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

SECTION I: BACKGROUND INFORMATION

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Fox River, LRC-2008-344 Mt. St. Mary Park
C. PROJECT LOCATION AND BACKGROUND INFORMATION: The Fox River within the Chicago District, USACE State: Illinois County: Lake, McHenry, Kane City: Multiple Center coordinates of site (lat/long in degree decimal format): Lat. 42.0483048 ° N, Long. 88.2915890 ° W. Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Fox River and Chain of Lakes Name of watershed or Hydrologic Unit Code (HUC): Upper Fox (07120006), Lower Fox (07120007)
  X 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: 10/19/2007

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.
  X 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.
1. Waters of the U.S.
   a. Indicate presence of waters of U.S. in review area: X TNWs, including territorial seas
   b. Identify (estimate) size of waters of the U.S. in the review area:
      Non-wetland waters: 387544 linear feet width (ft) and/or 10800 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.B.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
   a. Identify TNW: Fox River and the Chain of Lakes.

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:
   X TNWs: 387544 linear feet width (ft), Or, 10800 acres.

SECTION IV: DATA SOURCES

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
  X Maps, plans, plots or plats 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): .
  X Previous determination(s). File no. and date of response letter: multiple.
  X Other information (please specify): .
SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 23-Mar-2009

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2008-00487-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: Will
City: near Monee
Lat: 41.41553199300748
Long: -87.803506
Universal Transverse Mercator

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

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

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

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

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 17-Feb-2009
Field Determination Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

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

Waters subject to the ebb and flow of the tide.
Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

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

1. Waters of the U.S.

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

<table>
<thead>
<tr>
<th>Water Name</th>
<th>Water Type(s) Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs</td>
</tr>
</tbody>
</table>

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

Area: (m²)
Linear: (m)
c. Limits (boundaries) of jurisdiction:
   based on: [ ]
   OHWM Elevation: (if known)

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. TNW
   Not Applicable.

2. Wetland Adjacent to TNW
   Not Applicable.

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

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

   (i) General Area Conditions:
       Watershed size: [ ]
       Drainage area: [ ]
       Average annual rainfall: inches
       Average annual snowfall: inches

   (ii) Physical Characteristics
       (a) Relationship with TNW:
           Tributary flows directly into TNW.
           Tributary flows through [ ] tributaries before entering TNW.
           Number of tributaries
           Project waters are [ ] river miles from TNW.
           Project waters are [ ] river miles from RPW.
           Project Waters are [ ] aerial (straight) miles from TNW.
           Project waters are [ ] aerial (straight); miles from RPW.
           Project waters cross or serve as state boundaries.
           Explain:
           Identify flow route to TNW:

   Tributary Stream Order, if known:

<table>
<thead>
<tr>
<th>Order</th>
<th>Tributary Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LRC-2008-487 WL 1</td>
</tr>
</tbody>
</table>

   (b) General Tributary Characteristics:
       Tributary is:

       | Tributary Name | Natural | Artificial | Explain | Manipulated | Explain |
       |----------------|---------|------------|---------|------------|---------|
       | LRC-2008-487 WL 1 | -       | -          | -       | X          | It has been channelized. |

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

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Side Slopes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>4</td>
<td>1</td>
<td>2:1</td>
</tr>
</tbody>
</table>

   Primary tributary substrate composition:
Tributary Name | Silt | Sands | Concrete | Cobble | Gravel | Muck | Bedrock | Vegetation | Other
---|---|---|---|---|---|---|---|---|---
LRC-2008-487 WL 1 | X | | | | | | | | |

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

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Condition\Stability</th>
<th>Run\Riffle\Pool Complexes</th>
<th>Geometry</th>
<th>Gradient (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>moderate erosion and sloughing banks.</td>
<td>none</td>
<td>Relatively straight</td>
<td></td>
</tr>
</tbody>
</table>

(c) Flow:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Provides for</th>
<th>Events Per Year</th>
<th>Flow Regime</th>
<th>Duration &amp; Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>Perennial flow</td>
<td>11-20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Surface Flow is:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Surface Flow</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>Confined</td>
<td></td>
</tr>
</tbody>
</table>

Subsurface Flow:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Dye (or other) Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Tributary has:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Bed &amp; Banks</th>
<th>OHWM</th>
<th>Discontinuous OHWM?</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

- High Tide Line indicated by:
  - Not Applicable.

- Mean High Water Mark indicated by:
  - Not Applicable.

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

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Explain</th>
<th>Identify specific pollutants, if known</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(iv) Biological Characteristics. Channel supports:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Riparian Corridor Characteristics</th>
<th>Wetland Fringe Characteristics</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

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

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

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

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

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

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

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

3. Characteristics of all wetlands adjacent to the tributary (if any):
All wetlands being considered in the cumulative analysis:
Not Applicable.

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

C. SIGNIFICANT NEXUS DETERMINATION

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

Significant Nexus: Not Applicable

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

1. TNWs and Adjacent Wetlands:
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>PERENNIAL</td>
<td>Forked Creek is a blue line stream on the USGS topo quad.</td>
</tr>
</tbody>
</table>

Provide estimates for jurisdictional waters in the review area:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Type</th>
<th>Size (Linear) (m)</th>
<th>Size (Area) (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-487 WL 1</td>
<td>Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs</td>
<td>-</td>
<td>5665.5984</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>0</td>
<td>5665.5984</td>
</tr>
</tbody>
</table>

3. Non-RPWs that flow directly or indirectly into TNWs.\(^8\)
Not Applicable.
Provide estimates for jurisdictional waters in the review area:
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
Not Applicable.

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

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

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

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

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

7. Impoundments of jurisdictional waters:
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADAATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:
Not Applicable.

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

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

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

Other (Explain):

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

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for Jurisdiction.
Not Applicable.

SECTION IV: DATA SOURCES.

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

Data Reviewed Source Label Source Description

https://orm.usace.army.mil/orm2/?p=106:34:1589170275281119::NO::APP_FORM_ID:1... 6/12/2009
--- 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
--- U.S. Geological Survey map(s).
--- USDA Natural Resources Conservation Service Soil Survey.
--- National wetlands inventory map(s).
--- Photographs
--- Aerial

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

1. Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2. For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
3. Supporting documentation is presented in Section III.E.
4. Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
5. Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
6. A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody’s flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
7. ibid.
8. See Footnote #3.
9. To complete the analysis refer to the key in Section III.E.6 of the Instructional Guidebook.
10. Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.
SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 06-Jun-2009

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2009-00176-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: McHenry
City: McHenry
Lat: 42.34575306842735
Long: -88.2688934652123
Universal Transverse Mercator: Folder UTM List

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

Waters UTM List

- UTM list determined by waters location
- NAD83 / UTM zone 38S

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

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

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 05-Jun-2009
Field Determination Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 328) in the review area.

Waters subject to the ebb and flow of the tide.
Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.
1. Waters of the U.S.
   a. Indicate presence of waters of U.S. in review area.¹
      
      | Water Name           | Water Type(s) Present |
      |----------------------|----------------------|
      | LRC-2009-176 Boone Creek | Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs |

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

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

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. TNW
   Not Applicable.

2. Wetland Adjacent to TNW
   Not Applicable.

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

1. Characteristics of non-TNWs that flow directly or indirectly into TNW
   (i) General Area Conditions:
      Watershed size: []
      Drainage area: []
      Average annual rainfall: inches
      Average annual snowfall: inches

   (ii) Physical Characteristics
      (a) Relationship with TNW:
         Tributary flows directly into TNW.
         Tributary flows through [] tributaries before entering TNW.
         Number of tributaries
         Project waters are [ ] river miles from TNW.
         Project waters are [ ] river miles from RPW.
         Project Waters are [ ] aerial (straight) miles from TNW.
         Project waters are [ ] aerial(straight) miles from RPW.
Project waters cross or serve as state boundaries.

Explain:
Identify flow route to TNW.5

Tributary Stream Order, if known:
Order: Tributary Name
- LRC-2009-176 Boone Creek

(b) General Tributary Characteristics:
Tributary is:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Natural</th>
<th>Artificial</th>
<th>Explain</th>
<th>Manipulated</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>Not channelized, but slopes and flow path have likely been slightly altered over time - located in an urban setting.</td>
<td></td>
</tr>
</tbody>
</table>

Tributary properties with respect to top of bank (estimate):
Tributary Name Width (ft) Depth (ft) Side Slopes
<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Side Slopes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>60</td>
<td>10</td>
<td>2:1</td>
</tr>
</tbody>
</table>

Primary tributary substrate composition:
Tributary Name Silt Sands Concrete Cobble Gravel Muck Bedrock Vegetation Other
<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Silt</th>
<th>Sands</th>
<th>Concrete</th>
<th>Cobble</th>
<th>Gravel</th>
<th>Muck</th>
<th>Bedrock</th>
<th>Vegetation</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Condition</th>
<th>Stability</th>
<th>Run</th>
<th>Riffle</th>
<th>Pool Complexes</th>
<th>Geometry</th>
<th>Gradient (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>The banks appear relatively stable based on photographs provided in the delineation report.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Relatively straight</td>
<td>1</td>
</tr>
</tbody>
</table>

(c) Flow:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Provides for</th>
<th>Events Per Year</th>
<th>Flow Regime</th>
<th>Duration &amp; Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>Perennial flow</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Surface Flow is:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Surface Flow</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>Confined</td>
<td>Flow confined to channel during normal conditions</td>
</tr>
</tbody>
</table>

Subsurface Flow:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Dye (or other) Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Tributary has:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Bed &amp; Banks</th>
<th>OHWM</th>
<th>Discontinuous OHWM</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

High Tide Line Indicated by:
Not Applicable.

Mean High Water Mark Indicated by:
Not Applicable.

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

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>The water in the photographs appeared to be cloudy. However, Coone Creek is a class B stream for the entire reach, so it is considered to be of high value. Upstream portions of the waterway remain in a more natural state with meandering flow.</td>
</tr>
</tbody>
</table>

(iv) Biological Characteristics. Channel supports:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Riparian Corridor</th>
<th>Characteristics</th>
<th>Wetland Fringe</th>
<th>Characteristics</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>X</td>
<td>There is a local riparian corridor approximately 15 feet in width along either side of the creek. This does not extend for a long distance before it is broken. There is a small wooded area on the south and west side of the creek further downstream.</td>
<td>X</td>
<td>There is a narrow wetland fringe along the banks of the creek, but the slopes rise quickly, so this is only along the very bottom of the slope</td>
<td>X</td>
</tr>
</tbody>
</table>

Habitat for: (as indicated above)

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Habitat</th>
<th>Federally Listed Species</th>
<th>Explain Findings</th>
<th>Fish/Spawn Areas</th>
<th>Explain Findings</th>
<th>Other Environmentally Sensitive Species</th>
<th>Explain Findings</th>
<th>Aquatic/Wildlife Diversity</th>
<th>Explain Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

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

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

(b) General Flow Relationship with Non-TNW:

https://orm.usace.army.mil/orm2/?p=106:34:440148292197601::NO::
6/5/2009
Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

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

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

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

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

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

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

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

C. SIGNIFICANT NEXUS DETERMINATION

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

Significant Nexus: Not Applicable

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

1. TNWs and Adjacent Wetlands:
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>PERENNIAL</td>
<td>Appears as a solid line on the USGS Topographic Map.</td>
</tr>
</tbody>
</table>

Provide estimates for jurisdictional waters in the review area:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Type</th>
<th>Size (Linear) (m)</th>
<th>Size (Area) (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2009-176 Boone Creek</td>
<td>Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs</td>
<td>-</td>
<td>1821.0852</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>0</td>
<td>1821.0852</td>
</tr>
</tbody>
</table>

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

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

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

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Not Applicable.

7. Impoundments of jurisdictional waters:§

Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:


6/5/2009
Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):
Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):
Other (Explain):

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

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable:

SECTION IV: DATA SOURCES.

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

<table>
<thead>
<tr>
<th>Data Reviewed</th>
<th>Source Label</th>
<th>Source Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>USGS Map with ADID overlain</td>
<td>USGS map shows solid blue line through site - no ADID wetlands associated with the site. The creek is considered a High Quality Aquatic Resource - rated as a class B stream</td>
</tr>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>FEMA Map</td>
<td>Flood zones are labeled - located in zone A</td>
</tr>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Hydrologic Atlas</td>
<td>Flood of records are listed for the area and stay within the confines of the banks within the project area</td>
</tr>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Aerial Photo - Wetland Boundary</td>
<td>Delineated boundaries follow the shoreline including a narrow wetland fringe</td>
</tr>
</tbody>
</table>

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

1. Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2. For purposes of this form, an RW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
3. Supporting documentation is presented in Section III F.
4. Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the and West.
5. Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
6. A natural or man-made discontinuity in the CHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the CHWM has been removed by development or agricultural practices). Where there is a break in the CHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock dike or through a culvert), the agencies will look for indications of flow above and below the break.
7. See Footnote #3.
8. To complete the analysis refer to the key in Section III D 6 of the Instructional Guidebook.
9. Prior to waiving or declining CWA jurisdiction based solely on this category, Corps Districts will escalate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rainfall.