

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 23-Jun-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Kansas City District, NWK-2006-02530-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : MO - Missouri
County/parish/borough: Buchanan
City: St Joseph
Lat: 39.70927
Long: -94.83874
Universal Transverse Mercator: []
Name of nearest waterbody: Browns Branch
Name of nearest Traditional Navigable Water (TNW): Missouri River
Name of watershed or Hydrologic Unit Code (HUC): Independence-Sugar

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: 23-Jun-2008

Field Determination Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

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

Waters subject to the ebb and flow of the tide.

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

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:¹

Water Name	Water Type(s) Present
Site 4 Tributary NWK-2006-2530	Non-RPWs that flow directly or indirectly into TNWs
Site 2 Wetlands NWK-2006-2530	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
Site 3 Wetlands NWK-2006-2530	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
Site 1 WETLANDS NWK-2006-2530	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

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

Area: 1902.1 (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: 1987 Delineation Manual.

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.

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: acres

Drainage area: 150 acres

Average annual rainfall: 34 inches

Average annual snowfall: 21 inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [] tributaries before entering TNW.

:Number of tributaries

Project waters are 2-5 river miles from TNW.

Project waters are 2-5 river miles from RPW.

Project Waters are 2-5 aerial (straight) miles from TNW.

Project waters are 2-5 aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:⁵

The three wetlands are in two different upland swales that drain into the same upland swale that drains into an non RPW that combines with several other first order tributaries and flows into the piped storm water drainage system of St. Joseph, Missouri then discharges into the Missouri River.

Tributary Stream Order, if known:

Order	Tributary Name
1	Site 4 Tributary NWK-2006-2530

(b) General Tributary Characteristics:

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated
Site 4 Tributary NWK-2006-2530	X	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Sid
Site 4 Tributary NWK-2006-2530	10	2	3:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegeta
Site 4 Tributary NWK-2006-2530	X	-	-	-	-	-	-	-

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

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry
Site 4 Tributary NWK-2006-2530	-	-	Relatively straight

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
Site 4 Tributary NWK-2006-2530	Ephemeral flow	11-20	-	The OHWM begins several hundred feet downstream of the and continues approximately 3200 feet before flowing into Branch which then flows into the storm water sewer system Joseph, MO.

Surface Flow is:

Tributary Name	Surface Flow	Chara
Site 4 Tributary NWK-2006-2530	Discrete and confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or c
Site 4 Tributary NWK-2006-2530	-	-	

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM ⁷
Site 4 Tributary NWK-2006-2530	X	X	-

Tributaries with OHWM⁶ - (as indicated above)

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted/Absent Vegetation	Sediment Sorting	Leaf Litter	Scour
Site 4 Tributary NWK-2006-2530	X	-	-	-	X	-	-	X	-	-	-

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)

Tributary Name	Explain	Identify specific pollutants, if known
Site 4 Tributary NWK-2006-2530	-	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Charact
Site 4 Tributary NWK-2006-2530	X	Wooded corridor between 10 and 20 feet wide on each side.	-	-

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish/Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Fir
Site 4 Tributary NWK-2006-2530	X	X	May be habitat for the Indiana Bat	-	-	-	-

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Bou
Site 2 Wetlands NWK-2006-2530	.14	Palustrine Emergent	Small shallow wetland would provide some habitat for amphibians and invertebrates, and seasonal water and food supply for upland birds and mammals. It also provides some storm water detention and filtration.	-

Site 3 Wetlands NWK-2006-2530	.19	Palustrine Emergent Marsh	Small shallow wetland would provide some habitat for amphibians and invertebrates, and seasonal water and food supply for upland birds and mammals. It also provides some storm water detention and filtration.	-
Site 1 WETLANDS NWK-2006-2530	.14	Palustrine emergent marsh	Small shallow wetland would provide some habitat for amphibians and invertebrates, and seasonal water and food supply for upland birds and mammals. It also provides some storm water detention and filtration.	-

(b) General Flow Relationship with Non-TNW:

Flow is:

Wetland Name	Flow	
Site 2 Wetlands NWK-2006-2530	Ephemeral flow.	-
Site 3 Wetlands NWK-2006-2530	Ephemeral flow.	-
Site 1 WETLANDS NWK-2006-2530	Ephemeral flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
Site 2 Wetlands NWK-2006-2530	Confined	Wetland is in an upland swale that flows only after rainfall events
Site 3 Wetlands NWK-2006-2530	Confined	Wetland is in an upland swale that flows only after rainfall events
Site 1 WETLANDS NWK-2006-2530	Confined	Wetland is in an upland swale that flows only after rainfall events

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or
Site 2 Wetlands NWK-2006-2530	Unknown	-	
Site 3 Wetlands NWK-2006-2530	-	-	
Site 1 WETLANDS NWK-2006-2530	Unknown	-	

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection
Site 2 Wetlands NWK-2006-2530	No	X	-
Site 3 Wetlands NWK-2006-2530	No	X	-
Site 1 WETLANDS NWK-2006-2530	No	X	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Witl
Site 2 Wetlands NWK-2006-2530	2-5	2-5	Wetland to navigable waters	-
Site 3 Wetlands NWK-2006-2530	2-5	2-5	Wetland to navigable waters	-
Site 1 WETLANDS NWK-2006-2530	2-5	2-5	Wetland to navigable waters	-

(ii) Chemical Characteristics:

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

Wetland Name	Explain	Identify specific pollutants, if kno
Site 2 Wetlands NWK-2006-2530	-	-
Site 3 Wetlands NWK-2006-2530	-	-

Site 1 WETLANDS NWK-2006-2530	-	-
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(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
Site 2 Wetlands NWK-2006-2530	-	-	X	The swale is vegetated by the typical upland forest of th including maple, hackberry, honey locust, osage orange hickories.
Site 3 Wetlands NWK-2006-2530	-	-	X	The swale is vegetated by the typical upland forest of th including maple, hackberry, honey locust, osage orange hickories.
Site 1 WETLANDS NWK-2006-2530	-	-	X	The swale is vegetated by the typical upland forest of th including maple, hackberry, honey locust, osage orange hickories

Habitat for:

Wetland Name	Habitat	Federally Listed Species	Explain Findings	Spawn Area	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aq1
Site 2 Wetlands NWK-2006-2530	X	X	may provide habitat for the Indiana Bat.	-	-	X	Expected to provide habitat for various amphibians.	X
Site 3 Wetlands NWK-2006-2530	X	X	May provide habitat for Indiana Bats.	-	-	X	Expected to provide habitat for various amphibians.	X
Site 1 WETLANDS NWK-2006-2530	X	X	might provide habitat for the Indiana Bat	-	-	X	expected to be habitat for amphibians	X

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 wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integ the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, ha or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TI performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based so threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similar! wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Findings for: Site 4 Tributary NWK-2006-2530, Site 2 Wetlands NWK-2006-2530, Site 3 Wetlands NWK-2006-2530, Site 1 \ Because each of the wetlands is an old stock water pond created by digging or impounding upland swales that drain into tribu

discharge into the Missouri River, they all have a significant hydrologic connection to a TNW. Because of the area of wetland drainage area flowing into them they could have a significant effect on the chemical, physical, and biological integrity of the M

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

1. TNWs and Adjacent Wetlands:

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Tributary Name	Type	Size (Linear) (m)	
Site 4 Tributary NWK-2006-2530	Non-RPWs that flow directly or indirectly into TNWs	365.76	-
Total:		365.76	0

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:

Wetland Name	Type	Size (Linear) (m)
Site 2 Wetlands NWK-2006-2530	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs	-
Site 3 Wetlands NWK-2006-2530	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs	-
Site 1 WETLANDS NWK-2006-2530	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs	-
Total:		0

7. Impoundments of jurisdictional waters:⁹

Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:¹⁰

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

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

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

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

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

Other (Explain):

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

Not Applicable.

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

Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Adaptive Ecosystems, Inc. Report dated June 18, 2008	Includes a map of aquatic resources and pr
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Applicant Report Dated 10 August 2006	Included a letter explaining the situation, a p view, 52 photographs and a photo log and p
----USGS 8 and 12 digit HUC maps	-	-

--U.S. Geological Survey map(s).	St. Joseph South 7.5" USGS Quad	-
--USDA Natural Resources Conservation Service Soil Survey.	Soil Survey of Buchanan County, Missouri	Climate info and survey sheet 6
--National wetlands inventory map(s).	NWI Map for St. Joseph, MO South 7.5 min quad	NWI layer from the Kansas City Information Arc View computer program
--FEMA/FIRM maps	City of St. Joseph, MO Panel 20 of 20	Community-Panel Number 290043 0020 C September 19, 1984
--Photographs	-	-
----Aerial	1999 St. Joseph South Quad	199 aerial photo layer from the Kansas City Environment Arc View computer program
----Other	August 2, 2006 photographs from Applicant	52 color photos on site

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

¹-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

²-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³-Supporting documentation is presented in Section III.F.

⁴-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

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

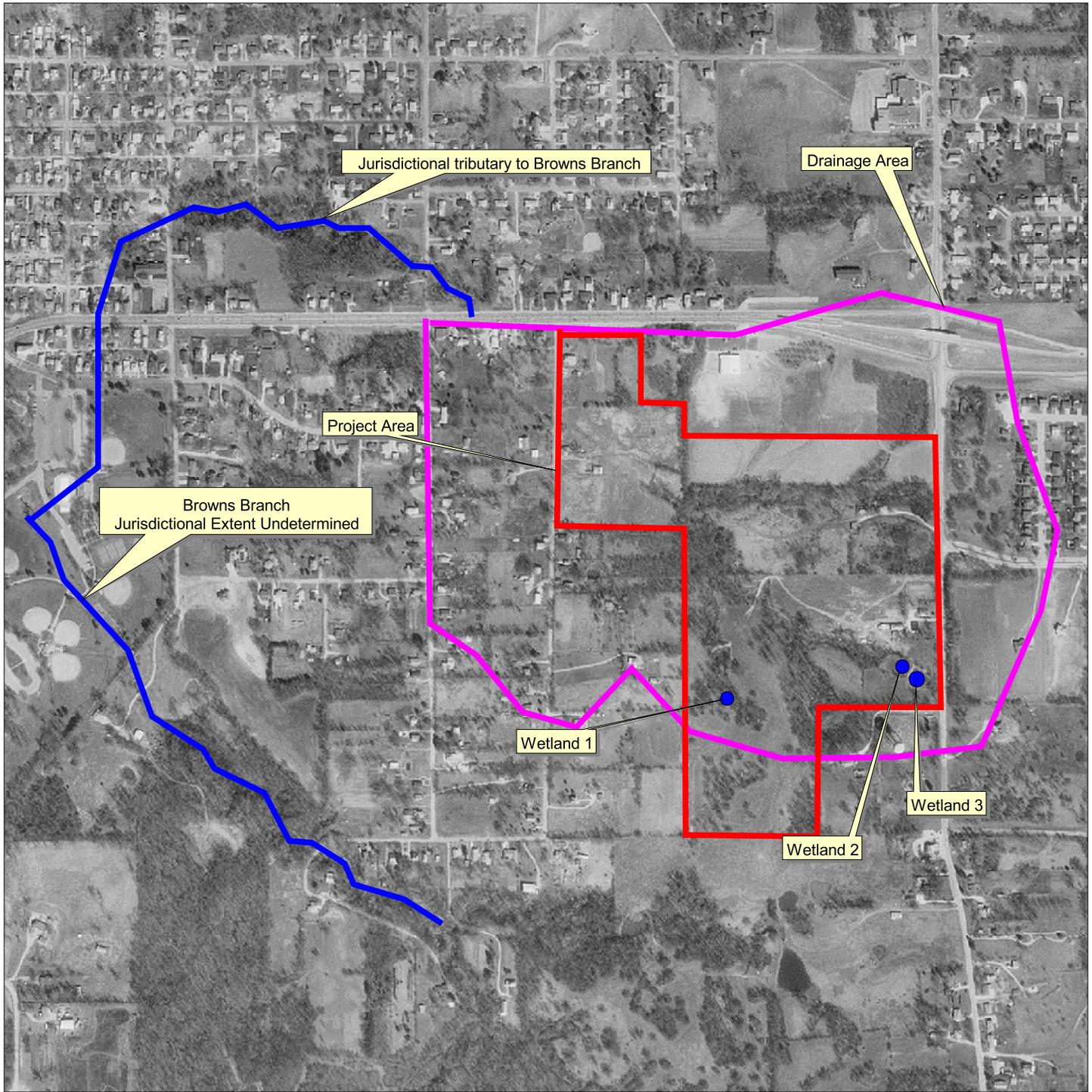
⁷-Ibid.

⁸-See Footnote #3.

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

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

Fountain Creek Aerial Photo 200602530



0 0.1 0.2 0.3 0.4 0.5 Miles



Fountain Creek Topo Map 200602530

