ATTACHMENT D

BURNS McDONNELL

NCHP - BIG WALNUT CREEK CROSSING PROJECT

Ecological Field Survey Report

Project Number: 182586

Date: August 21, 2025

Contents

Tables

1.0 Introduction

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by NiSource to provide a wetland delineation and habitat assessment for the North Columbus High Pressure (NCHP) Big Walnut Creek Crossing Project (Project) located in Columbus, Franklin County, Ohio (Figure 1, Appendix A). The purpose of the field work was to document conditions and confirm the presence or absence of the environmental features (wetlands, waterbodies, potential habitat for Threatened and Endangered species). The following sections provide information on the proposed Project and summarizes the completed ecological field survey.

The Project consists of the installation of approximately 1,465 linear feet of steel 24 inch diameter pipeline via horizontal direction drill (HDD) under Big Walnut Creek to remediate pipeline integrity concerns. Construction activities are expected to begin October 1, 2025 and cease November 15, 2025. Work will span from north of Scotsfield Drive moving east until it reaches just south of the station off Cherry Bottom Road. Workspaces will include installation portions of the Project, equipment access, and other laydown/staging areas, as needed. The ecological survey included all Project related activity and potential workspaces encompassing approximately 12.5 acres (Survey Area).

2.0 Methods

The following discussions summarize the methods used for the review of existing data, wetland delineation, and habitat assessment.

2.1 Existing Data Review

Burns & McDonnell reviewed available background information for the Project prior to conducting a site visit. This available background information included the 2023 U.S. Geological Survey (USGS) 7.5 minute topographic maps (Northeast Columbus, Ohio quadrangles), U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, National Agriculture Imagery Program (NAIP) aerial photography (2022), USGS National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NHFL), and U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) 2019 Soil Survey Geographic (SSURGO) digital data for Franklin County, Ohio. Figures 2 and 3 in Appendix A depict this data.

The presence of environmental resources based only on aerial, NWI, and NHD maps or other background information cannot be assumed to be an accurate assessment of the location and extent of jurisdictional resources and species habitat. Identification criteria differ between the USFWS, USGS, and the U.S. Army Corps of Engineers (USACE). As a result, wetlands, streams or other water resources shown on a NWI or NHD map may not be under the jurisdiction of the USACE, and all USACE-jurisdictional resources are not always included on NWI and NHD maps. Furthermore, potential species habitat cannot be identified without conducting a field visit. Therefore, a field visit was conducted to identify any environmental resources that may be present.

2.2 Wetland Delineation

A Burns & McDonnell wetland scientist completed a wetland delineation of the Survey Area on July 30th, and August 19th, 2025. The Survey Area included the areas where proposed Project activities would occur. The delineation was completed in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual (1987 Manual) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region – Version 2.0 (Regional Supplement). If wetlands are identified within the Project, sample plots are established at multiple locations and Wetland Determination Data Forms from the Regional Supplement are completed to characterize the wetlands within the Survey Area. Vegetation, soil conditions, and hydrologic indicators are recorded at the sample plots. Locations of identified features were surveyed using a sub-meter-accurate global positioning system (GPS) unit. Photographs of all identified features were taken onsite and are included in Appendix B (Photographs 1 through 12).

2.3 Wetland Evaluation

Each delineated wetland within the Survey Area is assessed and assigned a category using the Ohio Rapid Assessment Method (ORAM) for Wetland Categorization. According to Ohio Administrative Code, Category 1 wetlands have minimal habitat and minimal hydrological and recreational functions. These wetlands do not provide critical habitat for threatened or endangered species. Category 2 wetlands have moderate wildlife habitat or hydrological or recreational functions. Category 2 wetlands are dominated by native vegetation but generally do not contain threatened or endangered species habitat. Category 3 wetlands have superior

habitat or hydrological or recreational functions. These wetlands often provide habitat for threatened or endangered species.

The State of Ohio affords different levels of protection to wetlands based on wetland quality. If wetlands are identified within the Project, the Quantitative Rating pages from the ORAM 10-page form for Wetland Categorization are completed and a preliminary ORAM score for each wetland within the Survey Area is determined.

2.4 Stream Evaluation

The Survey Area was inspected for streams and other Water of the United States (WOTUS). Streams are identified by the presence of a defined bed and bank and an ordinary high-water mark (OHWM). An assessment of habitat in flowing waters was performed for streams located within the Survey Area using the Ohio Environmental Protection Agency (Ohio EPA) Qualitative Habitat Evaluation Index (QHEI) or Headwater Habitat Evaluation Index (HHEI). The QHEI and HHEI Field Sheets are included in Appendix C.

2.5 Protected Species

In August 2025, the USFWS Information for Planning and Consultation (IPaC) report and the Ohio Department of Natural Resources (ODNR) County lists were researched for federal, and state protected species present within and near the Survey Area. Project initial review request letters were also sent to the USFWS and ODNR in August 2025. No response has been received to date from these Agencies. Please refer to Appendix D for the official IPaC and county lists.

A desktop and onsite habitat assessment was performed to identify potential habitat of federally and state-listed species within the Survey Area. A general bat habitat survey to identify potential roost habitat trees (i.e. trees larger than 3 inches in diameter breast height (dbh) that also displayed characteristics such as loose bark, hollows, sloughing, and crevasses) within forested habitat of the Survey Area was conducted. The Survey Area was also assessed for the presence of potential habitat that could support other listed species.

3.0 Results

The following sections describe the results of the existing data review, completed wetland delineation, and habitat assessment.

3.1 Existing Data Review

The existing USGS topographic maps were reviewed to familiarize Burns & McDonnell wetland personnel with the topography and potential locations of wetlands and other waterbodies (Appendix A, Figure 2). The USGS topographic maps indicate the Survey Area is mostly flat with some steeper slopes around the NHD stream. USFWS NWI data shows one riverine wetland which is associated with the USGS NHD stream that crosses the Survey Area. The stream is named Big Walnut Creek and has mapped FEMA 100-year floodplain, 500-year floodplain, and Floodways associated with the stream and are present in the Survey Area (Appendix A, Figure 3). Aerial imagery indicates the Survey Area consists of road right of way, residential areas with some maintained grass, and forest (Appendix A, Figures 3 and 4).

The NRCS SSURGO digital data indicates that portions of six soil map units are located in the Survey Area (Appendix A, Figure 3). One soil map unit (Pm) is a majority hydric at 94 percent hydric. Three of the soil map units (BeB, Crd1B1, WeA) are a low percentage hydric (2-7%). Soil map units identified within the Survey Area are listed below:

- AdE2: Alexandria silt loam, 18 to 25 percent slopes, eroded, non-hydric
- BeB: Bennington silt loam, 2 to 6 percent slopes, 6% hydric
- Crd1B1: Cardington silt loam, 2 to 6 percent slopes, 7% hydric
- Pm: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes, 94% hydric
- Ut: Udorthents-Urban land complex, gently rolling, non-hydric
- WeA: Wea silt loam, 0 to 2 percent slopes, 2% hydric

3.2 Field Survey

On July 30th, and August 19th, 2025, a Burns & McDonnell wetland scientist and GIS specialist conducted a wetland delineation and protected species habitat assessment of the Survey Area and recorded the location and extent of features identified within the Survey Area. Upland habitat within the Survey Area consists primarily of maintained roadside, residential urban areas, and forested areas. Typical vegetation within this upland maintained habitat consists of Kentucky bluegrass (*Poa pratensis*). The forested habitat consisted of mostly honeysuckle (*Lonicera maackii*), black walnut (*Juglans nigra*), eastern cottonwood (*Populus deltoides*), and goldenrod (*Solidago canadensis*).

3.3 Delineated Areas

Two streams were identified within the Survey Area during the delineation effort. The location of identified resources is shown in Appendix A (Figure 4). The USACE's antecedent precipitation tool (APT) was used to determine if rainfall was within a normal range preceding and during the delineation (Appendix E). The APT indicated that the area was experiencing incipient drought conditions when considering long term trends but was still categorized as having wetter than normal conditions at the time of the July 30th investigation. The area was experiencing mild wetness for the dry season when considering longer term trends, but conditions were still categorized as normal at the time of the August 19th, 2025 investigation. The 30-day rolling rainfall

total was about an inch above the 30-year normal range for rainfall on July 30th and slightly below the average on August 19th, 2025.

3.3.1 Streams

Table 1 provides the size and type of each stream delineated within the Survey Area.

Table 1: Streams Delineated Within the Survey Area

Stream ID/Name	Stream Type[a]	Length Within Survey Area (Feet)	Width (Feet)	QHEI Score	HHEI Score
S02/ Big Walnut Creek	Perennial-RPW	218	120	79.5	N/A
S03	Perennial-RWP	309	5	N/A	60

a - RPW = Relatively Permanent Water = tributaries that have flowing or standing water year-round or continuously during certain times of year.

S02, or Big Walnut Creek, is a relatively permanent perennial stream (Appendix C, Photographs 1 and 2). A total of 218 feet of S02 was delineated within the Survey Area. S02 was approximately 120.0 feet wide, had a bank height of 6.0 feet, and a depth to OHWM of 4.0 feet. It achieved a QHEI score of 79.5. Using professional judgement, S02 flows offsite to the south into the Scioto River and should be considered jurisdictional and a WOTUS.

S03 is an unnamed relatively permanent perennial stream (Appendix C, Photographs 3 and 4). A total of 309 feet of S03 was delineated within the Survey Area. S03 was approximately 5.0 feet wide, had a bank height of 2.0 feet, and a depth to OHWM of 0.5 feet. It achieved a HHEI score of 60. Using professional judgement, S03 flows offsite to the east into Big Walnut Creek and should be considered jurisdictional and a WOTUS.

3.4 Protected Species

The USFWS IPaC report and the ODNR County lists (Appendix E) were researched for federal and state protected species present within and near the Survey Area. Project initial review request letters were also sent to the USFWS and ODNR in August 2025. No response has been received to date from these Agencies. State-listed plant species with records 25 years old or greater are not included as part of this discussion as such old species records are assumed to no longer exist. Listed species, and the designation of their listing, are identified in Table 2, below. If available, habitat types for the respective species are also listed in Table 2. No Critical Habitat for the species below was identified during the IPaC search.

If in-stream work is anticipated within Big Walnut Creek, coordination with regulatory agencies will be necessary due to the potential presence of federally and state-listed freshwater mussels. The stream provides suitable habitat with proper substrates and flowing water, for several sensitive mussel species, including the federally endangered Clubshell (*Pleurobema clava*), Northern Riffleshell (*Epioblasma rangiana*), and Rayed Bean (*Villosa fabalis*), along with multiple state-listed species. Consultation with the USFWS will be conducted to ensure the minimization of impacts to aquatic resources.

The entire state of Ohio is within range of the Indiana bat (*Myotis sodalis*), the northern long-eared bat (*Myotis septentrionalis*), Little Brown Bat (*Myotis lucifugus*) and the tri-colored bat (*Perimyotis subflavus*). Trees with loose, shaggy bark or crevices, holes, or cavities, along with trees with a diameter-at-breast-height (dbh) of

20 or more should be conserved if possible. Two potential roost trees (TE01 and TE02) were identified within the forested portions of the Survey Area during the onsite habitat assessment (Appendix B, Photographs 5 and 6). These trees had characteristics suitable for roosting such as cracks, crevices, and exfoliating bark. Although a species-specific survey was not conducted, no bats were observed while on-site. The potential roost trees are outside tree clearing areas and will be avoided during construction.

Burns & McDonnell performed a desktop review for potential hibernacula within the vicinity of the Project. The ODNR Division of Geological Survey Karst and Mine maps of Ohio did not identify any karst features or mines within the Project. No mines are located near the Project. The closest karst feature is located approximately 5.25 miles northeast of the Project.

Table 1: Threatened and Endangered Species with Potential to be Within the Survey Area

Species	Status[a]	Habitat Type	Habitat Observed During Site Visit
Mammals			
Indiana Bat (*Myotis sodalis*)	FE, SE	Winter hibernacula includes caves or abandoned mines. Summer roosting habitat includes wooded areas containing dead or dying trees or living trees that have cracks, crevices, and/or exfoliating bark and a diameter-at-breast-height (dbh) of 5 inches or greater. Tend to forage within forest or along forest edges.	Yes
Northern Long-eared Bat (*Myotis septentrionalis*)	FE, SE	Winter hibernacula includes caves or abandoned mines. Summer roosting habitat includes wooded areas containing dead or dying trees or living trees that have cracks, crevices, and/or exfoliating bark and a diameter-at-breast-height (dbh) of 5 inches or greater. Tend to forage within forest or along forest edges.	Yes
Tricolored Bat (*Perimyotis subflavus*)	PE, SE	This bat roosts in live and dead leaf clusters. Winter hibernacula includes caves or abandoned mines, culverts, and abandoned water wells. Tend to forage in forests or along forest edges.	Yes
Little Brown Bat (*Myotis lucifugus*)	SE	This bat roosts in live and dead leaf clusters. Winter hibernacula includes caves or abandoned mines, culverts, and abandoned water wells. Tend to forage in forests or along forest edges.	Yes
Bird			
Sandhill Crane (*Antigone canadensis*)	ST	Primarily breeds, migrates, winters, and forages in various wetland habitats. Habitats also include open grasslands such as harvested agriculture fields and marshy meadows.	No
Upland Sandpiper (*Bartramia longicauda*)	SE	Grasslands, including grazed and ungrazed pastures, and agricultural fields such as fallow and hay fields.	No
American Bittern (*Botaurus lentiginosus*)	SE	Freshwater and brackish marshes and swamps.	No
Lark Sparrow (*Chondestes grammacus*)	SE	Open grassy habitats with scattered trees and shrubs including orchards, fallow fields, open woodlands, mesquite grasslands, savanna, sagebrush steppe, and grasslands.	No

Species	Status[a]	Habitat Type	Habitat Observed During Site Visit
Least Bittern (*Ixobrychus exilis*)	ST	Freshwater or brackish marshes with tall grasses, cattails, and reeds. Winter in areas saltwater, brackish and freshwater wetlands.	No
Barn Owl (*Tyto furcata*)	ST	Open areas, forest edges, clearings, farmland, and cities. Hunting habitats are predominantly open landscapes.	No
Fish			
Lake Chubsucker (*Erimyzon sucetta*)	ST	Natural lakes, sluggish streams, along with marshes with dense aquatic vegetation and clear waters.	No
Iowa Darter (*Etheostoma exile*)	SE	Clean, clear, slow-moving waters such as lakes, ponds, and the backwaters of streams and rivers with vegetation.	No
Spotted Darter (*Etheostoma maculatum*)	SE	Found in the basin of the Ohio River and inhabits fast-flowing rocky riffles of medium-sized and smaller rivers, where there are many very large boulders or flat slabs of rock.	No
Shortnose Gar (*Lepisosteus platostomus*)	SE	Lakes, swamps, and the calm pools and backwaters of creeks and rivers.	No
Blacknose Shiner (*Notropis heterolepis*)	SE	Cool weedy creeks, small rivers, and lakes over sand.	No
Paddlefish (*Polyodon spathula*)	ST	Slow-moving, large, deep freshwater rivers and reservoirs.	No
Reptile			
Smooth Greensnake (*Opheodrys vernalis*)	SE	Lightly forested habitats, such as peat lands, pastures, bogs, marsh edges, and wet meadows.	No
Invertebrate			
Clubshell (*Pleurobema clava*)	FE, SE	Restricted mainly to headwater stretches of streams and small rivers. Prefers clean, loose sand and gravel.	Yes
Northern Riffleshell (*Epioblasma rangiana*)	FE, SE	Found in a variety of streams with firmly packed sand or gravel.	Yes
Rayed Bean (*Villosa fabalis*)	FE, SE	Smaller, headwater creeks, but it is sometimes found in large rivers and wave-washed areas of glacial lakes. Prefers gravel or sand substrates.	Yes
Salamander Mussel (*Simpsonaias ambigua*)	PE, ST	Requires habitat conditions that support mudpuppy (*Necturus maculosus*) populations, including clean, clear, flowing water, flat rocks and bedrock that provide crevice for shelter	Yes
Slippershell Mussel (*Alasmidonta viridis*)	ST	Headwaters, including intermittent creeks.	Yes
Elephant-ear (*Elliptio crassidens*)	SE	Strictly limited to big rivers, mainly Ohio River, in stable cobble and sand.	Yes

Species	Status[a]	Habitat Type	Habitat Observed During Site Visit
Snuffbox (*Epioblasma triquetra*)	SE	Small- to medium-sized creeks, inhabiting areas with a swift current, although it is also found in Lake Erie and some larger rivers. Adults often burrow deep in sand, gravel, or cobble substrates, except when they are spawning.	Yes
Pocketbook (*Lampsilis ovata*)	SE	Rivers and large creeks in stable sand and coble, although prefers a mix of gravel and sand with some silt or mud. Usually in moderately strong currents but can also exist in still water.	Yes
Washboard (*Megalonaias nervosa*)	SE	Inhabits small to large rivers, usually with slow currents and muddy to coarse gravel substrates.	Yes
Round Hickorynut (*Obovaria subrotunda*)	ST	From large rivers to small streams with moderate flow, along with lakes, with sand, gravel, and cobble substrates.	Yes
Rabbitsfoot (*Theliderma cylindrica*)	SE	Small to medium sized streams and some larger rivers. It occurs in shallow water areas along the bank and in shoals with reduced water velocity.	Yes
Pondhorn (*Uniomerus tetralasmus*)	ST	Quiet or slow-moving, shallow waters. Tolerant of poor water conditions. Sometimes found buried in fine silt and/or mud substrate.	Yes
Insects			
Monarch Butterfly (*Danaus plexippus*)	PT	Milkweed and flowering plants in a variety of habitats. Adults roost in trees near water, such as maple and conifers in the northern USA, and pecan and oak trees in the southern USA.	No
Stygian Shadowdragon (*Neurocordulia yamaskanensis*)	SE	Nymphs are found living in stream beds and utilize the nearby rocks and trees for emergence from exoskeletons before taking flight.	No
Plants			
Gattinger's-foxglove (*Agalinis gattingeri*)	ST	Dry roadsides, open woodlands, forest margins, mesic prairies, exposed ridges, and outcrops	No
Spreading Rock Cress (*Arabis patens*)	SE	Moist rocky woods, limestone outcrops, and shady riverbanks.	No
Cypress-knee Sedge (*Carex decomposita*)	SE	Very wet depressions in mixed swamp forests, most frequently on hummocks, exposed logs and peaty mounds. Found to be highly associated with buttonbush.	No
Showy Goldenrod (*Solidago speciosa*)	ST	Found in dry and sandy grasslands and fields, along with limestone barrens, oak savannas, open woods, and road embankments.	No

(a) FE = Federally Endangered, FT = Federally Threatened, SE = State Endangered, ST = State Threatened, PE = Proposed Endangered (Federal), PT= Proposed Threatened (Federal).
Source: Ohio DNR State Listed Species by County Report for Franklin County, accessed August 18, 2025; USFWS ECOS Species by County Report for Franklin, Ohio, accessed August 18, 2025.

4.0 Summary

Burns & McDonnell conducted a wetland delineation and onsite habitat assessment within the Survey Area to identify protected species habitat, wetlands, and other waterbodies. Two perennial streams were identified within the Survey Area.

Coordination with USFWS and ODNR has been initiated in August 2025. Two potential roost trees were identified in the Survey Area. These trees exhibited cracks, crevices, and/or exfoliating bark. These trees will be shown on engineering drawings and avoided during construction. If tree clearing activities cannot be conducted during the October 1st and March 31st window to avoid impacts to bats additional agency coordination is necessary. Furthermore, if tree clearing activities are required during the summer it is possible that the USFWS could request additional surveys. If proposed impacts change further coordination may be necessary.

In-stream work within Big Walnut Creek may impact habitat for several state and federally listed freshwater mussel species. In August 2025 a mussel survey and relocation was conducted in the affected portion of Big Walnut Creek (Permit Numbers ESPER0039255-1 (Schwegman) and ESPSR9968385-0 (Lawlis)). No known Threatened and Endangered species were detected within the survey or salvage areas. With the preferred method of HDD under Big Walnut Creek there will be no impacts to listed mussel species. If impacts to these streams are proposed further agency coordination may be required.

The USACE – Huntington District and the Ohio EPA regulate impacts to WOTUS and waters of the State (WOS), including wetlands and streams. If temporary or permanent fill will be placed in jurisdictional wetlands or streams that exceed 0.1 acre of impact, a Pre-Construction Notification will need to be submitted to the USACE Huntington District to receive coverage under Nationwide Permit 12 (NWP). General conditions of NWP 12 must be followed even if impacts are temporary or less than 0.1 acre. If impacts to WOS are proposed, then additional state permitting may be required.

On November 15, 2023, the U.S. Environmental Protection Agency and the USACE issued an update to the revised rules relevant for implementing either the 2023 rule or the pre-2015 regulatory regime. Based on this document, the USACE will use the “Relatively Permanent Standard” for determining if a tributary is jurisdictional. Relatively permanent waters (RPW) include tributaries that have flow or standing water year-round or continuously during certain times of year. RPWs do not include tributaries with flow or standing water for only a short duration in direct response to precipitation. “Direct response to precipitation” is intended to distinguish between episodic periods of flow associated with discrete precipitation events versus continuous flow for extended periods of time. With the new guidance, the USACE may no longer use the term “ephemeral streams”. However, ephemeral streams are those tributaries that flow for short durations as a direct response to rain events and as such, based on the current guidance, are not RPWs.

On March 12, 2025, new regulation clarified that wetlands must have a direct, continuous surface connection to a larger body of water to qualify for federal protection. This emphasizes that wetlands are only regulated if they abut or touch another regulated waterbody. The new regulation excludes certain wetlands separated by natural barriers or those that only connect during seasonal flooding from being a WOTUS.

A USACE jurisdictional determination is recommended if wetland and stream impacts will occur to verify jurisdictional status and boundaries. If there are proposed impacts to regulated features, a non-

notifying/self-certifying memo will be created to document any Project impacts below permitting thresholds and provide guidance on environmental compliance with the Clean Water Act. This package is for internal documentation purposes only and does not include agency submittal or review.

Appendix A – Figures

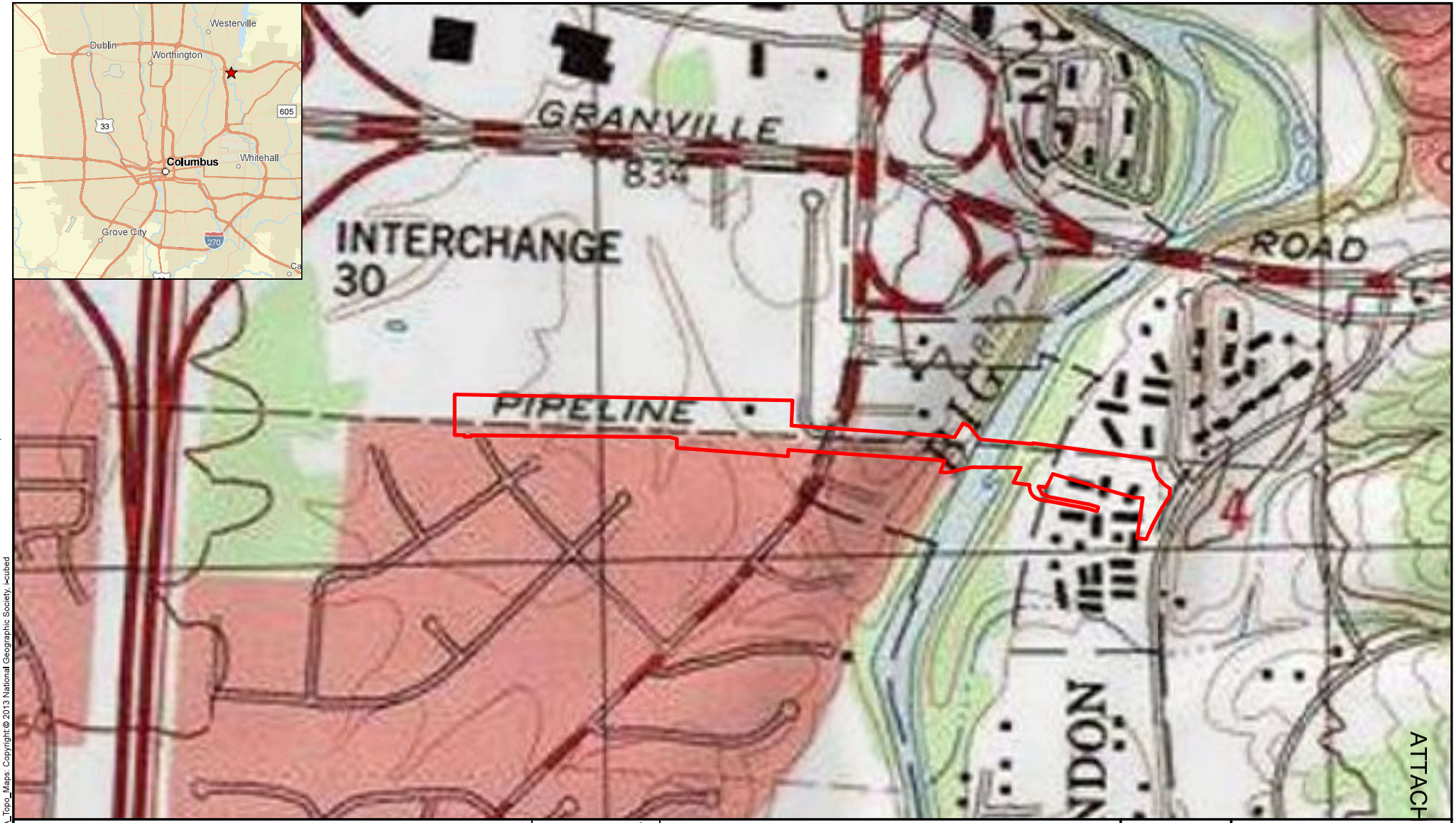

Figure 1
Vicinity Map
Big Walnut Creek Crossing
NiSource
Franklin County, OH

ATTACHMENT D

Source: ESRI, USGS, NiSource, Burns & McDonnell

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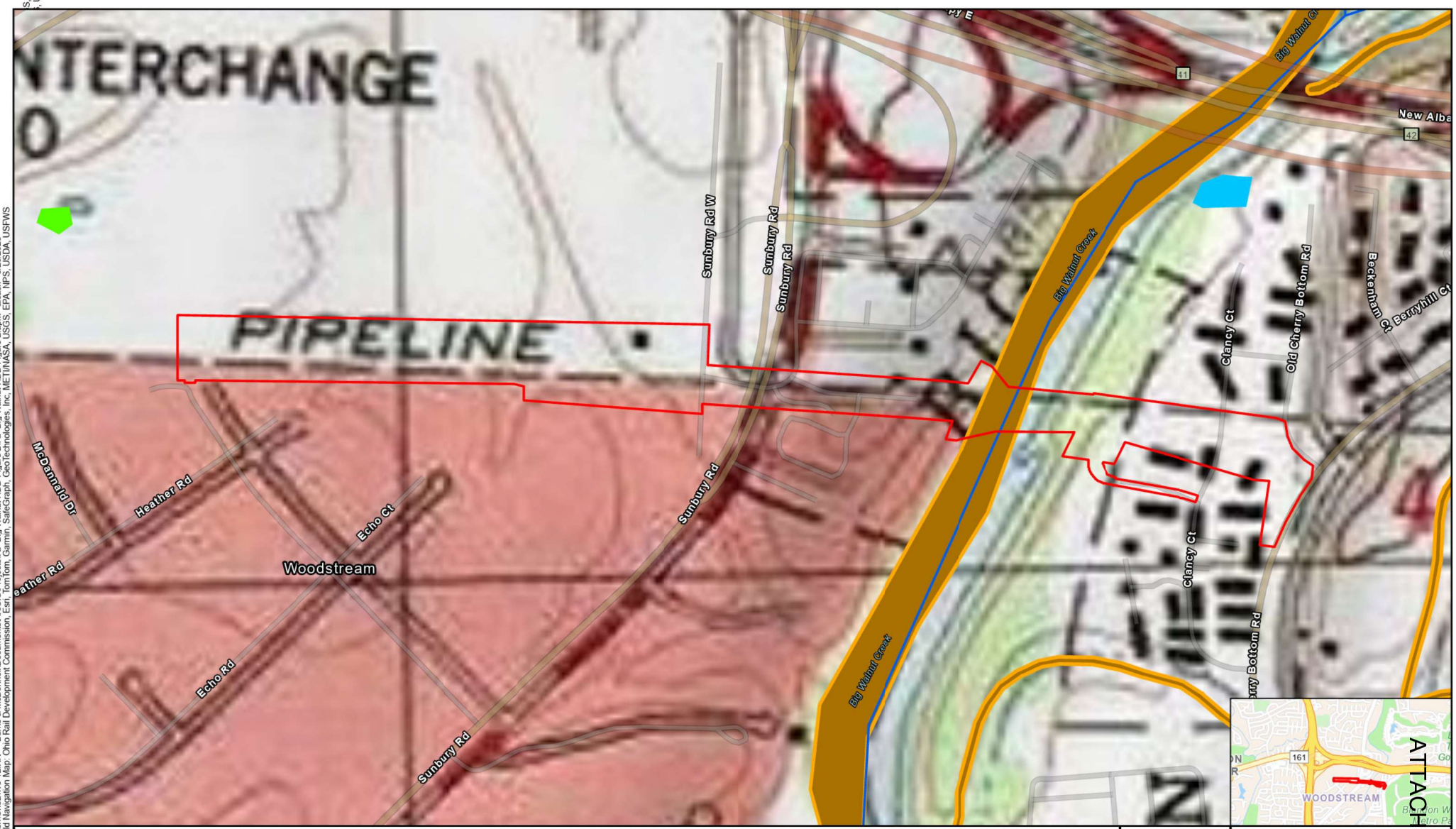
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Berryhill Ct
McDonald Dr
Heather Rd
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Echo Ct
Echo Rd
Woodstream
41
42
161
WOODSTREAM
New Alba
Survey Area
NHD Streams
NWI Wetlands
PEM
PFO/PSS
PUB
Riverine
NORTH
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Scale in Feet
BURNS McDONNELL
Figure 2
NWI, NHD, and Topographic Map
Big Walnut Creek Crossing
NiSource
Franklin County, OH
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Source: NWI, NHD, NiSource, Burns & McDonnell, ESRI
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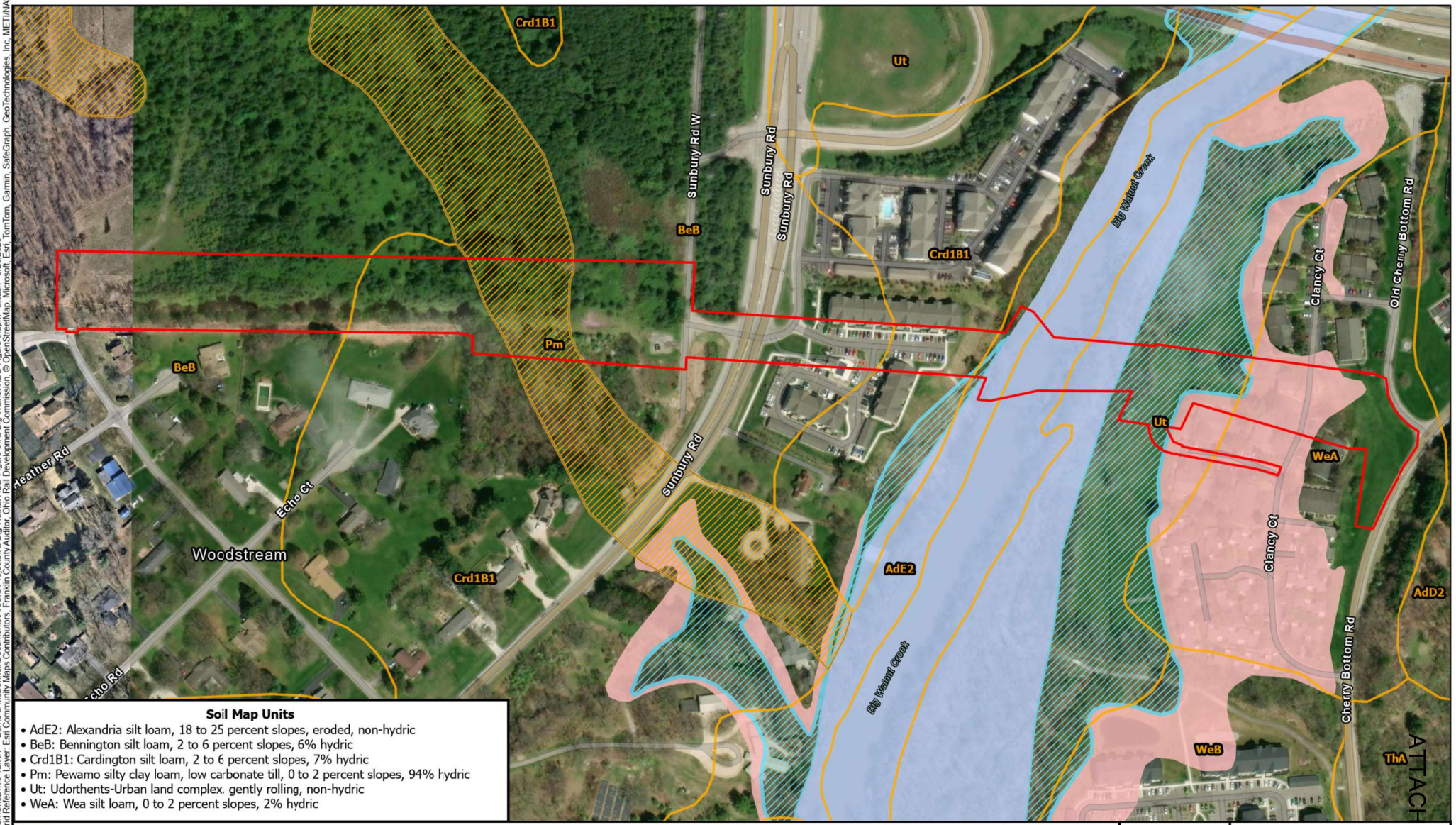

Soil Map Units

- AdE2: Alexandria silt loam, 18 to 25 percent slopes, eroded, non-hydric
- BeB: Bennington silt loam, 2 to 6 percent slopes, 6% hydric
- Crd1B1: Cardington silt loam, 2 to 6 percent slopes, 7% hydric
- Pm: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes, 94% hydric
- Ut: Udorthents-Urban land complex, gently rolling, non-hydric
- WeA: Wea silt loam, 0 to 2 percent slopes, 2% hydric

Survey Area
Soil Map Unit
Hydric Soil

FEMA Floodplain
500 yr floodplain
100 yr floodplain
Regulatory Floodway

NORTH
200 100 0 200
Scale in Feet

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Figure 3
Soils and Floodplain Map
Big Walnut Creek Crossing
NiSource
Franklin County, OH

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Source: FEMA, SSURGO, NiSource, Burns & McDonnell, ESRI

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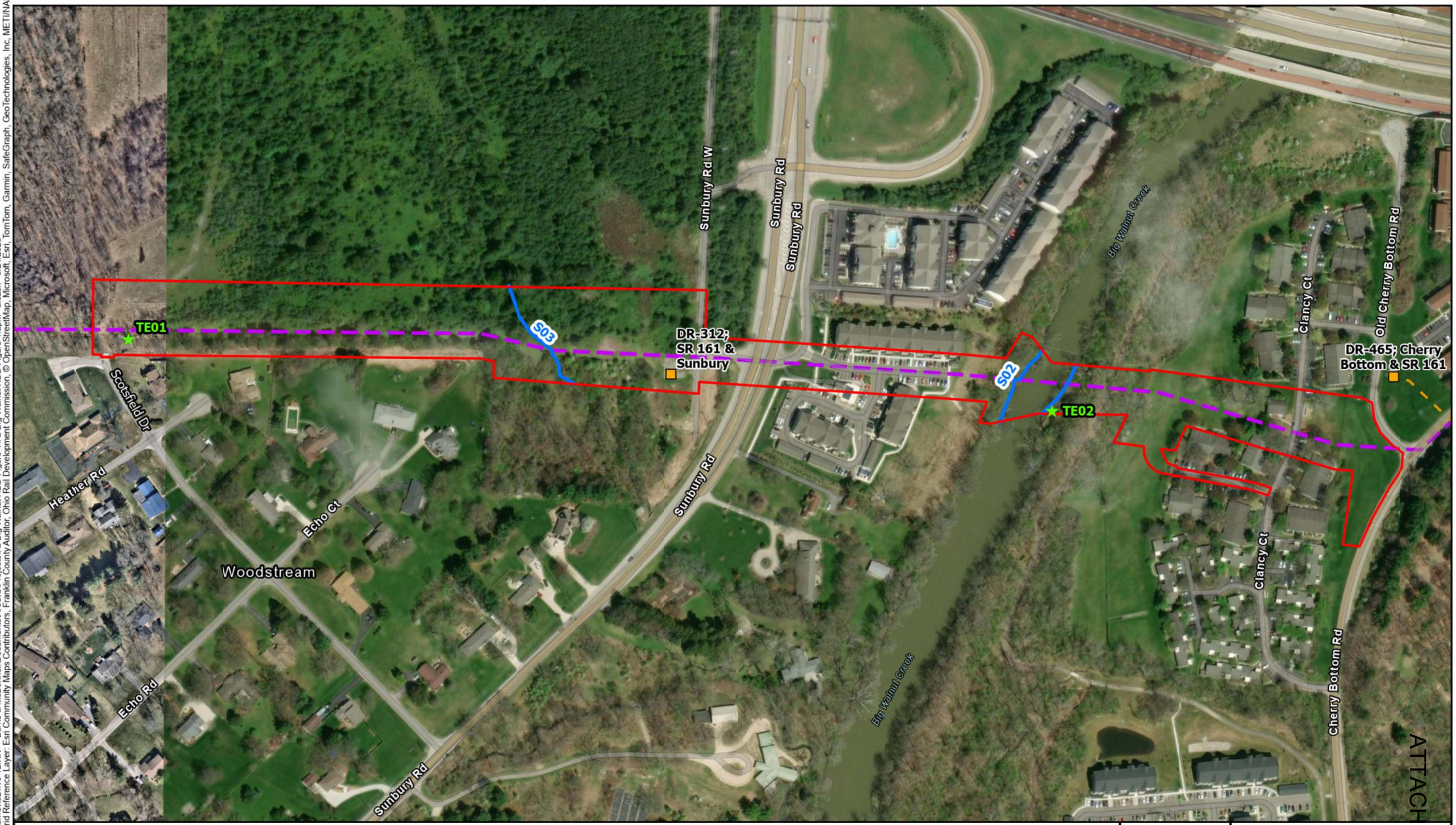

Survey Area
Potential Roost Tree
Pipeline Alignment
Pipeline Laterals
Stream (S)
Perennial Stream

NORTH
200 100 0 200
Scale in Feet

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Figure 4
Wetland Delineation Map
Big Walnut Creek Crossing
NiSource
Franklin County, OH

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Service Layer Credits: Hybrid Reference Layer: Esri Community Maps Contributors, Franklin County Auditor, Ohio Rail Development Commission, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA,

Source: NiSource, Burns & McDonnell

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Appendix B – Photolog

Photo 1: View upstream of perennial stream (S)02 Big Walnut Creek, facing north.

Photo 2: View downstream of perennial S02 Big Walnut Creek, facing south.

NiSource NCHP Big Walnut Creek Crossing Project	BURNS McDONNELL	Site Photographs July 30th and August 19th, 2025 Franklin County, OH

Photo 3: View upstream of perennial S03, facing northwest.

Photo 4: View downstream of perennial S03, facing southeast.

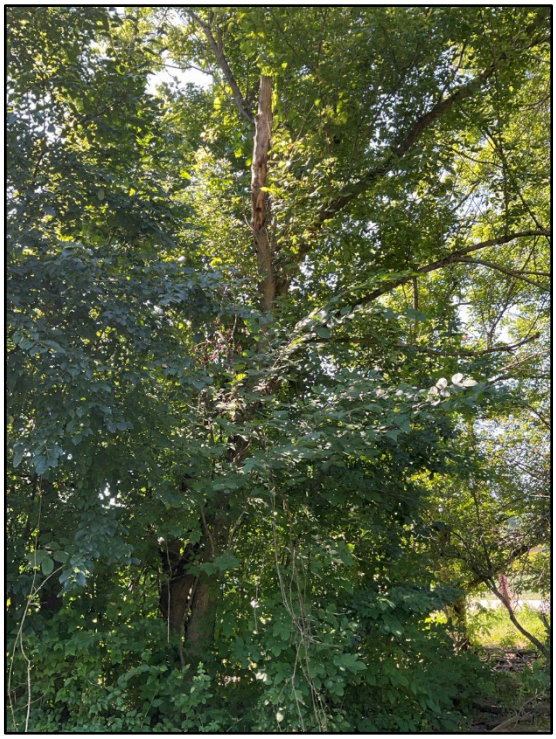

Photo 5: View of potential roost tree TE01, facing south.

Photo 6: View of potential roost tree TE02, facing east.

Photo 7: View of representative existing station on Sunbury Road, facing west.

Photo 8: View of representative pipeline right of way, facing west.

Photo 9: View of representative road right of way on Scotsfield Drive, facing south.

Photo 10: View of representative access area, facing south.

Photo 11: View of representative tree line, facing east.

Photo 12: View of representative maintained grass off Cherry Bottom Drive, facing southeast.

Appendix C – QHEI and HHEI Forms

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OhioEPA Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 79.5

Stream & Location: S.R. 2 Big Walnut Creek RM: ___.__ Date: 07/30/06

Scorers Full Name & Affiliation: Ben Squire BMCD

River Code: ___-___-___ STORET #: _____ Lat./Long.: (NAD 83 - decimal °) ___.____ / 18_.____ ☐ Office verified location

1] SUBSTRATE Check ONLY Two substrate TYPE BOXES; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐☐ BLDR /SLABS [10]			☐☐ HARDPAN [4]		
☐☐ BOULDER [9]	10		☐☐ DETRITUS [3]		
☒☐ COBBLE [8]	30		☐☐ MUCK [2]		
☐☒ GRAVEL [7]	30		☐☐ SILT [2]	20	
☐☐ SAND [6]	10		☐☐ ARTIFICIAL [0]		
☐☐ BEDROCK [5]			(Score natural substrates; ignore sludge from point-sources)		

NUMBER OF BEST TYPES: ☒ 4 or more [2] ☐ 3 or less [0]

Check ONE (Or 2 & average)

ORIGIN
- ☐ LIMESTONE [1]
- ☒ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☐ SHALE [-1]
- ☐ COAL FINES [-2]

QUALITY

SILT
- ☐ HEAVY [-2]
- ☐ MODERATE [-1]
- ☒ NORMAL [0]
- ☐ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☐ MODERATE [-1]
- ☒ NORMAL [0]
- ☐ NONE [1]

Comments

Substrate: 18 (Maximum 20)

2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

- ___ UNDERCUT BANKS [1]
- 2 OVERHANGING VEGETATION [1]
- ___ SHALLOWS (IN SLOW WATER) [1]
- ___ ROOTMATS [1]
- 1 POOLS > 70cm [2]
- ___ ROOTWADS [1]
- 1 BOULDERS [1]
- ___ OXBOWS, BACKWATERS [1]
- 1 AQUATIC MACROPHYTES [1]
- 1 LOGS OR WOODY DEBRIS [1]

AMOUNT Check ONE (Or 2 & average)
- ☐ EXTENSIVE >75% [11]
- ☒ MODERATE 25-75% [7]
- ☐ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

Comments

Cover Maximum 20: 13

3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average)

SINUOSITY
- ☐ HIGH [4]
- ☐ MODERATE [3]
- ☒ LOW [2]
- ☐ NONE [1]

DEVELOPMENT
- ☐ EXCELLENT [7]
- ☒ GOOD [5]
- ☐ FAIR [3]
- ☐ POOR [1]

CHANNELIZATION
- ☒ NONE [6]
- ☐ RECOVERED [4]
- ☐ RECOVERING [3]
- ☐ RECENT OR NO RECOVERY [1]

STABILITY
- ☐ HIGH [3]
- ☒ MODERATE [2]
- ☐ LOW [1]

Comments

Channel Maximum 20: 15

4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average)

River right looking downstream

EROSION

L	R	
☐	☐	NONE / LITTLE [3]
☒	☒	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

RIPARIAN WIDTH

L	R	
☒	☐	WIDE > 50m [4]
☐	☒	MODERATE 10-50m [3]
☐	☐	NARROW 5-10m [2]
☐	☐	VERY NARROW < 5m [1]
☐	☐	NONE [0]

FLOOD PLAIN QUALITY

L	R	
☒	☒	FOREST, SWAMP [3]
☐	☐	SHRUB OR OLD FIELD [2]
☐	☐	RESIDENTIAL, PARK, NEW FIELD [1]
☐	☐	FENCED PASTURE [1]
☐	☐	OPEN PASTURE, ROWCROP [0]
☐	☐	CONSERVATION TILLAGE [1]
☐	☐	URBAN OR INDUSTRIAL [0]
☐	☐	MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian Maximum 10: 8.5

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH Check ONE (ONLY!)
- ☒ > 1m [6]
- ☐ 0.7-<1m [4]
- ☐ 0.4-<0.7m [2]
- ☐ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH Check ONE (Or 2 & average)
- ☐ POOL WIDTH > RIFFLE WIDTH [2]
- ☒ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH > RIFFLE WIDTH [0]

CURRENT VELOCITY Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☒ FAST [1]
- ☒ MODERATE [1]
- ☐ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

Pool / Current Maximum 12: 9

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (Or 2 & average). ☐ NO RIFFLE [metric=0]

RIFFLE DEPTH
- ☒ BEST AREAS > 10cm [2]
- ☐ BEST AREAS 5-10cm [1]
- ☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
- ☒ MAXIMUM > 50cm [2]
- ☐ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
- ☐ STABLE (e.g., Cobble, Boulder) [2]
- ☒ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
- ☐ NONE [2]
- ☒ LOW [1]
- ☐ MODERATE [0]
- ☐ EXTENSIVE [-1]

Comments

Riffle / Run Maximum 8: 6

6] GRADIENT (4.87 ft/mi)

DRAINAGE AREA (194 mi²)

- ☐ VERY LOW - LOW [2-4]
- ☒ MODERATE [6-10]
- ☐ HIGH - VERY HIGH [10-6]

%POOL: 25 %GLIDE: 20

%RUN: 40 %RIFFLE: 15

Gradient Maximum 10: 10

ATTACHMENT D

A] SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
- ☐ WADE
- ☐ L. LINE
- ☐ OTHER

STAGE

1st -sample pass-	2nd
☐ HIGH	☐
☐ UP	☐
☐ NORMAL	☐
☐ LOW	☐
☐ DRY	☐

DISTANCE

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

_____ meters

CLARITY

1st --sample pass--	2nd
☐ < 20 cm	☐
☐ 20-<40 cm	☐
☐ 40-70 cm	☐
☐ > 70 cm/ CTB	☐
☐ SECCHI DEPTH	☐

1st pass _____ cm

2nd _____ cm

CANOPY

- ☐ > 85%- OPEN
- ☐ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

Comment RE: Reach consistency/ Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

C] RECREATION

AREA DEPTH

POOL: ☐ >100ft² ☐ >3ft

D] MAINTENANCE

Circle some & COMMENT

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

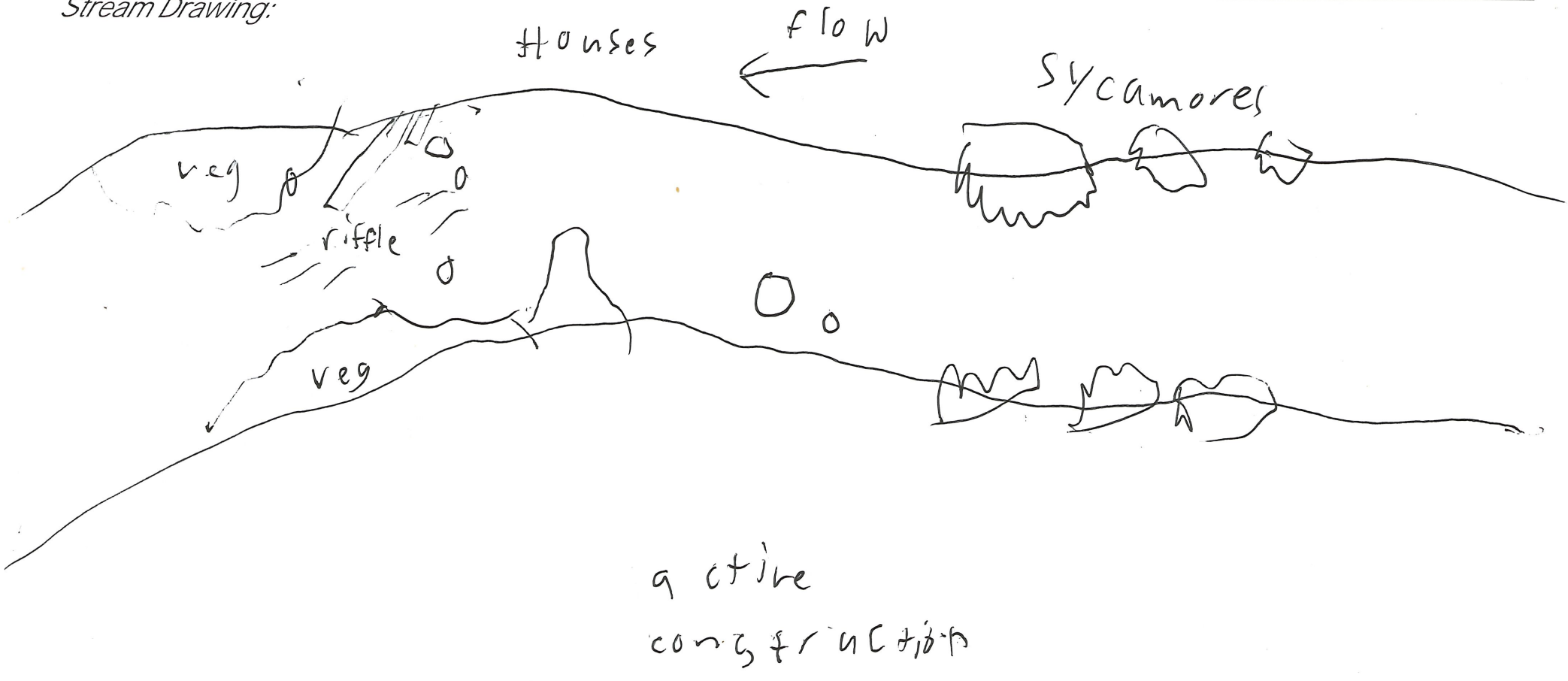
WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:



ATTACHMENT D

Headwater Habitat Evaluation Index Field Form

Ohio Environmental Protection Agency

HHEI Score (sum of metrics 1+2+3) 60

SITE NAME/LOCATION NCHP Phase 7a

SITE NUMBER 303 RIVER BASIN _____ RIVER CODE _____ DRAINAGE AREA (mi²) .38

LENGTH OF STREAM REACH (ft) 262 LAT _____ LONG _____ RIVER MILE _____

DATE 7/30/25 SCORER Ben Salyer COMMENTS _____

NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type present). Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]		☐☐	SILT [3 pt]	25
☐☐	BOULDER (>256 mm) [16 pts]		☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	
☐☐	BEDROCK [16 pts]		☐☐	FINE DETRITUS [3 pts]	
☐☒	COBBLE (65-256 mm) [12 pts]	25	☐☐	CLAY or HARDPAN [0 pt]	
☒☐	GRAVEL (2-64 mm) [9 pts]	40	☐☐	MUCK [0 pts]	
☐☐	SAND (<2 mm) [6 pts]	10	☐☐	ARTIFICIAL [3 pts]	

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 25 (A) 21

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 21 **TOTAL NUMBER OF SUBSTRATE TYPES:** (B) 4

HHEI Metric Points

Substrate Max = 40

25

A + B

2. Maximum Pool Depth (*Measure the maximum pool depth within the 61 meter (200 feet)* evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

- ☒ > 30 centimeters [20 pts]
- ☐ > 22.5 - 30 cm [30 pts]
- ☐ > 10 - 22.5 cm [25 pts]
- ☐ 5 cm - 10 cm [15 pts]
- ☐ < 5 cm [5pts]
- ☐ NO WATER OR MOIST CHANNEL [0pts]

COMMENTS _____ **MAXIMUM POOL DEPTH (centimeters):** 70

Pool Depth Max = 30

20

3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):

- ☐ > 4.0 meters (> 13') [30 pts]
- ☐ > 3.0 m - 4.0 m (> 9' 7"- 13') [25 pts]
- ☐ > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]
- ☒ > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
- ☐ ≤ 1.0 m (≤ 3' 3") [5 pts]

COMMENTS _____ **AVERAGE BANKFULL WIDTH (meters)** 1.2

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ★NOTE: River Left (L) and Right (R) as looking downstream★

RIPARIAN WIDTH (Per Bank) L	R		FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☒	☒	Wide >10m	☒	☒	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS _____

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

- ☒ Stream Flowing
- ☐ Subsurface flow with isolated pools (interstitial)
- ☐ Moist Channel, isolated pools, no flow (intermittent)
- ☐ Dry channel, no water (ephemeral)

COMMENTS _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

☐ None	☐ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☒ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☒ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? ☐ Yes ☐ No QHEI Score _____ (If Yes, Attach Completed QHEI form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.

USGS Quadrangle Name: _____ NRCS Soil Map Page: _____ NRCS Soil Map Stream Order: _____

County: _____ Township/City: _____

MISCELLANEOUS

Base Flow Conditions? (Y/N): _____ Date of last precipitation: _____ Quantity: _____

Photo-documentation Notes: _____

Elevated Turbidity? (Y/N): _____ Canopy (% open): _____

Were samples collected for water chemistry? (Y/N): _____ Lab Sample # or ID (attach results): _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (umhos/cm) _____

Is the sampling reach representative of the stream (Y/N) _____ If not, explain: _____

_____

Additional comments/description of pollution impacts: _____

_____

BIOLOGICAL OBSERVATIONS

(Record all observations below)

Fish Observed? (Y/N) _____ Species observed (if known): _____

Frogs or Tadpoles Observed? (Y/N) _____ Species observed (if known): _____

Salamanders Observed? (Y/N) _____ Species observed (if known): _____

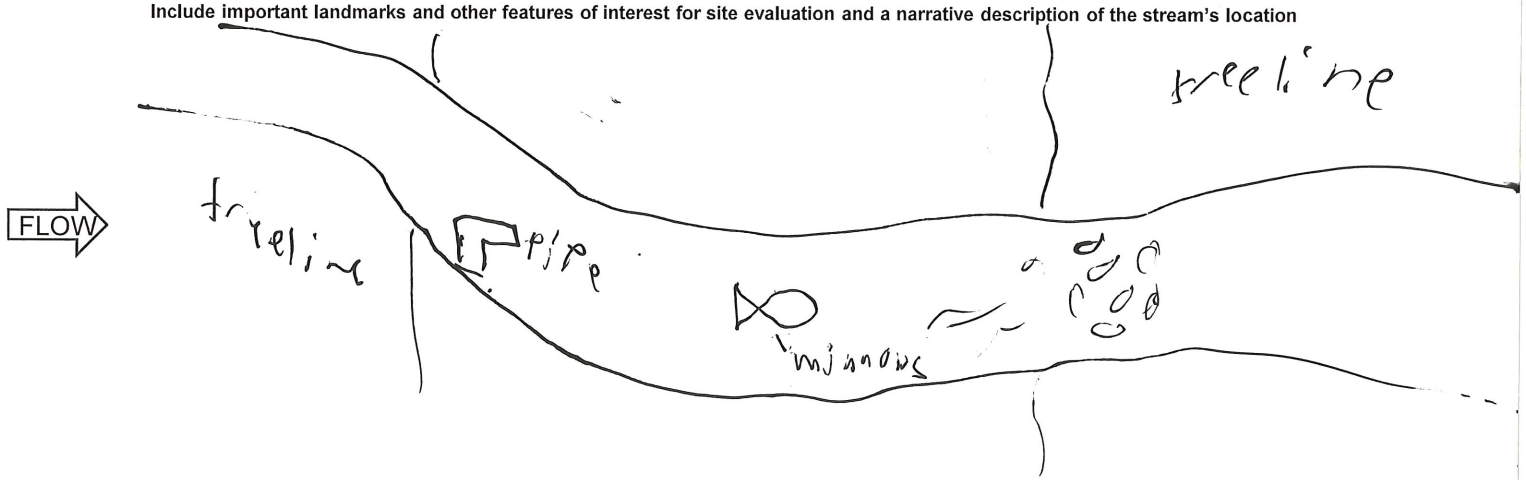
Aquatic Macroinvertebrates Observed? (Y/N) _____ Species observed (if known): _____

Comments Regarding Biology: _____

_____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



Appendix D - Agency Correspondence and Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ohio Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, OH 43230-8355
Phone: (614) 416-8993 Fax: (614) 416-8994

In Reply Refer To: 08/18/2025 19:19:16 UTC
Project Code: 2025-0137317
Project Name: Big Walnut Creek Crossing

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Requests for additional technical assistance or consultation from the Ohio Field Office should be submitted following guidance on the following page https://www.fws.gov/office/ohio-ecological-services/request-project-review. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ohio Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, OH 43230-8355
(614) 416-8993

PROJECT SUMMARY

Project Code: 2025-0137317
Project Name: Big Walnut Creek Crossing
Project Type: Pipeline - Onshore - Maintenance / Modification - Below Ground
Project Description: Emergency installation of a new section of pipeline under Big Walnut Creek via HDD to address an anomaly located under Big Walnut Creek. The anomaly was discovered during an in-line-inspection of one of our pipelines and requires immediate attention. HDD will reduce the impact to Big Walnut Creek and the adjacent floodway and floodplain but open trenching will be utilized if HDD is not possible.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.0778965,-82.89188550235696,14z

Counties: Franklin County, Ohio

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

CLAMS

NAME	STATUS
Rayed Bean *Villosa fabalis* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5862	Endangered
Round Hickorynut *Obovaria subrotunda* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9879	Threatened
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Antonio Hornstein
Address: 530 W Spring St
Address Line 2: Ste 100
City: Columbus
State: OH
Zip: 43215
Email alhornstein1@gmail.com
Phone: 3096425009

ATTACHMENT D

Franklin County State Listed Plant Species

Common Name	Scientific Name	Last Observed	Category	State Status	Federal Status
American Sweet-flag	*Acorus americanus*	1989	Vascular Plant	P	
Gattinger's-foxglove	*Agalinis gattingeri*	2017	Vascular Plant	T	
Spreading Rock Cress	*Arabis patens*	2022	Vascular Plant	E	
Southern Hairy Rock Cress	*Arabis pycnocarpa* var. *adpressipilis*	2023	Vascular Plant	P	
Prairie False Indigo	*Baptisia lactea*	2017	Vascular Plant	P	
Prairie Brome	*Bromus kalmii*	2019	Vascular Plant	P	
Cypress-knee Sedge	*Carex decomposita*	2006	Vascular Plant	E	
Tall Larkspur	*Delphinium exaltatum*	2008	Vascular Plant	P	
One-sided Rush	*Juncus secundus*	2012	Vascular Plant	P	
Scaly Blazing-star	*Liatris squarrosa*	2019	Vascular Plant	P	
Showy Goldenrod	*Solidago speciosa*	2019	Vascular Plant	T	
Arbor Vitae	*Thuja occidentalis*	2001	Vascular Plant	P	

Data from the Ohio Natural Heritage Database

Species reported extant in county since 1980

6/21/2023

Status:
X = Extirpated
E = Endangered
T = Threatened
P = Potentially Threatened
U = Undetermined

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements.

Common Name	Scientific Name	Last Observed	Category	State Status	Federal Status
Three-birds Orchid	*Triphora trianthophoros*	1981	Vascular Plant	P	
Rock Elm	*Ulmus thomasii*	2010	Vascular Plant	P	

Data from the Ohio Natural Heritage Database

Species reported extant in county since 1980

6/21/2023

Status:
X = Extirpated
E = Endangered
T = Threatened
P = Potentially Threatened
U = Undetermined

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements.

ATTACHMENT D

Franklin County State Listed Animal Species

Common Name	Scientific Name	Group	State Status	Federal Status
Blanchard's Cricket Frog	*Acris blanchardi*	Amphibian	Species of Concern	
Green-winged Teal	*Anas crecca*	Bird	Special Interest	
Sandhill Crane	*Antigone canadensis*	Bird	Threatened	
Great Egret	*Ardea alba*	Bird	Species of Concern	
Upland Sandpiper	*Bartramia longicauda*	Bird	Endangered	
American Bittern	*Botaurus lentiginosus*	Bird	Endangered	
Lark Sparrow	*Chondestes grammacus*	Bird	Endangered	
Least Bittern	*Ixobrychus exilis*	Bird	Threatened	
Yellow-crowned Night-heron	*Nyctanassa violacea*	Bird	Special Interest	
Prothonotary Warbler	*Protonotaria citrea*	Bird	Species of Concern	
Barn Owl	*Tyto alba*	Bird	Threatened	
Golden-winged Warbler	*Vermivora chrysoptera*	Bird	Special Interest	
Lyre-tipped Spreadwing	*Lestes unguiculatus*	Damselfly	Species of Concern	
Eastern Ringtail	*Erpetogomphus designatus*	Dragonfly	Species of Concern	

Data from the Ohio Natural Heritage Database

Species reported extant in county since 1980

6/23/2023

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements. All federally and/or state listed bat species have ranges that encompass the entire state and are not included on county lists. For further information on current listed species, please use the following link:

State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

Common Name	Scientific Name	Group	State Status	Federal Status
Stygian Shadowdragon	*Neurocordulia yamaskanensis*	Dragonfly	Endangered	
Lake Chubsucker	*Erimyzon sucetta*	Fish	Threatened	
Muskellunge	*Esox masquinongy*	Fish	Species of Concern	
Iowa Darter	*Etheostoma exile*	Fish	Endangered	
Spotted Darter	*Etheostoma maculatum*	Fish	Endangered	
Tippecanoe Darter	*Etheostoma tippecanoe*	Fish	Species of Concern	
Shortnose Gar	*Lepisosteus platostomus*	Fish	Endangered	
Blacknose Shiner	*Notropis heterolepis*	Fish	Endangered	
Paddlefish	*Polyodon spathula*	Fish	Threatened	
Deer Mouse	*Peromyscus maniculatus*	Mammal	Species of Concern	
American Badger	*Taxidea taxus*	Mammal	Species of Concern	
Elktoe	*Alasmidonta marginata*	Mollusk	Species of Concern	
Slippershell Mussel	*Alasmidonta viridis*	Mollusk	Threatened	
Purple Wartyback	*Cyclonaias tuberculata*	Mollusk	Species of Concern	
Elephant-ear	*Elliptio crassidens*	Mollusk	Endangered	
Northern Riffleshell	*Epioblasma rangiana*	Mollusk	Endangered	Endangered

Data from the Ohio Natural Heritage Database

Species reported extant in county since 1980

6/23/2023

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements. All federally and/or state listed bat species have ranges that encompass the entire state and are not included on county lists. For further information on current listed species, please use the following link:

State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

Common Name	Scientific Name	Group	State Status	Federal Status
Snuffbox	*Epioblasma triquetra*	Mollusk	Endangered	Endangered
Wavy-rayed Lampmussel	*Lampsilis fasciola*	Mollusk	Species of Concern	
Pocketbook	*Lampsilis ovata*	Mollusk	Endangered	
Creek Heelsplitter	*Lasmigona compressa*	Mollusk	Species of Concern	
Black Sandshell	*Ligumia recta*	Mollusk	Species of Concern	
Washboard	*Megalonaias nervosa*	Mollusk	Endangered	
Threehorn Wartyback	*Obliquaria reflexa*	Mollusk	Species of Concern	
Round Hickorynut	*Obovaria subrotunda*	Mollusk	Threatened	
Clubshell	*Pleurobema clava*	Mollusk	Endangered	Endangered
Round Pigtoe	*Pleurobema sintoxia*	Mollusk	Species of Concern	
Kidneyshell	*Ptychobranchus fasciolaris*	Mollusk	Species of Concern	
Salamander Mussel	*Simpsonaias ambigua*	Mollusk	Threatened	
Rabbitsfoot	*Theliderma cylindrica*	Mollusk	Endangered	Threatened
Fawnsfoot	*Truncilla donaciformis*	Mollusk	Species of Concern	
Deertoe	*Truncilla truncata*	Mollusk	Species of Concern	
Pondhorn	*Uniomerus tetralasmus*	Mollusk	Threatened	

Data from the Ohio Natural Heritage Database

Species reported extant in county since 1980

6/23/2023

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements. All federally and/or state listed bat species have ranges that encompass the entire state and are not included on county lists. For further information on current listed species, please use the following link:

State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

Common Name	Scientific Name	Group	State Status	Federal Status
Rayed Bean	*Villosa fabalis*	Mollusk	Endangered	Endangered
Rainbow	*Villosa iris*	Mollusk	Species of Concern	
Smooth Greensnake	*Opheodrys vernalis*	Reptile	Endangered	
Queensnake	*Regina septemvittata*	Reptile	Species of Concern	

Data from the Ohio Natural Heritage Database

Species reported extant in county since 1980

6/23/2023

Absence of a species on this list does not indicate absence from the county. The information contained in this list does not represent coordination with ODNR or fulfill NEPA or other federal/state requirements. All federally and/or state listed bat species have ranges that encompass the entire state and are not included on county lists. For further information on current listed species, please use the following link:

State Listed Species | Ohio Department of Natural Resources (ohiodnr.gov)

BURNS McDONNELL

8/20/2025

Attention: Jeromy Applegate
U.S. Fish and Wildlife Service
4265 Morse Road, Suite 104
Columbus, OH 43230

Re: Project Review Request, Big Walnut Creek Crossing
IPAC #: 2025-0137317
Franklin County, Ohio

Dear Mr. Applegate,

NiSource is formally requesting that the U.S. Fish and Wildlife Service (USFWS) complete an environmental review for the proposed North Columbus High Pressure Pipeline(NCHP) Big Walnut Creek Crossing emergency dent repair located in Franklin County, Ohio (Figure 1). The Project is within the City of Columbus. The Big Walnut Creek Crossing project includes the emergency installation of a new section of pipeline under Big Walnut Creek to address an anomaly discovered during an in-line inspection of an existing pipeline. Horizontal directional drilling (HDD) is the preferred method of installation to reduce potential impacts to Big Walnut Creek and the adjacent floodplain. In the event that HDD method cannot be utilized, the new section will be installed via open trench. In August 2025 a mussel survey and relocation was conducted in the affected portion of Big Walnut Creek (Permit Numbers ESPER0039255-1 (Schwegman) and ESPSR9968385-0 (Lawlis)). No known Threatened and Endangered species were detected within the survey or salvage areas. The environmental impact area was surveyed for potentially suitable bat habitat on August 19, 2025. Two trees were identified as having characteristics suitable for roosting such as cracks, crevices, and/or exfoliating bark. The two trees are to be shown in engineering drawings and avoided during construction. An estimated total of 1.26 acres of tree clearing is likely to be required. Although a species-specific survey was not conducted, no bats were observed while on-site. Landscape trees within road right of way and some forested areas are present within portions of the existing pipeline right of way.

Due to the emergency nature of this project, we are requesting that you please provide us with information on federally listed threatened and endangered species as soon as possible. For ease of review, we have included a project location map (Figure 1), shapefile of the project survey boundary, and IPaC official species list. If you have questions or need additional information regarding the Project, please contact me at the phone number or email below. Thank you for your assistance with this request.

Sincerely,

Brooke Harrison

Brooke Harrison
Project Manager
bharrison@burnsmcd.com
(380) 390-2516

Burns & McDonnell
Attn. Brooke Harrison

530 West Spring Street, Suite 100
Columbus, OH 43215

Cc:

Antonio Hornstein, Burns & McDonnell

ATTACHMENT D

BURNS McDONNELL

8/20/2025

Attention: Mike Pettegrew
ODNR Office of Real Estate & Land Management
2045 Morse Road, Building E-2
Columbus, OH 43229

Via email: environmentalreviewrequest@dnr.state.oh.us

Re: Project Review Request
NCHP Big Walnut Creek Crossing
Franklin County, Ohio

Dear Mr. Pettegrew,

NiSource is formally requesting that the Ohio Department of Natural Resources (ODNR) complete an environmental review for the proposed North Columbus High Pressure Pipeline(NCHP) Big Walnut Creek Crossing emergency dent repair located in Franklin County, Ohio (Figure 1). The Project is within the City of Columbus. The Big Walnut Creek Crossing project includes the emergency installation of a new section of pipeline under Big Walnut Creek to address an anomaly discovered during an in-line inspection of an existing pipeline. Horizontal directional drilling (HDD) is the preferred method of installation to reduce potential impacts to Big Walnut Creek and the adjacent floodplain. In the event that HDD method cannot be utilized, the new section will be installed via open trench. In August 2025 a mussel survey and relocation was conducted in the affected portion of Big Walnut Creek (USFWS Permit Numbers ESPER0039255-1 (Schwegman) and ESPSR9968385-0 (Lawlis)). No known Threatened and Endangered species were detected within the survey or salvage areas. The environmental impact area was surveyed for potentially suitable bat habitat on August 19, 2025. Two trees were identified as having characteristics suitable for roosting such as cracks, crevices, and/or exfoliating bark. The two trees are to be shown in engineering drawings and avoided during construction. An estimated total of 1.26 acres of tree clearing is likely to be required. Although a species-specific survey was not conducted, no bats were observed while on-site. Landscape trees within road right of way and some forested areas are present within portions of the existing pipeline right of way.

Due to the emergency nature of this project, we are requesting that you please provide us with the results of the ODNR's environmental review, including results of the ODNR Natural Heritage Database search, as soon as possible. For ease of review, we have included a project location map (Figure 1) and shapefile of the project survey boundary. If you have questions or need additional information regarding the Project, please contact me at the phone number or email below. Thank you for your assistance with this request.

Sincerely,

Brooke Harrison

Brooke Harrison
Project Manager
bharrison@burnsmcd.com
(380) 390-2516

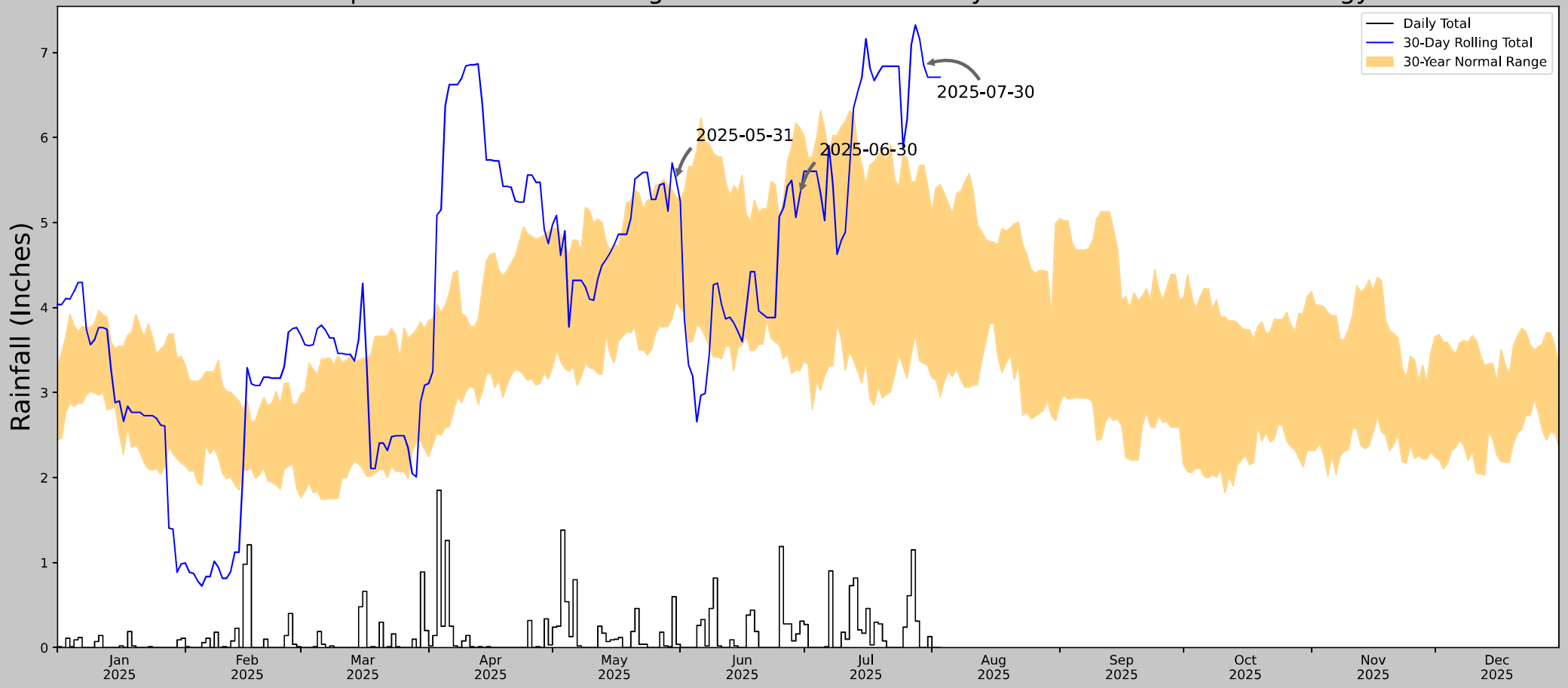
Burns & McDonnell
Attn. Brooke Harrison
530 West Spring Street, Suite 100
Columbus, OH 43215

Cc:

Antonio Hornstein, Burns & McDonnell

Appendix E - Antecedent Precipitation Tool

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.07847, -82.90271
Observation Date	2025-07-30
Elevation (ft)	840.278
Drought Index (PDSI)	Incipient drought (2025-06)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-07-30	3.345669	5.672835	6.850394	Wet	3	3	9
2025-06-30	3.261811	6.114961	5.330709	Normal	2	2	4
2025-05-31	4.067323	5.294488	5.5	Wet	3	1	3
Result							Wetter than Normal (16

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

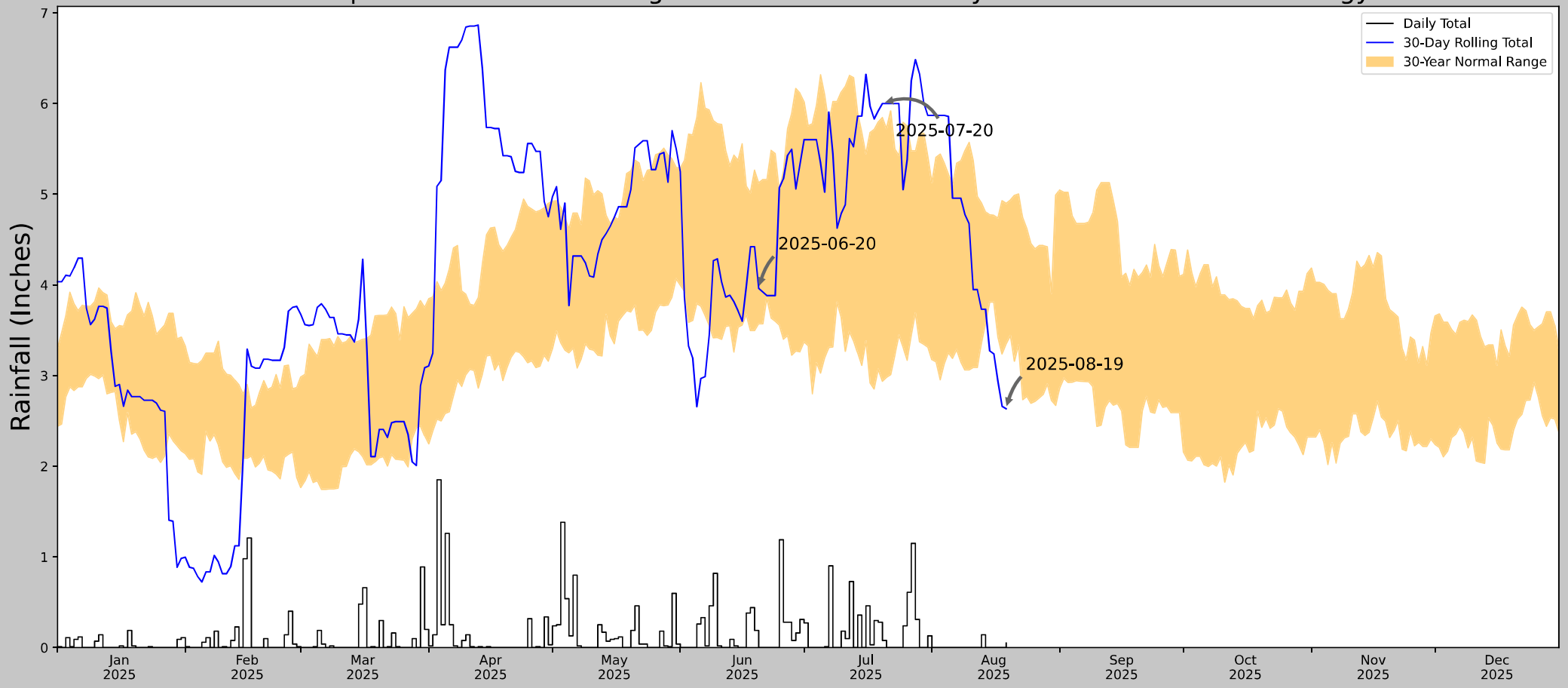
US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
COLUMBUS-HAP CREMEAN WP	40.0603, -82.8942	831.037	1.334	9.241	0.612	10771	86
COLUMBUS 8.2 NE	40.0639, -82.8673	955.053	1.444	124.016	0.829	8	4
COLUMBUS 3.5 NE	40.0287, -82.9477	833.005	3.574	1.968	1.615	2	0
WESTERVILLE 3.0 ESE	40.1107, -82.8622	875.0	3.871	43.963	1.912	1	0
WESTERVILLE 0.2 WNW	40.1226, -82.9213	886.155	4.537	55.118	2.292	43	0
JOHN GLENN INTL AP	39.9906, -82.8769	810.039	4.902	20.998	2.309	528	0

ATTACHMENT D

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.07828, -82.8971
Observation Date	2025-08-19
Elevation (ft)	830.464
Drought Index (PDSI)	Mild wetness (2025-07)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-08-19	3.348032	4.898819	2.633858	Dry	1	3	3
2025-07-20	2.937795	5.846851	6.0	Wet	3	2	6
2025-06-20	3.57126	5.12441	3.96063	Normal	2	1	2
Result							Normal Conditions = 11

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers. ERDC

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
COLUMBUS-HAP CREMEAN WP	40.0603, -82.8942	831.037	1.252	0.573	0.564	10771	88
COLUMBUS 8.2 NE	40.0639, -82.8673	955.053	1.444	124.016	0.829	8	2
COLUMBUS 3.5 NE	40.0287, -82.9477	833.005	3.574	1.968	1.615	2	0
WESTERVILLE 3.0 ESE	40.1107, -82.8622	875.0	3.871	43.963	1.912	1	0
WESTERVILLE 0.2 WNW	40.1226, -82.9213	886.155	4.537	55.118	2.292	43	0
JOHN GLENN INTL AP	39.9906, -82.8769	810.039	4.902	20.998	2.309	528	0

ATTACHMENT D


BURNS
McDONNELL