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): January 29, 2013

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: St. Louis District, Poettker Tree Clearing and Ditch Straightening, MVS-2012-452

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **IL** County/parish/borough: **Bond** City: **Tamalco**

Center coordinates of site (lat/long in degree decimal format): **Lat. 38.799821° N, Long. -89.256895° W**.

Universal Transverse Mercator: **UTM**

Name of nearest waterbody: **Spring Branch**

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

Name of watershed or Hydrologic Unit Code (HUC): **Spring Branch-Kaskaskia River, HUC 71402020607**

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

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

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

☐ Office (Desk) Determination. Date:

☒ Field Determination. Date(s): **July 27, 2012: A site visit was conducted on the referenced date with Mr. Tyson Zobrist of the Corps of Engineers and Mr. Scott Poettker, the land owner. The site visit was in reference to an application that Mr. Poettker had submitted to the Corps of Engineers, St. Louis District, Regulatory Branch, in which he proposed to clear trees along a riparian corridor of an unnamed tributary to Spring Branch. Additionally, Mr. Poettker wanted to take a meandering, 1,200-liear foot section of the unnamed tributary and fill it to create a straight drainage swale. The unnamed tributary flows through the center of the site from east to west, where it exits the site to the northwest. It was determined by Tyson Zobrist that the unnamed tributary was jurisdictional Waters of the United States. Mr. Zobrist explained to Mr. Poettker that if he would like to place fill below the OHWM of the unnamed tributary a Sections 404 of the Clean Water Act permit would be required. Mr. Poettker stated that he did not want to proceed with the Section 404 authorization but would consider harvesting trees within the site. Mr. Zobrist explained that tree cutting would not need authorization under Section 404 as long as the unnamed tributary was not affected by the tree clearing work. Site visit notes were completed by Mr. Zobrist on July 27, 2012.**

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

☐ Waters subject to the ebb and flow of the tide.

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

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent 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

[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).

☐ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:
Non-wetland waters: **1,200 linear feet: 4 feet width (and/or 0.11 acres).**
Wetlands: **none**

c. Limits (boundaries) of jurisdiction based on: **OHWM**
Elevation of established OHWM (if known): **An OHWM was identified visually during the site visit on July 27, 2012. It was found that a distinct OHWM was found approximately 1 to 1 ½-foot above the bed of the stream. The stream bed width at OHWM was approximately 4-feet.**

2. Non-regulated waters/wetlands (check if applicable):[3]

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:

Summarize rationale supporting determination.

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

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

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

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

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

If the waterbody[4] **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: **1067.65 Acres**
Drainage area**: 175 Acres (Measured using topographical elevation lines)**
Average annual rainfall: **40.6 inches**

[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.

Average annual snowfall: **Unknown**

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through **3** tributaries before entering TNW.

Project waters are **74** river miles from TNW.
Project waters are **1 (or less)** stream miles from RPW.
Project waters are **41** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries: **No** Explain: **The impacted reach of the unnamed tributary is contained within Bond County, Illinois and does not cross state boundaries However, just upstream of the impacted tributary is the Bond and Fayette County line. No impacts have been completed within the Fayette County portion of the tributary by Mr. Poettker.**

Identify flow route to TNW[5]: **The unnamed tributary flows through the project area from east to west and connects with Spring Branch approximately 0.20 mile from where the project footprint ends. Spring Branch flows into the Carlyle Lake, an impoundment of the Kaskaskia River. The Kaskaskia River is identified as TNW at Fayetteville, Illinois.**

Tributary stream order, if known: **The unnamed tributary is a 1st order, headwater stream.**

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

Tributary is: ☒ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: **During the July 27, 2012 site visit the unnamed tributary within the project area exhibited natural meanders and had an established riparian corridor for the majority of the 1,200-feet of tributary impacted by the work. There were some locations in which agricultural practices had been conducted close to the stream banks and had cause minor erosion issues. The 1,200-foot stream corridor when observed on July 27th was in a relatively natural state. The upstream and downstream portions, outside of the work area had been manipulated and altered by ditching in the past. The tributary, when observed on December 15, 2012, had been filled and cleared of its riparian corridor along 1,200-feet of channel. A small agricultural swale exists at the site currently.**

Tributary properties with respect to top of bank (estimate):
Average width: **8-10 feet**
Average depth: **2-4 feet**
Average side slopes: **2:1**

Primary tributary substrate composition (check all that apply):

☒ Silts	☒ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☒ Vegetation.	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **The unnamed tributary had an established riparian corridor of at least 120-feet wide for much of the 1,200-foot stream corridor. On the upstream end of the corridor all trees had been removed and contained to mainly an agricultural swale. Downstream of the 1,200-foot impact site the tributary had been channelized and converted to 400-feet of agricultural swale several years ago. From the constructed swale the stream returns to a natural, meandering channel for another 1,400–feet until its confluence with Spring Branch. The impacted stream contained meanders and was in a relatively stable and natural condition. There were approximately two locations where the stream meanders were starting to move outside of the riparian corridor and encroaching into the adjacent agricultural fields. These sites showed signs of streambank failure and erosion issue but they were minor. Overall the 1,200-foot stream corridor was stable and had water within the channel at the time of the on-site visit.**

Presence of run/riffle/pool complexes. Explain: **None observed**.
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): **Unknown**

(c) Flow:

Tributary provides for: **Ephemeral flow**.
Estimate average number of flow events in review area/year: **20 or greater**

[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.

Describe flow regime: **The unnamed tributary typically flows during rain events. During the July 27, 2012 site visit it was observed that the stream had minimal flow. Based on the rain data received by the Corps Water Control Branch for July 25, 26 and 27, 2012 no measurable precipitation had accumulated at the Corps gages in Carlyle or Mulberry Grove. Both gages are less than 15 miles from the site. This does not take into consideration spot rain events that may have occurred at the site on or prior to July 27, 2012. There has been no observed flow within the new channelized swale that the landowner has constructed during the December 15, 2012 or January 25, 2013 site visits. An additional consideration may be groundwater induced flows that were observed during the July 27th visit.**

Other information on duration and volume: **There was flowing water present within the stream during the site visit conducted on July 27, 2012.**

Surface flow is: **Confined.** Characteristics: **The stream has a rather small drainage area and high banks in comparison to the stream capcity so water is transported withing the channel without much over bank flow.**

Subsurface flow: **Unknown**. Explain findings:
☐ Dye (or other) test performed: No.

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):
- ☒ clear, natural line impressed on the bank
- ☐ changes in the character of soil
- ☐ shelving
- ☒ vegetation matted down, bent, or absent
- ☒ leaf litter disturbed or washed away
- ☒ sediment deposition
- ☐ water staining
- ☐ other (list):
- ☐ the presence of litter and debris
- ☐ destruction of terrestrial vegetation
- ☐ the presence of wrack line
- ☐ sediment sorting
- ☒ scour
- ☐ multiple observed or predicted flow events
- ☐ abrupt change in plant community

☐ Discontinuous OHWM.[7] Explain.

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

☒ Mean High Water Mark indicated by:
- ☐ survey to available datum;
- ☒ physical markings;
- ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: **Water within the stream during the July 27, 2012 site visit did not appear to contain any pollutants. The water was generally clear with a small amount of sediment being transported. The majority of the drainage area is in agricultural production. The area is void of vegetation in most of the drainage area which increases the amount of sediment entering the stream system. The increased amount of sediment and raw materials that are entering the tributary would have a major impact on the stream composition and the organisms that utilize the stream. Upon removal of the trees and vegetation within this site, an increase in sediments will enter the stream system and reduce water clarity and disrupt plant growth,which can damage stream beds and banks and will reduce the beneficial use of the intermittent stream by aquatic organisms.**

Identify specific pollutants, if known: **Sediment, Herbicides**

(iv) Biological Characteristics. Channel supports (check all that apply):
☒ Riparian corridor. Characteristics (type, average width): **Forested, 120-feet.**
☐ 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

[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.

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size:

Wetland type. Explain:.

Wetland quality. Explain:.

Project wetlands cross or serve as state boundaries. Explain:.

(b) General Flow Relationship with Non-TNW:

Flow is: Explain:

Surface flow is: **Pick List**

Characteristics: The

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 river miles from TNW.

Project waters are aerial (straight) miles from TNW.

Flow is from:.

Estimate approximate location of wetland as within the floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface;

.

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:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

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

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

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

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:**

   The unnamed tributary is a non-Relatively Permanent Water (Non-RPW) that possesses features of an ephemeral tributary with an ordinary high water mark (OHWM). It averages a width of approximately 3-5 feet at the OHWM and has approximately 2-4 foot bank height. Features observed supporting clear evidence of flow and an OHWM throughout the entire channel include: clear natural line impressed on the bank, shelving and leaf litter washed away, sediment deposition and scour. Based on observed characteristics described above and the overall size of the tributary drainage area of approximately 175-acres, the tributary is indicative of first order stream hydrology. It was observed that the unnamed tributary has the capacity to carry surface flow hydrology via a confined channel to Spring Branch, a primary tributary to Carlyle Lake, an Impoundment of the Kaskaskia River, then to the Kaskaskia River downstream of the Carlyle Lake Dam. There is no interruption in flow or hydrologic connectivity between the onsite tributary and Spring Branch. Based on observed conditions, Spring Branch has the capacity to carry surface flow hydrology via a confined channel to Carlyle Lake, an impoundment of the Kaskaskia River.

   At the point where hydrology from the unnamed tributary reaches the Kaskaskia River at Fayetteville, Illinois, the Kaskaskia River has been designated as a Traditional Navigable Waterway (TNW) by the St. Louis District. Since the unnamed tributary maintains hydrologic connectivity to the Kaskaskia River, a significant nexus has been established between the Non-RPW and a TNW. Hydrologic connectivity refers to the flow that transports organic matter and nutrients, energy, and aquatic organisms throughout the system (Freeman et al., 2006). The unnamed Non-RPW contributes to the chemical and physical make-up of Spring Branch, Carlyle Lake, the Kaskasia River and the Mississippi River, through its ability to convey sediments and attached nutrients during hydrologic pulses generated by precipitation events, as well as through probable groundwater discharge.

   The associated streamside riparian corridor that previously bordered the unnamed tributary (as seen in the attached aerials), prior to being cleared for this project, although relatively small in size, was important for protecting water quality, stream stability and health, and biological communities. The riparian corridor would have trapped nutrient runoff from adjacent uplands. Fertilizers utilized within the drainage area commonly contain phosphorous, which upon application attaches to soil particles. During precipitation events runoff has the ability to detach and transport phosphorous-laden sediments carrying these particles towards the stream. The riparian buffer functions to trap phosphorus-laden sediments, keeping them out of the stream system, which reduces the potential for downstream waters to become eutrophic. Large rainfall events within the area provides a pulse of hydrology to donwstream receiving waterways. After water levels receed, the process of drying produces natural chemical and physical changes in the tributary. It has been identified when headwater streams "dry up", they continue to be an integral part of the overall stream conditions through their influence on river chemistry (Izbicki 2007).

   The wooded riparian corridor that had been situated along the unnamed tributary contained a deep root structure which functions to reinforce the soil structure along the streambanks and minimize erosion, resulting in the attenuation of sediment input to downstream receiving waters. We expect that the riparian corridor also provided shade to sections of the tributary, which sustains surface water temperatures that are conducive for fish to survive and maintain downstream water temperatures. The characteristics of headwater streams can have a direct impact on the physical and chemical properties of receiving waters in other ways unrelated to the direct input of nutrients or pollutants. The temperature of waters conducted through a stream system can have a direct effect on the health of aquatic ecosystems. Runoff collected from exposed surfaces such as roadways can be elevated in temperature from solar heating. Exposed stream systems (those lacking a wooded canopy) can also experience elevated water temperatures due to solar heating. Stream systems with wooded canopy shade their water from the sun, allowing water temperatures to cool to ranges considered beneficial to aquatic ecosystems. Since the unnamed tributary had possessed a wooded canopy, it likely contributed to the health and function of the Kaskaskia River by lowering the temperature of water entering into it.

The unnamed tributary contains silt and sands substrate as well as vegetation that provides rough passages for water which reduces water velocities within the channel. The unnamced tributary also contained meanders which provide increase stream length reducing water velocities. Reduced water velocities minimizes the ability of moving water to erode streambanks and carry sediment downstream.

The unnamed tributary maintains a hydrologic connection to the Kaskaskia River through an open and defined channel. Evidence of water flow was indicated through the presence of clear indicators of an OHWM observed during the site visit on July 27, 2012. The significant nexus evaluation demonstrates that the unnamed tributary impacts the physical, chemical, and biological integrity of the Kaskaskia River. The unnamed tributary contributes hydrology to downstream waters, carries and/or filters sediments and other pollutants, and provides organic input to downstream waters. Based on these hydrologic connections, it has been determined that the unnamed tributary maintains a significant nexus to the Kaskaskia River.

LITERATURE CITED

Freeman, M.C., C.M. Pringle, and C. R. Jackson. 2007. Hydrologic Connectivity and the Contribution of Stream Headwaters to Ecological Integrity at Regional Scales. Journal of the American Water Resources Association 43:5-14.

Izbicki, J.A. 2007. Physical and Temporal Isolation of Mountain Headwater Streams in the Western Mojave Desert, Southern California. Journal of the American Water Resources Association. 43: 26-40.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:.

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

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

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

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   - ☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. **Data supporting this conclusion is provided at Section III.C**.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☒ Tributary waters: **1,200** linear feet **4** 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

[8]See Footnote # 3.

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 jurisidictional. 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: .

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).

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[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.*

☐ 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: .
☐ 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: **Precipitation Gage Data: Mulberry Grove/ Hurricane Creek Gage and Carlyle Lake/ Kaskaskia Gage.**
☐ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps. **Spring Branch-Kaskaskia River, HUC 71402020607**
☒ U.S. Geological Survey map(s). Cite scale & quad name: **Pleasant Mound, 1:24000**
☐ USDA Natural Resources Conservation Service Soil Survey. Citation:.
☒ National wetlands inventory map(s). Cite name: **Pleasant Mound**.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): **Google Earth Pro: September 29, 2012, March 18, 2005**
or ☒ Other (Name & Date):. **ArcGIS/ ArcMap Image: NAIP/Illinois_2012_1m_NC**
☒ Previous determination(s). File **Yes**. and date of response letter: **Preliminary Jurisdictional Form, July 27, 2012**
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): **See part B. of Section IV: DATA SOURCES**

B. ADDITIONAL COMMENTS TO SUPPORT JD: On July 27, 2012 Tyson Zobrist of Corps of Engineers Regulatory Branch conducted a site visit with Mr. Scott Poettker on his property northeast of Tamalco, Bond County, Illinois. Mr. Poettker has approximately 1,200-linear feet of ephemeral channel that he wanted to straighten and turn into an agricultural drainage. Based on the site visit Mr. Zobrist found that ephemeral channel was a well established meandering channel with a well developed riparian corridor. Mr. Zobrist discussed with Mr. Poettker about his options with regard to Section 404 of the CWA permitting. Based on the site visit this project would fall under an individual permit with required mitigation. Mr. Zobrist explained the permitting process to Mr. Poettker and he felt that he would not want to pursue this project due to the high cost of mitigation. Mr. Poettker stated that he would consider some logging of trees in this corridor but he would not do any work within the channel of the ephemeral stream. His application MVS-2012-452 was withdrawn at that time. Mr. Zobrist drove by the site on December 15, 2012 and found the forested riparian corridor had been cleared and the ephemeral stream channel was filled. A small drainage swale was constructed to provide drainage through the site. The work completed by Mr. Poettker is considered a violation of Section 404 of the Clean Water Act. A follow-up site visit was conducted on January 25, 2013 to make a more detailed observation of the site and to take photographs.

Attached to this Approved JD: Aerial photos and topographical maps of the site prior to any clearing work, photographs of the site after the clearing and the filling of the channel had been completed, a preliminary jurisdictional determination form from the July 27, 2012 site visit and site visit field notes, and an excel document showing the Carlyle and Mulberry Grove, Illinois gage data for precipitation for the month of July, 2012.