



GCI PROJECT #20-E-24706

Jurisdictional Waters Delineation Report

Forest Ridge Property Hazelton-Etna Road Pataskala, Licking County, Ohio

Prepared for:

Watcon Consulting Engineers & Surveyros, LLC

February 24, 2021

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GEOTECHNICAL CONSULTANTS INC.

REPORT OF JURISDICTIONAL WATERS DELINEATION

FOREST RIDGE PROPERTY HAZELTON-ETNA ROAD PATASKALA, LICKING COUNTY, OHIO

GCI PROJECT NO. 20-E-24706

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Licking County Auditor's GIS Map
2019 USGS Topographic Map
USDA Web Soil Survey Map
National Wetlands Inventory (NWI) Map
1989, 1997, 2002, 2006, 2011, and 2019 Aerial Photographs
Jurisdictional Waters Location Map (2 pages)
Photo Key Map (2 pages)
Photographs (Photo 1 through Photo 78)
Midwest Region Wetland Determination Data Form (34 pages)
ORAM Scoresheets (110 pages)

1.0 INTRODUCTION

Watcon Consulting Engineers & Surveyors, LLC retained Geotechnical Consultants, Inc. (GCI) to perform a jurisdictional waters delineation of the Forest Ridge property located east of Hazelton-Etna Road in Pataskala, Licking County, Ohio (the "property" of "site"). The property comprises 128.134± acres of agricultural and wooded land identified by Licking County parcel identification numbers 255-067746-00.000 (75.735± acres), 255-069066-00.005 (14.829± acres), and 255-069072-00.000 (37.57± acres).

The delineation consists of three parts: 1) preliminary off-site determination (research of existing published data), 2) on-site delineation, and 3) data compilation/report preparation.

The purpose of the delineation is to locate and delineate the quantity and quality of jurisdictional waters on the property, as outlined in the agreement dated October 26, 2020, between GCI and Wicked Chicken, LLC. GCI performed this delineation for specific application to the property described herein, in accordance with the <u>U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987)</u> and the <u>2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region.</u>

This report is an instrument of professional service prepared by GCI for the sole use of Watcon Consulting Engineers & Surveyors, LLC and other parties that may be designated jointly by Watcon Consulting Engineers & Surveyors, LLC and GCI. Any other party that wishes to use or rely upon this report, or that wishes to duplicate, otherwise, reproduce or copy, or excerpt from, or quote this report must apply for authorization to do so. Any unauthorized use of or reliance on this report shall release GCI from any liability resulting from such use or reliance. Any unauthorized duplication, other reproduction or copying, or excerption or quotation of this report shall expose the violator to all legal remedies available to GCI. This report will become public information upon submittal to the USACE.

2.0 PROPERTY DESCRIPTION AND PROJECT SCOPE

The property is located east of Hazelton-Etna Road in Pataskala, Licking County, Ohio. The property comprises 128.134± acres of agricultural and wooded land identified by Licking County parcel identification numbers 255-067746-00.000 (75.735± acres), 255-069066-00.005 (14.829± acres), and 255-069072-00.000 (37.57± acres). Approximate latitude / longitude coordinates for the center of the property are 40.017249 / -82.663815.

The property is predominantly wooded land except for the southwestern portion of the property which is agricultural land. The wooded areas are generally dominated by black cherry, sugar maple, red Maple, American beech, American elm, American sycamore, pin oak, black walnut, and bush honeysuckle.

Hazelton-Etna Road borders a portion of the west side of the property. Single-family residential properties adjoin the west side of the property, east of Hazelton-Etna Road. A residential development adjoins the north, northeast, and south sides of the property. Wooded land adjoins the east side of the property. A general property location map, a Licking County Auditor's GIS Map, a 2019 USGS topographic map (Jersey, Ohio quadrangle), and aerial photographs showing the approximate property area are appended to this report. Photographs showing representative vegetation, property features, and views from several locations around the site are also included.

GCI identified seven (7) streams (Stream 1 through Stream 7) totaling **9,810± linear feet**, and eleven (11) wetlands (Wetland A through Wetland K) totaling **9.42± acres** within the property boundary. GCI surveyed the stream and wetland locations with a sub-meter Spectra Geospatial SP20 handheld global navigation satellite system (GNSS) receiver. Attached to this report is a **Jurisdictional Waters Location Map** showing the location of the delineated stream, pond, and wetlands.

The following report provides additional information and should be read entirely.

3.0 RECORDS REVIEW AND DETERMINATION

The preliminary off-site determination consisted of a desk-top review of published information including USGS topographic maps, US Department of Agriculture (USDA) soils map, US Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) map, and aerial photographs from local governmental agencies. GCI used this information to determine the geo-morphological setting at the property, soil types present, whether disturbed conditions existed at the property, and to determine the appropriate field delineation method to be used.

3.1 TOPOGRAPHY

GCI reviewed the 2019 *Jersey, Ohio*, United States Geological Survey (USGS) 7.5-minute series topographic maps for the property area. According to the maps, surface elevations range from approximately 1080 feet above mean sea level (AMSL) on the southwestern portion of the property to approximately 1200 feet AMSL on the northeastern portion of the property. Three (3) north/south oriented streams are depicted within the property. Surface elevations in the general vicinity of the property appear to follow these streams corridor in a southerly direction. Green tint, indicating wooded areas, is depicted on the majority of the property. No other surface waters are indicated on the property.

The streams shown within the property appear to have a confluence with South Fork Licking River approximately 1-mile south of the property.

GCI uses USGS topographic maps as an indicator of watershed characteristics on the property. USGS maps should not be relied upon to identify wetlands, ponds, or streams because the maps are created from widely scattered spot elevations averaged across an area. The maps may not identify small depressional areas or streams and are not updated frequently. The appendix of this report includes photocopies of portions of the USGS map showing the property area.

3.2 <u>Soils</u>

GCI reviewed information from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the USDA Web Soil Survey website¹ for the property area, and the list of <u>Hydric Soils of the United States</u> (published by NRCS in cooperation with the National Technical Committee for Hydric Soils). These sources indicate soils underlying the property consist of the following:

¹ http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

TABLE 1Property Soil Designation

Map ID	Map Unit Name	% Slope	Hydric Classification	% Hydric Component
AmB2	Amanda silt loam, eroded	2-6	Non-hydric	-
AmC2	Amanda silt loam, eroded	6-12	Non-hydric	-
AmD2	Amanda silt loam, eroded	12-18	Non-hydric	1
AmF	Amanda silt loam	25-50	Non-hydric	=
BeA	Bennington silt loam	0-2	Non-hydric with hydric components	Condit (5%) and Pewamo (3%)
BeB	Bennington silt loam	2-6	Non-hydric with hydric components	Condit (3%) and Pewamo (3%)
Cen1B1	Centerburg silt loam	2-6	Non-hydric with hydric components	Condit (4%) and Marengo (3%)
Cen1C1	Centerburg silt loam	2-6	Non-hydric with hydric components	Condit (4%)
Sh	Shoals silt loam, occasionally flooded	0-2	Non-hydric with hydric components	Sloan (8%)

Amanda silt loam, eroded (AmB2 and AmC2) is described as a deep, gently sloping, well-drained soil with moderately high permeability and high available water capacity.

Amanda silt loam (AmD2) is described as a moderately steep, well-drained soil with moderately slow permeability and moderate available water capacity.

Amanda silt loam (AmF) is described as a very steep, well-drained soil with moderately high permeability and moderate available water capacity.

Bennington silt loam (BeA) is described as a deep, nearly level, somewhat poorly drained soil with slow permeability and moderate available water capacity.

Bennington silt loam (BeB) is described as a deep, gently sloping, somewhat poorly drained soil with slow permeability and moderate available water capacity.

Centerburg silt loam (Cen1B1) is described as a deep, gently sloping, moderately well-drained soil with moderately slow permeability and moderate available water capacity.

Centerburg silt loam, eroded (Cen1C2) is described as a deep, sloping, moderately well-drained soil with moderately slow permeability and moderate available water capacity.

Shoals silt loam, occasionally flooded (Sh) is described as nearly level, somewhat poorly drained with moderate permeability and high available water capacity.

According to the soil map, hydric soils are not located within the property boundary.

Mineral-based soils (as opposed to carbon- or organic-based soils) generally contain significant amounts of iron and manganese. As the iron component of the soil matrix comes into contact with the atmosphere, the iron tends to oxidize giving soils a high "chroma" or rust-like color. This characteristic is typically observed in upland (i.e., non-wetlands) areas where oxygen is abundant. On the contrary, mineral soils that are saturated for extended periods (e.g., hydric soils) tend to have oxygen ions stripped, chemically reducing iron and giving these soils bluish-grayish coloring or low chroma. This reduced condition in mineral soils is known as "gleying" and is typically observed in wetlands, where soil oxygen contents are generally lower relative to upland soils. Low oxygen levels in reduced soils also tend to slow decomposition, leading to increased organic content. (Note: high organic levels in soils can present construction challenges and thus should be geotechnically assessed by a soil engineer for load-bearing capacities if construction is planned in areas having organic soils.)

3.3 NATIONAL WETLANDS INVENTORY (NWI) MAP

GCI reviewed the NWI Map for wetlands information in the property area. The United States Fish and Wildlife Service (USFWS) produced NWI mapping as an attempt to document wetlands in the United States. The USFWS drafted NWI maps using high-altitude infrared aerial photography to identify areas with saturated or inundated soils. Areas that are saturated or inundated are typically lower in temperature than dryer areas, giving wet areas unique heat signatures compared with surrounding upland areas. The USFWS mapped these cooler areas as wetlands without field verification.

GCI uses NWI maps as a desk-top determination tool. NWI maps may not reflect actual field conditions due to meteorological or seasonal conditions that may have existed at the time of data collection. GCI typically uses NWI maps to plan field reconnaissance and as an indicator of areas that may support wetlands; however, USACE-approved delineations often deviate significantly from the NWI Maps.

The NWI map does not depict any wetland mapping symbols within the property boundary. Streams are shown crossing the central portion of the property.

3.4 AERIAL PHOTOGRAPHS

Current regulations require that wetland delineations be performed in accordance with the 1987 USACE Wetland Delineation Manual and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. These manuals specify two primary methods of delineation: the *routine method* and the *disturbed condition method*. The *routine method* is used on undisturbed properties and is preferred by USACE because wetland boundaries can be accurately identified by a wetland professional based on actual field boundaries. The *disturbed condition method* is used on properties that have had previous land disturbance. Disturbed properties often require reliance on historical aerial photography, soil maps, and NWI maps, and can result in an over-estimation of jurisdictional water area size.

GCI reviewed aerial photographs of the property area dated 1989, 1997, 2002, 2006, 2011, and 2019. GCI uses aerial photographs as an indicator to determine historical uses of the property, whether the property had been significantly disturbed within the past few years, and for visual evidence of ponds, streams, or saturated or inundated soils and wetlands on the property.

The aerial photographs indicate the property is predominantly wooded land except for the southwestern portion of the property which is agricultural land. Streams, ponds, or potential wetland areas are not apparent on the property from the aerial photographs.

Copies of the aerial photographs showing the assessed area are attached to this report.

3.5 RECORDS REVIEW DETERMINATION CONCLUSIONS

The published information reviewed indicated property conditions were generally unchanged for several years prior to this delineation, such that the property was considered undisturbed for data collection. Therefore, the routine method was used in this assessment.

Information obtained from USGS topographic maps, the NWI map, and aerial photographs indicate the potential for at least three streams to be located within the property boundary.

The potential for wetlands, streams, and ponds within an area cannot be determined solely from a records review determination; therefore, an on-property investigation is required to verify on-property conditions.

4.0 JURISDICTIONAL WATERS DELINEATION

GCI performs their field visits for Jurisdictional Waters Delineations using criteria and guidance in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. In this method, vegetation, hydrology, and soil criteria are used to identify jurisdictional wetlands. The delineation method and vegetation sampling methodology uses the procedures for Routine Determinations found in the 1987 and 2010 manuals.

The property was assessed in accordance with guidelines from the USACE pertaining to potential jurisdictional waters of the United States. All potential wetlands, streams, and drainage ditches were followed to determine the flow regime and whether a significant nexus to a jurisdictional water of the U.S. could be established.

The field investigation was conducted by walking and visually surveying the subject property, and in the vicinity, to collect wetland and stream data, as necessary.

Photographic documentation of the potential wetlands, vegetation, streams, and general landscape photographs are attached. GCI recorded observations concerning soils, hydrology, and vegetation in potential wetland areas on the attached data forms.

5.0 PROPERTY VISIT AND ON-PROPERTY DETERMINATION

Mr. Joe Maniaci with GCI conducted the Jurisdictional Waters on Tuesday, November 4; Thursday, November 5, and Thursday, November 19, 2020. The atmospheric conditions during the site visits were approximately 55 degrees Fahrenheit and mostly sunny. Photographs documenting site conditions during the November site visits are appended.

Section 404 of the Clean Water Act requires a pre-discharge notification to the USACE for approval, prior to placing dredged or fill material into jurisdictional waters connected to navigable

waters. Connection to navigable waters is characterized as any surface water connection with a defined bed and bank to streams or other open waters. House Bill 231 requires an Ohio Isolated Wetland Permit (OIWP) from Ohio EPA prior to impacting isolated wetlands not determined to be connected to navigable waters.

Three wetland criteria are required to be present to establish the presence of wetlands: hydric soils, hydrophytic vegetation, and wetland hydrology; and, all three criteria must be present for an area to be identified as wetland. These three criteria are defined and explained in detail in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. The Wetlands Research Program of the USACE Waterways Experiment Station developed the manual in 1987. GCI followed the methods described in these manuals in performing the delineation. No other warranty is expressed or implied.

After collecting pertinent information through the preliminary off-site determination, GCI used the routine method to determine if wetland areas existed on property. The approach used for the routine determination was the plant community assessment procedure. This approach required initial identification of representative plant community types in the subject area followed by characterization of vegetation, soils, and hydrology for each community type.

Upon identification of hydrophytic (wetland) and non-wetland communities, the wetland boundary is located and surveyed with a sub-meter Spectra Geospatial SP20 handheld global navigation satellite system (GNSS) receiver. Field notes are taken at points where the dominant vegetation species change from wetland to upland or hydrologic or soil indicators became transitional or absent. GCI records property observations concerning vegetation, soil, and hydrology on Midwest Region Wetland Determination Data Forms.

5.1 HYDRIC SOILS CRITERIA

GCI performs shovel test pits to characterize soil conditions and to evaluate the presence or absence of hydric soil features. A drain spade is used to collect soil samples from a maximum depth of approximately 20 inches below ground surface. GCI determines the presence or absence of hydric soils by comparing soil samples to a Munsell soil color chart, as soil colors often reveal whether a soil is hydric or non-hydric. The standardized Munsell soil colors consist of three components: hue, value, and chroma. Soil in hydric soil areas typically show yellow-red hues, varying gray color values, and chromas of one or two. Chromas of two or less are considered low, and are often diagnostic of hydric soils. Soils are considered hydric if at least one primary indicator or at least one problematic hydric soil indicator is present, as defined by the USACE.

Hydric mineral soils saturated for long periods of the growing season, but unsaturated for some time, often develop mottles and/or a low chroma matrix. GCI observed these soil characteristics at the property. Therefore, the property satisfied the hydric soil criteria for jurisdictional wetlands.

5.2 WETLAND HYDROLOGY CRITERIA

Wetland hydrology is determined present in areas that are periodically inundated or have soils saturated to the surface sometime during the growing season. This is a dynamic characteristic and is usually not present during drier periods of the year. Primary wetland hydrology indicators include, but are not limited to, surface water, high water table, inundation, soil saturation in the upper 12 inches of the soil, water marks, sediment deposits, drift deposits, and water-stained leaves. Secondary wetland hydrology

indicators include surface soil cracks, drainage patterns, dry-season water table, crayfish burrows, saturation visible on aerial imagery, stunted or stressed plants, geomorphic position, and FAC-Neutral Test of vegetation. One primary indicator or two or more secondary indicators are required to establish a positive indication of hydrology.

During the site visit, GCI observed primary and secondary hydrology indicators; therefore, the property satisfied the hydrology criteria for jurisdictional wetlands.

5.3 HYDROPHYTIC VEGETATION CRITERIA

Hydrophytic vegetation is present if more than 50 percent of plant species within a plant community have an indicator status of obligate wetland (OBL), facultative wetland (FACW), and/or facultative (FAC). Plant species have an indicator status that is expressed in terms of the estimated probability of that species occurring in wetland conditions within a given region. The indicator status of plant species found in wetlands is listed in the Midwest 2012 Final Regional Wetland Plant List published by the USACE.

The indicator categories, as defined by the USACE, are:

- Obligate Wetland (OBL): Occurs almost always (estimated probability >99 percent) under natural conditions in wetlands.
- <u>Facultative Wetland (FACW):</u> Usually occurs in wetlands (estimated probability 67 to 99 percent), but occasionally found in non-wetlands.
- <u>Facultative (FAC)</u>: Equally likely to occur in wetlands or non-wetlands (estimated probability 34 to 66 percent).
- <u>Facultative Upland (FACU):</u> Usually occurs in non-wetlands, but occasionally found in wetlands (estimated probability 1 to 33 percent).
- Obligate Upland (UPL): Occurs almost always (estimated probability >99 percent) in uplands.

Plants that are OBL, FACW, and FAC are considered wetland species. The percentage of the dominant wetland species in each of the vegetation strata in the sample area determines the hydrophytic or wetland status of the plant community. Soil type and hydroperiod are two factors important in controlling species composition.

GCI used this data, and determined hydrophytic vegetation was present at the property. Therefore, the property satisfied the vegetation criteria for jurisdictional wetlands.

5.4 On-Property Determination Conclusions

The field investigation confirmed:

- Six (6) potentially jurisdictional streams,
- One (1) potentially non-jurisdictional stream,
- Three (3) potentially isolated wetlands, and
- Eight (8) potentially jurisdictional wetlands are located within the property.

Refer to the Jurisdictional Waters Location Map attached to this report for the locations and identities of the stream, pond, and wetlands delineated on the property.

6.0 JURISDICTIONAL WATERS

According to Section 404 of the Clean Water Act (CWA), the USACE asserts jurisdiction over Traditional Navigable Waters, which includes all waters as outlined in 33 C.F.R. § 328.3(a)(I), and 40 C.F.R. § 230.3 (s)(I). This includes non-navigable tributaries of traditional navigable waters that flow relatively permanently for at least 3 months of the year. Moreover, the USACE will also assert jurisdiction over non-navigable, not relatively permanent tributaries, where such tributaries have a significant nexus to traditional navigable waters.

GCI identified seven (7) streams (Stream 1 through Stream 7) totaling **9,810± linear feet**, and eleven (11) wetlands (Wetland A through Wetland K) totaling **9.42± acres** within the property boundary. Attached to this report is a **Jurisdictional Waters Location Map** showing the location of the delineated streams and wetlands.

TABLE 2Stream Information

Stream ID	Length of Stream On-Site (linear feet)	Classification	Start Location	End Location
Stream 1	3,744	Intermittent	40.013, -82.6658	40.0192, -82.6585
Stream 2	413	Ephemeral	40.013, -82.6648	40.014, -82.6644
Stream 3	254	Intermittent	40.0163, -82.6706	40.0165, -82.6700
Stream 4	2,939	Intermittent	40.022, -82.6595	40.0161, -82.664
Stream 5	394	Intermittent	40.0198, -82.6638	40.0193, -82.6632
Stream 6	307	Intermittent	40.0189, -82.6639	40.0181, -82.6643
Stream 7	1,759	Intermittent	40.0192, -82.6608	40.0162, -82.6637
Total	9,810			<u>'</u>

Stream 1 is an intermittent stream crossing the property in a general north/south direction. This stream was depicted on the NWI map with a R4SBC indicating the stream is a riverine system with a streambed and intermittent water flow that is seasonally flooded. Appended to this report is a Site Features Map depicting the location of Stream 1.

Stream 2 is an ephemeral stream crossing the property in a general north/south direction. This stream was not depicted on the NWI map. Appended to this report is a Site Features Map depicting the location of Stream 1.

Stream 3 is an intermittent stream crossing the property in a general north/south direction. This stream was depicted on the NWI map with a R4SBC indicating the stream is a riverine system with a streambed and intermittent water flow that is seasonally flooded. Appended to this report is a Site Features Map depicting the location of Stream 3.

Stream 4 is an intermittent stream crossing the property in a general north/south direction. This stream was depicted on the NWI map with a R4SBC indicating the stream is a riverine

system with a streambed and intermittent water flow that is seasonally flooded. Appended to this report is a Site Features Map depicting the location of Stream 4.

Stream 5 is an intermittent stream crossing the property in a general north/south direction. This stream was not depicted on the NWI map. It flows through wetland G before flowing into Stream 4. Appended to this report is a Site Features Map depicting the location of Stream 5.

Stream 6 is an intermittent stream crossing the property in a general north/south direction. This stream was not depicted on the NWI map. It is fed by wetland G and flows into Stream 4. Appended to this report is a Site Features Map depicting the location of Stream 6.

Stream 7 is an intermittent stream crossing the property in a general north/south direction. This stream was not depicted on the NWI map. It is fed by Wetland M and flows into Stream 1. Appended to this report is a Site Features Map depicting the location of Stream 7.

TABLE 3Wetland Information

Wetland ID	Acreage	Description	Classification	Location
Wetland A	2.21	Forested	Jurisdictional	40.0132,
				-82.666
Wetland B	0.05	Forested	Isolated	40.0141,
				-82.6643
Wetland C	0.26	Forested	Isolated	40.0138,
				-82.6627
Wetland D	0.48	Forested	Jurisdictional	40.0156,
				-82.6625
Wetland E	0.15	Forested	Jurisdictional	40.0166,
				-82.6709
Wetland F	0.59	Forested	Jurisdictional	40.0153,
				-82.666
Wetland G	1.44	Forested	Jurisdictional	40.0195,
				-82.6632
Wetland H	0.26	Forested	Jurisdictional	40.0175,
				-82.6601
Wetland I	1.15	Forested	Jurisdictional	40.0214,
				-82.6597
Wetland J	0.34	Forested	Isolated	40.0204,
				-82.6607
Wetland K	2.49	Forested	Jurisdictional	40.0205,
				-82.6589
Total	9.42			

Wetlands A contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area abutting Stream 1. Wetland A has a surface water connection to Stream 1, therefore, Wetland A is likely considered a jurisdictional water of the U.S.

Wetlands B contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area

adjacent to Stream 2. Although Wetland B has a surface water connection to Stream 2, Stream 2 is considered an ephemeral stream, therefore, Wetland B is likely considered an isolated water of the state of Ohio.

Wetlands C contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area in the southeast portion of the property. Since Wetland C has no surface water connection to a water of the U.S., therefore, Wetland C is likely considered an isolated water of the state of Ohio.

Wetlands D contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area adjacent to Stream 1. Wetland D has a surface water connection to Stream 1, therefore, Wetland D is likely considered a jurisdictional water of the U.S.

Wetlands E contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area abutting to Stream 3. Wetland E has a surface water connection to Stream 3, therefore, Wetland E is likely considered a jurisdictional water of the U.S.

Wetlands F contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area abutting to Stream 1. Wetland F has a surface water connection to Stream 1, therefore, Wetland F is likely considered a jurisdictional water of the U.S.

Wetlands G contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area abutting to Streams 4, 5, and 6. Wetland G has a surface water connection to Streams 4, 5, and 6, therefore, Wetland G is likely considered a jurisdictional water of the U.S.

Wetland H contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area abutting to Streams 1. Wetland I has a surface water connection to Streams 1, therefore, Wetland I is likely considered a jurisdictional water of the U.S.

Wetland I contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area abutting to Streams 4. Wetland I has a surface water connection to Streams 4, therefore, Wetland I is likely considered a jurisdictional water of the U.S.

Wetlands J contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area in the northeast portion of the property. Since Wetland J has no surface water connection to a water of the U.S., therefore, Wetland J is likely considered an isolated water of the state of Ohio. Wetland K contains areas exhibiting a dominance of hydrophytic species, secondary wetland hydrology indicators, and hydric soil characteristics. This wetland is situated in a low-lying area adjacent to Streams 7, and has a clear drainage into Stream 7. Wetland K has a surface water connection to Streams 7, therefore, Wetland K is likely considered a jurisdictional water of the U.S

6.1 OHIO RAPID ASSESSMENT METHOD (ORAM)

GCI completed ORAM score sheets for the wetland areas delineated on the property. **Table 4** shows the ORAM score and category for each wetland. Copies of the ORAM forms are appended.

TABLE 4
ORAM Scores

Wetland ID	Score	Category
Wetland A	46.0	2
Wetland B	27.0	1
Wetland C	37.0	2
Wetland D	53.0	2
Wetland E	24.5	1
Wetland F	46.0	2
Wetland G	54.0	2
Wetland H	54.0	2
Wetland I	49.0	2
Wetland J	43.0	2
Wetland K	36.5	2

7.0 PERMITS

The USACE administers Nationwide Permits (NWPs) under the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (CWA). Section 404 deals with the physical aspects of ground modification or "impacts" (e.g., draining, dredging, and filling). Mucking out a wetland and culverting a stream for a road crossing are examples of such impacts. The USACE must generally be involved in all jurisdictional wetland, pond, or stream related activities.

Ohio EPA issues section 401 permits of the CWA. Section 401 deals with how a specific activity will affect water quality. Parameters such as sedimentation and nutrients are considered in 401 permitting. Wetlands are able to trap sediment and convert nutrients; hence, negative wetland or stream impacts effectively may lower water quality downstream. The Ohio EPA has jurisdiction over wetlands or other waters the USACE has determined to be "isolated" and not connected to navigable waters by direct surface water drainage.

The USACE Districts for the State of Ohio have imposed regional, general, and specific conditions on NWPs for the entire state. Specific conditions imposed on NWPs for the State of Ohio include Ohio EPA 401 Water Quality Certification (WQC). Impacts to jurisdictional waters must meet the Ohio EPA eligibility criteria for 401 WQC for NWPs to be valid. If 401 WQC eligibility requirements are not met, individual 401 WQC or Director's Authorization is required.

Individual section 401 and 404 permits generally are costly and often take several months to receive complete regulatory agency review. Under the CWA, NWPs are issued to speed up the permitting process and reduce administrative burdens for minor activities. Whether filling, re-routing, or enhancing jurisdictional waters, the USACE must be notified at a minimum under most NWPs.

Under the NWPs, stream impacts are generally limited to 300 linear feet, while wetland impacts are generally limited to ½ acre. Limitations and conditions vary from permit to permit and are dependent on property development plans. Mitigation may be necessary for impacts to jurisdictional waters. The NWPs cannot be used if any the following are to be impacted:

- high quality, isolated, or rare wetlands,
- wetlands within the 100 year flood plain,
- state or National Scenic Rivers,
- navigable waterways,
- areas where endangered species are known to exist,
- areas where historic or archeological sites or structures are known to exist,
- · areas containing a large concentration of shellfish beds,
- areas where water quality will be significantly degraded, and
- Critical Resource Waters.

8.0 CLOSING

GCI identified seven (7) streams (Stream 1 through Stream 7) totaling **9,810± linear feet**, and eleven (11) wetlands (Wetland A through Wetland K) totaling **9.42± acres** within the property boundary. Attached to this report is a **Jurisdictional Waters Location Map** showing the location of the delineated streams and wetlands.

Section 404 of the CWA requires pre-construction notification (PCN) to the USACE and a Department of the Army (DA) permit prior to discharging dredged or fill material into waters of the U.S., including wetlands.

If future development of the property impacts identified wetlands and/or streams, permitting and coordination through the USACE and/or Ohio EPA will be necessary prior to construction. GCI recommends obtaining USACE verification of this delineation prior to development of the property to determine permitting requirements for proposed wetland impacts. A jurisdictional determination letter issued by the USACE, and your final development plan will determine permitting requirements.

With your authorization, GCI will supply a copy of this report to the USACE, Huntington, WV District Office for verification. With this reported information and/or a property visit, the USACE will make the official determination on jurisdiction.

GCI appreciates the opportunity to serve you on this project. Please contact our office with any questions or concerns regarding our report.

9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Prepared by:

Joe Maniaci, WPIT

Project Manager – Environmental Services Wetland Scientist, 401/404 Specialist

Reviewed by:

Kevin J. Fulk, MBA, EP

Kevin Fulk

Vice President – Environmental Services





ATTACHMENTS



DEAGLE JAMES L HAZELTON-ETNA RD

255 - HARRISON TWP - PATASKALA - SW LICK LSD - WLJFD Tax District:

School District: SOUTHWEST LICKING LSD Neighborhood: 06300 Harrison Twp

110 CAUV Vacant land Classification:

Acreage:

TAXES

Pen/Int/Adj

Specials

Gross Due

Payments

Net Due

Recoupment

Taxes/Reductions

Parcel #: 255-067746-00.000 Rt #: 255-004.00-007.000

1 of 1



LOT 31						
ATTRIBUTES						
Story Height: Exterior Wall: Heating: Cooling: Basement: Attic:						
Total Rooms: Bedrooms: Family Rooms: Dining Rooms:						
Full Baths: Half Baths: Other Fixtures:						
Year Built: Finished Living Area:						
Fireplace Openings: Fireplace Stacks:						
Basement Garage(s): Basement Finished: No						
AREA	VALUES #			Land	Improvement	Total
First Floor:	VALUES (b)		ear) Mark CAU'	et 529.600	0	529,600 85,870
Upper Floor: Attic: Half Story:		2016	Mark CAU	et 529,600	0	529,600 85,870
Crawl: Basement:		2015	Mark CAU	et 426,400 V 134,240	0	426,400 134,240
SALES HISTORY	•					
Pcl # Instrument Type Sale Pric				Previous Owner		
01/01/2016		N Y	Y 1	DEAGLE JAMES L MIKE FERRIS PRO IAMES L		DEAGLE
10/18/2001 1 WD - WARRANTY 426000.0	0 03498	Y		Refer to deed		
IMPROVEMENTS						
Description	Yr Bu	ilt	S	qFt Valu	е	

Prior

0.00

0.00

0.00

0.00

0.00

0.00

0.00

1st Half

842.32

0.00

0.00

3.00

0.00

845.32

845.32

2nd Half

842.32

0.00

0.00

3.00

0.00

845.32

845.32

Total

0.00

0.00

6.00

0.00

1684.64

1690.64

1690.64

FANNIN LIMITED PARTNERSHIP APPLE BLOSSOM RD

255 - HARRISON TWP - PATASKALA - SW LICK LSD - WLJFD Tax District:

School District: SOUTHWEST LICKING LSD Neighborhood: 06300 Harrison Twp

Classification: 101 Cash - grain or general farm

Acreage:

ATTRIBUTES

01/01/2016

08/19/1999

TAXES

Pen/Int/Adj

Specials

Gross Due

Payments

Net Due

Recoupment

IMPROVEMENTS Description

Taxes/Reductions

1 UN-UNKNOWN

2 WD - WARRANTY

Property Desc: 14.487 AC LOT 30 PT Parcel #: 255-069066-00.005 Rt #: 255-004.00-004.004

1 of 1



Story Height: Exterior Wall: Heating: Cooling: Basement: Attic: Total Rooms: Bedrooms:						
Family Rooms:						
Dining Rooms:						
Full Baths:						
Other Fixtures:						
Other Fixtures.						
Year Built:						
Finished Living Area:						
Fireplace Openings: Fireplace Stacks:						
Basement Garage(s): Basement Finished: No						
AREA	V	ALUES (by tax ye	ar)	Land	Improvement	Total
First Floor:			Market	101,400	0	101,400
Upper Floor:		2017	CAUV	0	0	0
Attic:		2016	Market CAUV	101,400 0	0	101,400
Half Story:		2010			•	0
Crawl: Basement:		2015	Market CAUV	206,300 0	0	206,300 0
SALES HISTORY						
Pcl # Instrument Type	Sale Price	Conv # V I	LO Previo	ous Owner		
04/04/0040	0.00	00000 11			ABTUEBOUUB	

0.00

419192.00

Prior

0.00

0.00

0.00

0.00

0.00

0.00

00000

Yr Built

1st Half

994.81

0.00

0.00

3.00

997.81

997.81

Ν 02812 N

FANNIN LIMITED PARTNERSHIP

Value

Total

0.00

0.00

6.00

0.00

1989.62

1995.62

1995.62

2nd Half

994.81

0.00

0.00

3.00

997.81

997.81

Refer to deed

SqFt

FANNIN LIMITED PARTNERSHIP APPLE BLOSSOM RD

255 - HARRISON TWP - PATASKALA - SW LICK LSD - WLJFD Tax District:

School District: SOUTHWEST LICKING LSD Neighborhood: 06300 Harrison Twp

Classification: 100 Agricultural Vacant Land

Acreage:

ATTRIBUTES

01/01/2016

08/19/1999

TAXES

Pen/Int/Adj

Specials

Gross Due

Payments

Net Due

Recoupment

IMPROVEMENTS Description

Taxes/Reductions

1 UN-UNKNOWN

2 WD - WARRANTY

Property Desc: 37.57 AC LOT 29 Parcel #: 255-069072-00.000 Rt #: 255-004.00-004.001

1 of 1



ther Fixtures: aera Built: nished Living Area: replace Openings: replace Stacks: assement Garage(s): assement Finished: No VALUES (by tax year)	Pcl # Instrument Type Sale Price	Conv# V LO Pre	vious Owner			
ther Fixtures: ear Built: inished Living Area: replace Openings: replace Stacks: assement Garage(s): assement Finished: No VALUES (by tax year) Market 263,000 0 263,000 pper Floor: 2017 CAUV 0 0 0 0 pper Floor: titic: alf Story: rawl: Market 374,800 0 374,800 rawl: Market 374,800 0 374,800 rawl:	SALES HISTORY					
ther Fixtures: ear Built: inished Living Area: replace Openings: replace Stacks: assement Garage(s): assement Finished: No REA VALUES (by tax year) Market 263,000 0 263,000 pper Floor: pper Floor: ttic: alf Story: Market 263,000 0 263,000 0 0 0 0	Crawl: Basement:					
ther Fixtures: ear Built: nished Living Area: replace Openings: replace Stacks: asement Garage(s): asement Finished: No WALUES (by tax year) Land Improvement Total rest Floor: Market 263,000 0 263,000 pper Floor:	Attic: Half Story:	2016 CAUV	0	0	0	
ther Fixtures: ear Built: inished Living Area: replace Openings: replace Stacks: asement Garage(s): asement Finished: No VALUES (by tax year) Market 263,000 0 263,000	Upper Floor:					
ther Fixtures: ear Built: inished Living Area: replace Openings: replace Stacks: asement Garage(s): asement Finished: No	First Floor:	Market				
ther Fixtures: ear Built: nished Living Area: replace Openings: replace Stacks: asement Garage(s):	AREA	VALUES (by tax year)	Land	Improvement	Total	_
		VALUES (by tay year)	Land	Improvement	Total	
1	Story Height: Exterior Wall: Heating: Cooling: Basement: Attic:					

0.00

419192.00

Prior

0.00

0.00

0.00

0.00

0.00

0.00

00000

Yr Built

1st Half

2580.22

2580.22

2580.22

0.00

0.00

0.00

Ν 02812 N

FANNIN LIMITED PARTNERSHIP

Value

Total 5160.44

0.00

0.00

0.00

0.00

5160.44

5160.44

2nd Half

2580.22

2580.22

2580.22

0.00

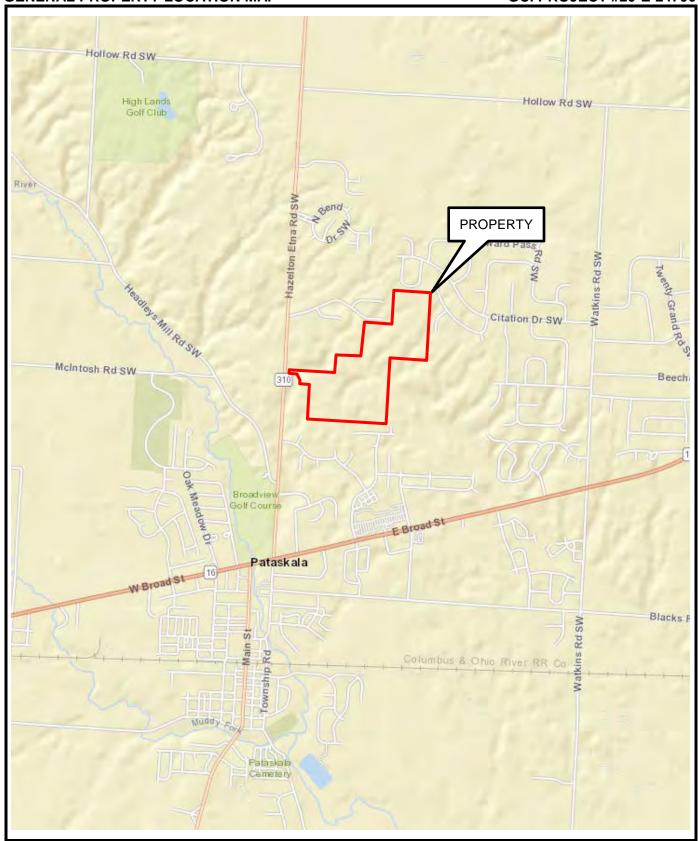
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Refer to deed

SqFt

GCI PROJECT #20-E-24706



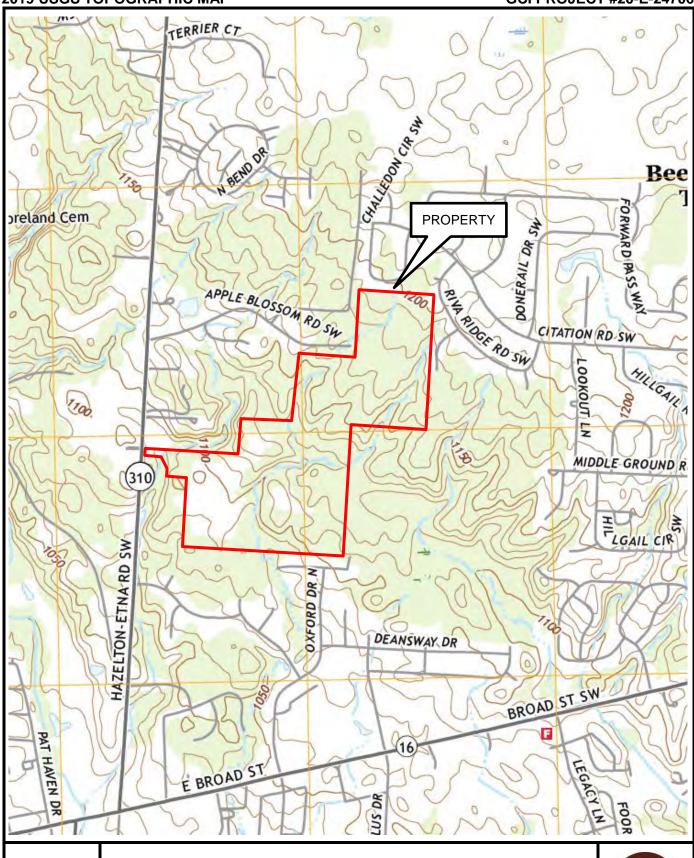








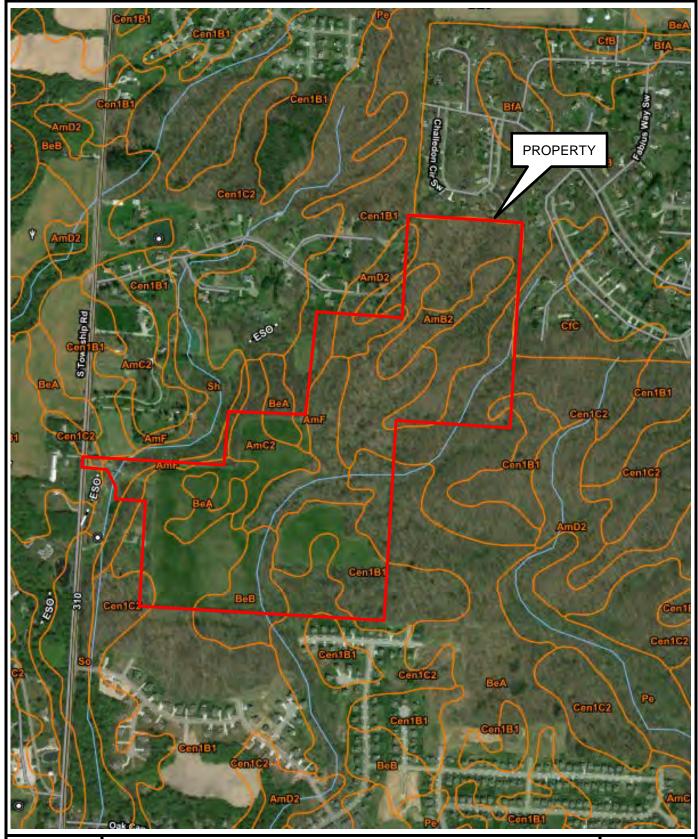






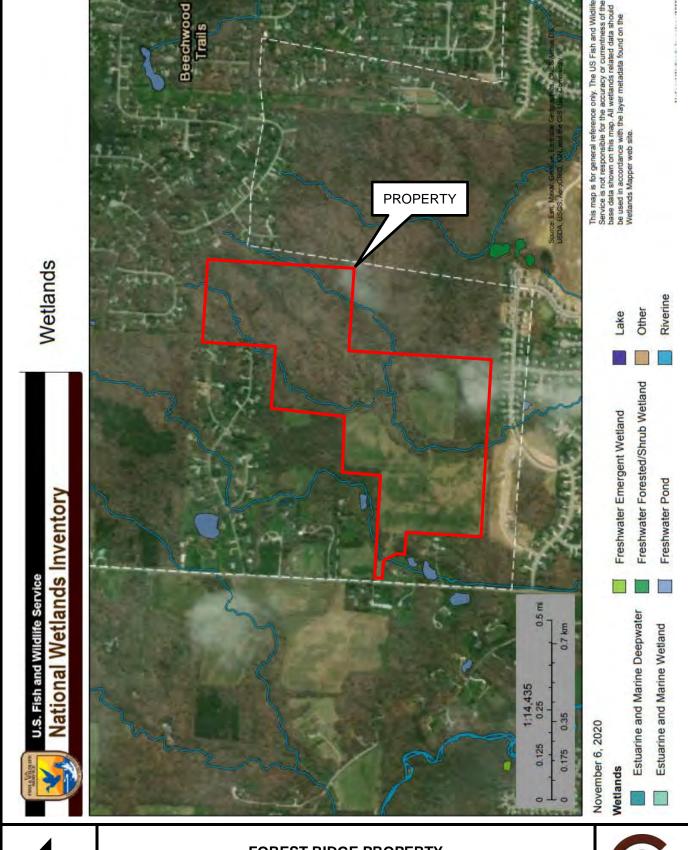


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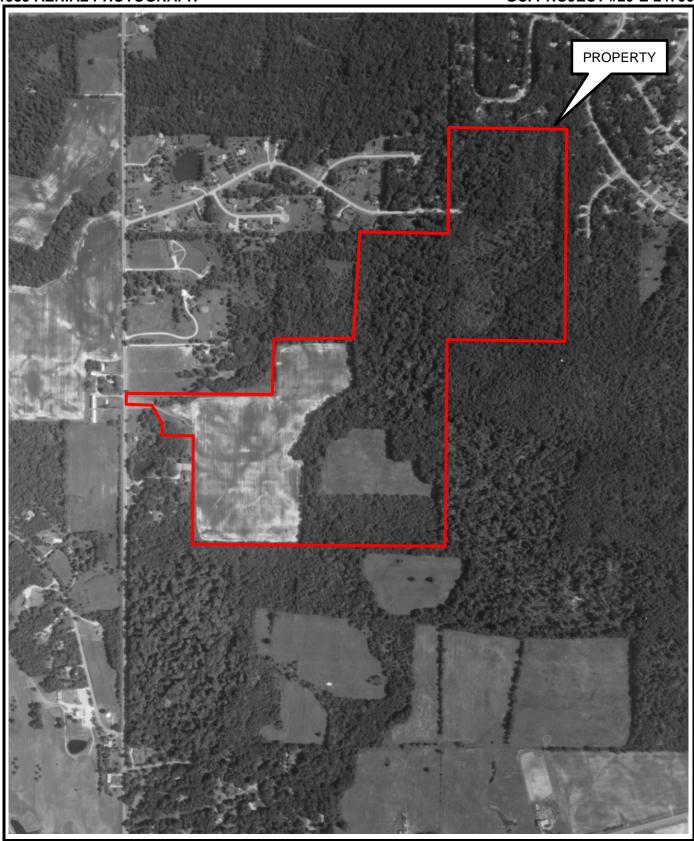


















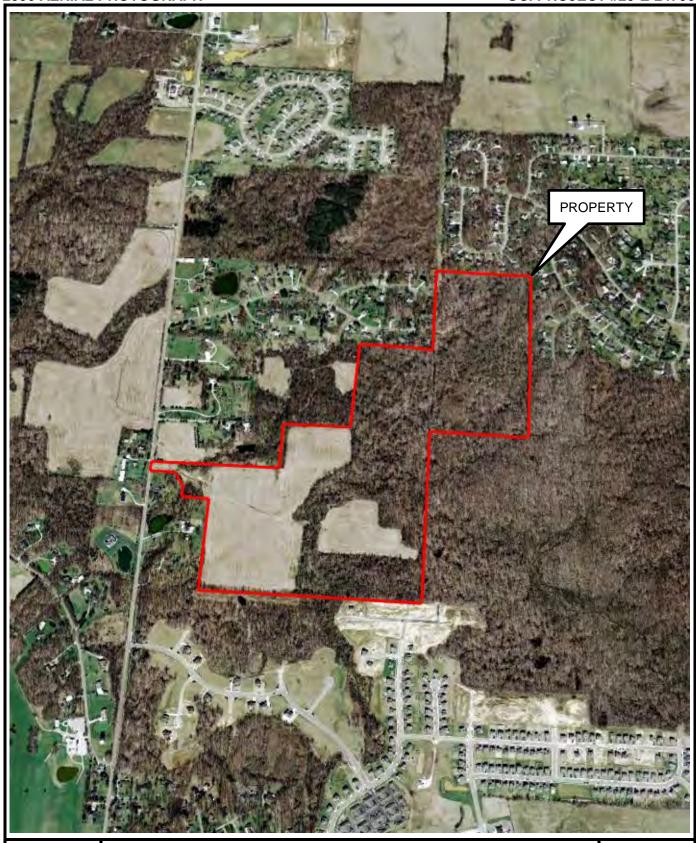






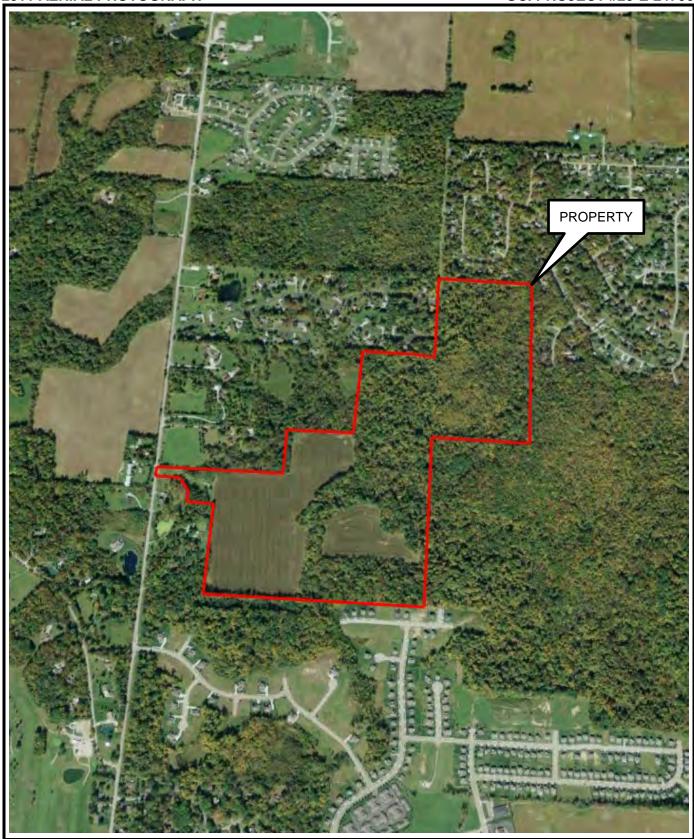






















GCI PROJECT #20-E-24706 **JURISDICTIONAL WATERS LOCATION MAP** 310 DP8 Study Area Stream Wetland E Stream 3 Wetland 254 L.F. 0.15 Acres Data Point 0 Wetland A Wetland F 2.21 Acres 0.59 Acres Stream 1 О DP16 (3,744 L.F. O DP2 DP9 Wetland B Stream 4 Stream 2 0.05 Acres 2.939 L.F. 413 L.F. DP3 O DP4 O DP6 O Stream 7 1,759 L.F. Wetland C **O** DP5 0.26 Acres Wetland D 0.48 Acres © 2021 Google **FOREST RIDGE**







© 2021 Google

Middle Ground a



Wetland I 1.15 Acres







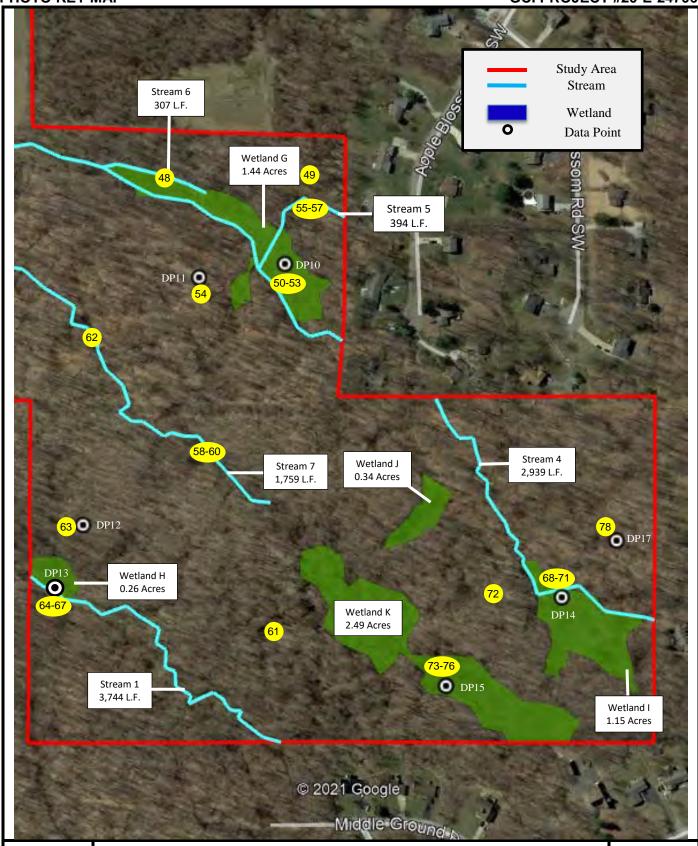








Photo 1: View of typical upland area facing east.



Photo 2: View of typical upland area facing south.





Photo 3: View of typical upland area facing south.



Photo 4: View of data point DP1 facing southwest (upland).





Photo 5: View of Stream 1 facing upstream.



Photo 6: View of Stream 1 facing downstream.





Photo 7: View of Stream 1 substrate.



Photo 8: View of data point DP2 facing east (Wetland A).





Photo 9: View of data point DP2 facing south (Wetland A).



Photo 10: View of data point DP2 facing west (Wetland A).





Photo 11: View of data point DP2 facing north (Wetland A).



Photo 12: View of typical upland area facing north.





Photo 13: View of Stream 2 facing downstream.



Photo 14: View of Stream 2 facing upstream.





Photo 15: View of Stream 2 substrate.



Photo 16: View of data point DP3 facing north (Wetland B).





Photo 17: View of data point DP3 facing east (Wetland B).



Photo 18: View of data point DP3 facing south (Wetland B).





Photo 19: View of data point DP3 facing west (Wetland B).



Photo 20: View of data point DP4 facing south (upland).





Photo 21: View of data point DP5 facing north (Wetland C).



Photo 22: View of data point DP5 facing east (Wetland C).





Photo 23: View of data point DP5 facing west (Wetland C).



Photo 24: View of data point DP5 facing south (Wetland C).





Photo 25: View of typical upland area facing south.



Photo 26: View of data point DP6 facing north (upland).





Photo 27: View of data point DP7 facing north (Wetland D).



Photo 28: View of data point DP7 facing east (Wetland D).





Photo 29: View of data point DP7 facing south (Wetland D).



Photo 30: View of data point DP7 facing west (Wetland D).





Photo 31: View of typical upland area facing north.



Photo 32: View of Stream 1 facing downstream.





Photo 33: View of Stream 3 facing upstream.



Photo 34: View of Stream 3 facing downstream.





Photo 35: View of Stream 3 substrate.



Photo 36: View of data point DP8 facing east (Wetland E).





Photo 37: View of data point DP8 facing north (Wetland E).



Photo 38: View of data point DP8 facing west (Wetland E).





Photo 39: View of data point DP8 facing south (Wetland E).



Photo 40: View of data point DP9 facing west (Wetland F).





Photo 41: View of data point DP9 facing north (Wetland F).



Photo 42: View of data point DP9 facing east (Wetland F).





Photo 43: View of data point DP9 facing south (Wetland F).



Photo 44: View of Stream 4 facing downstream.





Photo 45: View of Stream 4 facing upstream.



Photo 46: View of Stream 4 substrate.





Photo 47: View of typical upland area facing north.



Photo 48: View of Stream 5 facing upstream.





Photo 49: View of typical upland area facing west.



Photo 50: View of data point DP10 facing north (Wetland G).





Photo 51: View of data point DP10 facing east (Wetland G).



Photo 52: View of data point DP10 facing south (Wetland G).





Photo 53: View of data point DP10 facing west (Wetland G).



Photo 54: View of data point DP11 facing east (upland).





Photo 55: View of Stream 6 facing upstream.



Photo 56: View of Stream 6 facing downstream.





Photo 57: View of Stream 6 substrate.



Photo 58: View of Stream 7 facing upstream.





Photo 59: View of Stream 7 facing downstream.



Photo 60: View of Stream 7 substrate.





Photo 61: View of typical upland area facing southwest.



Photo 62: View of Stream 7 facing downstream.





Photo 63: View of data point DP12 facing north (upland).



Photo 64: View of data point DP13 facing west (Wetland H).





Photo 65: View of data point DP13 facing north (Wetland H).



Photo 6: View of data point DP13 facing east (Wetland H).





Photo 67: View of data point DP13 facing south (Wetland H).



Photo 68: View of data point DP14 facing east (Wetland I).





Photo 69: View of data point DP14 facing south (Wetland I).



Photo 70: View of data point DP14 facing west (Wetland I).





Photo 71: View of data point DP14 facing north (Wetland I).



Photo 72: View of typical upland area facing southwest.





Photo 73: View of data point DP15 facing north (Wetland K).



Photo 74: View of data point DP15 facing east (Wetland K).





Photo 75: View of data point DP15 facing south (Wetland K).



Photo 76: View of data point DP15 facing west (Wetland K).





Photo 77: View of data point DP16 facing north (upland).



Photo 78: View of data point DP17 facing north (upland).



Project/Site: Forest Ridge	City/County: Licking Sampling Date: 11/4/2020
Applicant/Owner: Watcon Consulting Engineers & Surveyors, LLC	State: OH Sampling Point: DP1
Investigator(s): JM	Section, Township, Range: Pataskala
Landform (hillside, terrace, etc.): plain	Local relief (concave, convex, none): none
Slope (%): 0 Lat:	Long: Datum: NAD83
Soil Map Unit Name:	NWI classification: none
Are climatic / hydrologic conditions on the site typical for this time of year	ear? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally probler	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No _X_
Wetland Hydrology Present? Yes No X	
Remarks:	
VEGETATION – Use scientific names of plants.	S. C. Paris I
	Ominant Indicator Species? Status Dominance Test worksheet:
1	Number of Dominant Species That
2.	Are OBL, FACW, or FAC: 0 (A)
3	Total Number of Dominant Species
<u>4.</u>	Across All Strata: 1(B)
5	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
Sapling/Shrub Stratum (Plot size:)	otal Cover Are OBL, FACW, or FAC: 0.0% (A/B)
1	Prevalence Index worksheet:
2.	Total % Cover of: Multiply by:
3.	OBL species 0 x 1 = 0
4.	FACW species 0 x 2 = 0
5	FAC species 0 x 3 = 0
	tal Cover FACU species 0 x 4 = 0
Herb Stratum (Plot size:)	UPL species 100 x 5 = 500 Yes UPL Column Totals: 100 (A) 500 (B)
1. Zea mays 100 100	Dravislance Index D/A 5.00
	Flevalefice filluex = D/A = 0.00
4.	Hydrophytic Vegetation Indicators:
5.	1 - Rapid Test for Hydrophytic Vegetation
6.	2 - Dominance Test is >50%
7.	3 - Prevalence Index is ≤3.0 ¹
8	4 - Morphological Adaptations ¹ (Provide supporting
9	data in Remarks or on a separate sheet)
10.	Problematic Hydrophytic Vegetation ¹ (Explain)
	otal Cover Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	be present, unless disturbed or problematic.
1	Hydrophytic
	Vegetation otal Cover Present? Yes No X
Remarks: (Include photo numbers here or on a separate sheet.)	
Tremains. (molade priote frame of on a separate street,	

		_				tor or o	confirm the absence	e of indicators.)			
Depth	Matrix			ox Featur							
(inches)			Color (moist)	%	Type ¹	Loc ²	Texture	Remark	(S		
0-12	2.5Y 4/3	100									
12-20	2.5Y 5/2	55	2.5Y 4/2	25	D	M	Loamy/Clayey				
			10YR 4/6	20	С	M		Prominent redox co	oncentrations		
								•			
								-	_		
¹ Type: C=C	oncentration, D=D	epletion, RM=	Reduced Matrix,	MS=Mas	ked Sand	Grains	s. ² Locatio	on: PL=Pore Lining, M=M	latrix.		
Hydric Soil	Indicators:						Indicate	ors for Problematic Hyd	lric Soils³:		
Histosol	(A1)		Sandy Gle	eyed Mat	rix (S4)		Coa	ast Prairie Redox (A16)			
Histic Ep	pipedon (A2)		Sandy Re	dox (S5)			Iron	n-Manganese Masses (F1	2)		
Black His	stic (A3)	Stripped I	Matrix (S6	5)		Rec	d Parent Material (F21)				
Hydroge	n Sulfide (A4)	Dark Surf	ace (S7)			Ver	y Shallow Dark Surface (F22)			
Stratified	l Layers (A5)		Loamy Mi	ucky Mine	eral (F1)		Oth	er (Explain in Remarks)			
2 cm Mu	ick (A10)		Loamy Gl	eyed Mat	rix (F2)						
Depleted	d Below Dark Surfa	ace (A11)	Depleted	Matrix (F	3)						
Thick Da	ark Surface (A12)		Redox Da	rk Surfac	e (F6)		³ Indicate	ors of hydrophytic vegeta	tion and		
Sandy M	lucky Mineral (S1)		Depleted	Dark Sur	face (F7)		wet	land hydrology must be p	resent,		
5 cm Mu	icky Peat or Peat (S3)	Redox De	pression	s (F8)		unle	ess disturbed or problema	atic.		
Restrictive	Layer (if observed	d):									
Type:											
Depth (ir	nches):						Hydric Soil Prese	nt? Yes	NoX		
Remarks:											
								ors of Hydric Soils, Versic	on 7.0, 2015		
Errata. (http:	//www.nrcs.usda.g	ov/Internet/F	SE_DOCUMENTS	S/nrcs142	2p2_0512	293.doc	x)				
LIVED OL O	.0.1/										
HYDROLO											
_	drology Indicator						0				
	cators (minimum o	t one is requi			(D.0)			ary Indicators (minimum	of two required)		
	Water (A1)		Water-Sta		` '		Surface Soil Cracks (B6)				
	iter Table (A2)		Aquatic F					inage Patterns (B10)	2)		
Saturatio	arks (B1)		True Aqua					-Season Water Table (C2	2)		
	,		Hydrogen Ovidized		` '			yfish Burrows (C8)	magany (CO)		
	nt Deposits (B2) posits (B3)		Oxidized Presence			-	· · · · · · · · · · · · · · · · · · ·	uration Visible on Aerial I nted or Stressed Plants (
	it or Crust (B4)		Recent Iro			,		omorphic Position (D2)	D1)		
	osits (B5)		Thin Mucl			ileu Sui	` ′	C-Neutral Test (D5)			
	on Visible on Aeria	I Imagery (B7			` '			5-Neutral Test (D5)			
	Vegetated Conca										
Field Obser		ve ounace (L	Other (EX	piairi ii i	ciliaiks)		T				
Surface Wat		Yes	No	Denth (i	nches):						
Water Table		Yes	No		nches):						
Saturation P		Yes	No	Depth (i	_		Wetland Hydrol	ogy Present? Yes	No X		
(includes car		. 33		Zopai (II			Tronuna Tryuron				
		ım gauge, mo	onitoring well, aeri	al photos	, previous	s inspec	ctions), if available:				
	,		J ,				,,				
Remarks:											

Project/Site: Forest Ridge	nty: Licking		Sampling Date:	11/4/	11/4/2020		
Applicant/Owner: Watcon Consulting Engineers & S	Surveyors, LI	LC		State: OH	Sampling Point:		DP2
Investigator(s): JM		Section, T	ownship, Ra	ange: Pataskala			
Landform (hillside, terrace, etc.): plain		!	Local relief (d	concave, convex, none):	concave		
Slope (%):0 _ Lat:		Long:		•	Datum: NAD83		
Soil Map Unit Name:					fication: none		
Are climatic / hydrologic conditions on the site typical for	or this time o	f year?	Yes X	No (If no, exp	plain in Remarks.)		
Are Vegetation, Soil, or Hydrologys	significantly c						
Are Vegetation, Soil, or Hydrologyn				κplain any answers in Re	<u> </u>		•
SUMMARY OF FINDINGS – Attach site ma	ap showir	ıg samplin	ıg point lo	ocations, transects	, important fe	atures	, etc.
Hydrophytic Vegetation Present? Yes X No)	Is the	Sampled A	rea			
			n a Wetlandî		No		
Wetland Hydrology Present? Yes X No	,						
Remarks:							
Wetland A							
NECETATION III and a significant and a significa	1 -						
VEGETATION – Use scientific names of plan	Absolute	Dominant	Indicator	Т			
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wo	rksheet:		
1. Prunus serotina	20	Yes	FACU	Number of Dominant	Species That		
2. Ulmus americana	40	Yes	FACW	Are OBL, FACW, or F		4	(A)
3. Acer negundo	10	No	FAC	Total Number of Dom	inant Species		
4.				Across All Strata:		6	_(B)
5	70	Tatal Cover		Percent of Dominant	•	20/	/ ^ /D)
Sapling/Shrub Stratum (Plot size: 15')	70 =	=Total Cover		Are OBL, FACW, or F	AC: c	66.7%	_(A/B)
1. Cornus amomum	15	Yes	FACW	Prevalence Index wo	orksheet:		
2. Lonicera tatarica	10	Yes	FACU	Total % Cover of		v bv:	
3. Acer negundo	20	Yes	FAC	OBL species 0		0	-
4.				FACW species 9	5 x 2 =	190	_
5.				FAC species 4	5 x 3 =	135	- -
	45 =	=Total Cover		FACU species 3		120	_
Herb Stratum (Plot size: 5')			-: 2044	UPL species 0		0	-
1. Carex grayi	35	Yes	FACW	Column Totals: 17	`´	445	_(B)
2. Agrimonia parviflora	5	No No	FACW	Prevalence Index	= B/A = <u>2.6</u>	.2	-
Geum canadense Smilax tamnoides	10	No No	FAC FAC	Hydrophytic Vegetat	tion Indicators:		
5. Smilax herbacea	5	No	FAC		r Hydrophytic Vege	etation	
6.		110	-170	X 2 - Dominance Te		,tation	
7.				X 3 - Prevalence Inc			
8.				4 - Morphological	Adaptations ¹ (Pro	vide sup	porting
9.				data in Remark	ks or on a separate	e sheet)	
10				Problematic Hydr	ophytic Vegetation	า ¹ (Expla	in)
	65 =	=Total Cover		¹ Indicators of hydric s			must
Woody Vine Stratum (Plot size: 15')				be present, unless dis	sturbed or problem	atic.	
1.				Hydrophytic			
2		=Total Cover		Vegetation Present? Yes	Y No		
		=10tal Cove		Present? Yes	<u>X</u> No		
Remarks: (Include photo numbers here or on a separa	ate sheet.)						

(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture 0-10 2.5Y 3/2 100 Loamy/Clayey 10-20 2.5Y 4/2 90 10YR 4/6 10 C M Loamy/Clayey Prominent 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix,	natic Hydric Soils ³ :						
10-20 2.5Y 4/2 90 10YR 4/6 10 C M Loamy/Clayey Prominent 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1 Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox	ing, M=Matrix. natic Hydric Soils ³ :						
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Public Soil Indicators: Indicators for Problem **Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox	ing, M=Matrix. natic Hydric Soils ³ :						
Hydric Soil Indicators: Indicators for Problem Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox	natic Hydric Soils ³ :						
Hydric Soil Indicators: Indicators for Problem Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox	natic Hydric Soils ³ :						
Hydric Soil Indicators: Indicators for Problem Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox	natic Hydric Soils ³ :						
Hydric Soil Indicators: Indicators for Problem Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox	natic Hydric Soils ³ :						
Hydric Soil Indicators: Indicators for Problem Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox	natic Hydric Soils ³ :						
							
Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Ma	د (A16)						
	asses (F12)						
Black Histic (A3) Stripped Matrix (S6) Red Parent Materia	l (F21)						
Hydrogen Sulfide (A4) Dark Surface (S7) Very Shallow Dark S	Surface (F22)						
Stratified Layers (A5) Loamy Mucky Mineral (F1) Other (Explain in Re	emarks)						
2 cm Muck (A10) Loamy Gleyed Matrix (F2)							
X Depleted Below Dark Surface (A11) X Depleted Matrix (F3)							
Thick Dark Surface (A12) Redox Dark Surface (F6) Redox Dark Surface (F6)	ic vegetation and						
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology n	wetland hydrology must be present,						
	unless disturbed or problematic.						
Restrictive Layer (if observed):							
Type:							
Depth (inches): Hydric Soil Present?	Yes X No						
IVDDOL OCV							
HYDROLOGY							
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (m	ninimum of two require						
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks	•						
High Water Table (A2) Aquatic Fauna (B13) Aquatic Fauna (B13) X Drainage Patterns (` '						
Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (A2)							
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C							
<u> </u>	n Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressec							
Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position	on (D2)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) X FAC-Neutral Test (I	on (D2)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	on (D2)						
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position X FAC-Neutral Test (Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	on (D2)						
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position X FAC-Neutral Test (Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	on (D2)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches):	on (D2)						
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position X FAC-Neutral Test (Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches):	on (D2)						
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Ves No Depth (inches): Description Reduction in Tilled Soils (C6) X Geomorphic Position X FAC-Neutral Test (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	on (D2) D5)						
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Stunted or Stressed Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position X FAC-Neutral Test (I) Gauge or Well Data (D9) Other (Explain in Remarks) Presence of Reduced Iron (C4) X Geomorphic Position X FAC-Neutral Test (I) Depth (inches): Wetland Hydrology Present?	on (D2) D5)						
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	on (D2) D5)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? (includes capillary fringe)	on (D2) D5)						

Project/Site: Forest Ridge		City/Cou	11/4/2020			
Applicant/Owner: Watcon Consulting Engineers &	Surveyors, L	.LC		State: OH	Sampling Point	DP3
Investigator(s): JM		Section, T	Γownship, Ra	ange: Pataskala		
Landform (hillside, terrace, etc.): plain		!	Local relief (concave, convex, none):	concave	
Slope (%):0 Lat:		Long:			Datum: NAD83	
Soil Map Unit Name:				NWI classif	ication: none	
Are climatic / hydrologic conditions on the site typical f	for this time o	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed? A	re "Normal (Circumstances" present?	Yes X	No
Are Vegetation, Soil, or Hydrology	naturally prol	blematic? (If needed, ex	xplain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showir	ng samplin	ng point lo	ocations, transects	, important fe	atures, etc.
Hydrophytic Vegetation Present? Yes X N	0	Is the	Sampled A	rea		
Hydric Soil Present? Yes X N	0		n a Wetland		No	
Wetland Hydrology Present? Yes X N	0				· · · · · · · · · · · · · · · · · · ·	
Remarks:						
Wetland B						
VECETATION Lies esignific names of pla						
VEGETATION – Use scientific names of pla	Absolute	Dominant	Indicator	1		
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wor	ksheet:	
1. Juglans nigra	10	Yes	FACU	Number of Dominant S	•	
2. Ulmus americana	20	Yes	FACW	Are OBL, FACW, or F		3 (A)
3. 4.				Total Number of Domi Across All Strata:	nant Species	4 (B)
5.				Percent of Dominant S		4 (D)
	30	=Total Cover		Are OBL, FACW, or F	•	75.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15')					
1.				Prevalence Index wo		
2.				Total % Cover of:		
3				OBL species 45 FACW species 50		100
5.				FAC species 0		0
		=Total Cover		FACU species 10		40
Herb Stratum (Plot size: 5')				UPL species 0	x 5 =	0
Asclepias incarnata	45	Yes	OBL	Column Totals: 10	` ′	185 (B)
2. Agrimonia parviflora	30	Yes	FACW	Prevalence Index =	= B/A = <u>1.7</u>	<u>76 </u>
3. 4.				Hydrophytic Vegetati	ion Indicators:	
5.				1 - Rapid Test for		etation
6.				X 2 - Dominance Te		
7.				X 3 - Prevalence Inc		
8				4 - Morphological		
9.					s or on a separat	·
10	75	=Total Cover		Problematic Hydro		` ' '
Woody Vine Stratum (Plot size: 15')	= rotal Gover		¹ Indicators of hydric so be present, unless dis		
1.	<u> </u>			Hydrophytic	•	
2.				Vegetation		
		=Total Cover		Present? Yes	No	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)					

Profile Desc Depth	ription: (Describe Matrix		ument t x Featur		ator or c	confirm the absence of	of indicators.)				
(inches)	Color (moist)	%	Color (moist)	% " Catal	Type ¹	Loc ²	Texture	Remarks			
0-10	2.5Y 3/2	100	Color (moist)		1,700		Loamy/Clayey	Kemano			
			10VP 4/6					Draminant raday concentrations			
10-20	2.5Y 4/2	95	10YR 4/6	5	<u>C</u>	M	Loamy/Clayey	Prominent redox concentrations			
		- '					_				
¹ Type: C=Co	oncentration, D=Dep	oletion, RM	=Reduced Matrix, I	MS=Mas	ked Sand	Grains	Location:	PL=Pore Lining, M=Matrix.			
Hydric Soil I			·					s for Problematic Hydric Soils ³ :			
Histosol	(A1)		Sandy Gle	eyed Mat	rix (S4)		Coast	Prairie Redox (A16)			
Histic Ep	ipedon (A2)		Sandy Re	dox (S5)			Iron-M	Manganese Masses (F12)			
Black Histic (A3) Stripped Matrix (S6)							Red F	Parent Material (F21)			
Hydrogei	n Sulfide (A4)		Dark Surfa	ace (S7)			Very S	Shallow Dark Surface (F22)			
Stratified	Layers (A5)		Loamy Mu	icky Min	eral (F1)		Other	(Explain in Remarks)			
2 cm Mu	ck (A10)		Loamy Gl	eyed Ma	trix (F2)						
X Depleted	Below Dark Surfac	e (A11)	X Depleted	Matrix (F	3)						
Thick Da	rk Surface (A12)		Redox Da	rk Surfa	e (F6)		³ Indicators	s of hydrophytic vegetation and			
Sandy M	ucky Mineral (S1)		Depleted	Dark Sur	face (F7)		wetlar	nd hydrology must be present,			
5 cm Mu	cky Peat or Peat (S	3)	Redox De	pression	s (F8)		unless disturbed or problematic.				
Restrictive L	_ayer (if observed)	:									
Type:											
Depth (in	nches):						Hydric Soil Present	? Yes X No			
Errata. (http:/	//www.nrcs.usda.go	v/Internet/F	FSE_DOCUMENTS	S/nrcs14	2p2_0512	293.docx	x)				
HYDROLO	GY										
Wetland Hyd	drology Indicators	:									
_	cators (minimum of		ired; check all that	apply)			Secondar	y Indicators (minimum of two required)			
Surface \	Water (A1)		Water-Sta	ined Lea	ves (B9)		Surfac	ce Soil Cracks (B6)			
High Wa	ter Table (A2)		Aquatic Fa	auna (B1	3)		X Draina	age Patterns (B10)			
Saturatio	on (A3)		True Aqua	atic Plant	s (B14)		Dry-S	eason Water Table (C2)			
Water Ma	arks (B1)		Hydrogen	Sulfide	Odor (C1))	Crayfi	sh Burrows (C8)			
Sedimen	t Deposits (B2)		Oxidized F	Rhizosph	eres on l	_iving Ro	oots (C3)Satura	ation Visible on Aerial Imagery (C9)			
Drift Dep	osits (B3)		Presence	of Redu	ced Iron ((C4)	Stunte	ed or Stressed Plants (D1)			
	t or Crust (B4)		Recent Iro	n Reduc	tion in Ti	lled Soil	` ′	orphic Position (D2)			
	osits (B5)		Thin Muck		, ,		<u>X</u> FAC-1	Neutral Test (D5)			
	on Visible on Aerial				` '						
Sparsely	Vegetated Concave	e Surface (B8)Other (Exp	olain in F	Remarks)						
Field Observ											
Surface Wate		es	No		nches):						
Water Table	Present? You	es	No		nches): _						
			No	Depth (i	nches): _		Wetland Hydrolog	y Present? Yes X No			
Saturation Pr		es									
Saturation Proceeds (includes cape	oillary fringe)			-1 -a la -1 -		_ !	tions) if any little				
Saturation Proceeds (includes cape				al photos	, previou	s inspec	ctions), if available:				
Saturation Projection (includes cape Describe Rec	oillary fringe)			al photos	, previou	s inspec	ctions), if available:				
Saturation Proceeds (includes cape	oillary fringe)			al photos	, previou	s inspec	ctions), if available:				

Project/Site: Forest Ridge	ect/Site: Forest Ridge City/County: Lic								
Applicant/Owner: Watcon Consulting Engineers & S	urveyors, LI	LC		State: OH	Sampling Point:	DP4			
Investigator(s): JM		Section, T	_ 「ownship, Rar	nge: Pataskala	·				
Landform (hillside, terrace, etc.): plain		'	Local relief (c	oncave, convex, none):	none				
Slope (%):0 _ Lat:					Datum: NAD83				
Soil Map Unit Name:					fication: none				
Are climatic / hydrologic conditions on the site typical fo	or this time o	f year?	Yes X	No (If no, ex					
Are Vegetation, Soil, or Hydrologysi						lo			
Are Vegetation , Soil , or Hydrology na				plain any answers in Re	' <u></u> '				
SUMMARY OF FINDINGS – Attach site ma						atures, etc.			
Hydrophytic Vegetation Present? Yes No	X	Is the	Sampled Ar	ea					
	X		n a Wetland?		No X				
	X								
Remarks:			,			,			
VEGETATION – Use scientific names of plan	nts.								
(7)	Absolute	Dominant	Indicator	- · T/					
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wo					
1. Prunus serotina	30	Yes	FACU	Number of Dominant	•	1 (A)			
Juglans nigra Acer saccharum	20	No Yes	FACU FACU	Are OBL, FACW, or F		1 (A)			
4. Acer rubrum	20	Yes	FAC	Total Number of Dom Across All Strata:	inant Species	6 (B)			
5. Ulmus americana	5	No	FACW		Cassiss That				
Office difference		=Total Cover		Percent of Dominant Are OBL, FACW, or F	•	6.7% (A/B)			
Sapling/Shrub Stratum (Plot size: 15')		• • • • •		, , ,		<u> </u>			
1. Lonicera tatarica	20	Yes	FACU	Prevalence Index we	orksheet:				
2.				Total % Cover of	f: Multipl	y <u>by:</u>			
3.				OBL species (x 1 =	0			
4				FACW species 5	5 x 2 =	10			
5			[0 x 3 =	60			
	=	=Total Cover			0 x 4 =	360			
Herb Stratum (Plot size: 5')	_		-: 2	UPL species (0 (7)			
1. Rubus allegheniensis	5	Yes	FACU		15 (A)	430 (B)			
2. Lonicera tatarica	5	Yes	FACU	Prevalence Index	= B/A = <u>3.7</u>	4			
3			—— <u> </u>	Hydrophytic Vegeta	tion Indicators:				
					r Hydrophytic Vege	atation			
				2 - Dominance To		lation			
7.				3 - Prevalence In					
8.					Adaptations ¹ (Pro	vide supporting			
9.				data in Remark	ks or on a separate	sheet)			
10.				Problematic Hydr	ophytic Vegetation	ո¹ (Explain)			
	10 =	=Total Cover		¹ Indicators of hydric s					
Woody Vine Stratum (Plot size:)]	be present, unless dis					
1				Hydrophytic					
2				Vegetation					
	=	=Total Cover		Present? Yes	No_X				
Remarks: (Include photo numbers here or on a separa	ate sheet.)								

Profile Des Depth	cription: (Describe Matrix	e to the dep		ument t x Featur		ator or c	confirm the absend	ce of indicators	s.)			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks			
0-6	2.5Y 4/3	100	Solot (Illolot)		. , , , ,		TOMUTO		Ttomanto			
-							-					
6-20	2.5Y 4/4	100										
								_				
				-				_				
¹ Type: C=C	oncentration, D=De	pletion. RM	=Reduced Matrix. I	MS=Mas	ked Sand	Grains	Locat	ion: PL=Pore L	ining, M=Mat	trix.		
Hydric Soil		,	,					tors for Proble				
Histosol			Sandy Gle	eyed Mat	rix (S4)			oast Prairie Rec	-			
	pipedon (A2)		Sandy Re	•	, ,			on-Manganese I)		
	istic (A3)		Stripped N					ed Parent Mater		,		
— Hydroge	en Sulfide (A4)		Dark Surfa		,			ery Shallow Dar	k Surface (F2	22)		
	d Layers (A5)		Loamy Mu	` ′	eral (F1)			ther (Explain in		•		
2 cm Mu	uck (A10)		Loamy Gle	-					•			
Deplete	d Below Dark Surfac	ce (A11)	Depleted I									
	ark Surface (A12)		Redox Da				³ Indica	ators of hydroph	ytic vegetatio	on and		
Sandy N	Mucky Mineral (S1)		Depleted I	Dark Sur	face (F7)		We	etland hydrology	must be pre	esent,		
5 cm Mu	ucky Peat or Peat (S	S3)	Redox De	pression	s (F8)		unless disturbed or problematic.					
Restrictive	Layer (if observed):										
Type:		•										
Depth (i	nches):						Hydric Soil Pres	ent?	Yes	No >		
Remarks:												
Errata. (http	://www.nrcs.usda.gc	ov/Internet/F	SE_DOCUMENTS	5/nrcs14	2p2_0512	293.docx	()					
HYDROLO	OGY											
Wetland Hy	drology Indicators	»:										
Primary Indi	cators (minimum of	one is requ	ired; check all that	apply)			Secon	dary Indicators	(minimum of	two require		
Surface	Water (A1)		Water-Sta	ined Lea	aves (B9)		Su	urface Soil Crac	ks (B6)			
High Wa	ater Table (A2)		Aquatic Fa	auna (B1	3)		Dr	ainage Patterns	s (B10)			
Saturati	on (A3)		True Aqua	tic Plant	ts (B14)		Dr	y-Season Wate	er Table (C2)			
Water N	1arks (B1)		Hydrogen	Sulfide (Odor (C1))	Cr	ayfish Burrows	(C8)			
	nt Deposits (B2)		Oxidized F	•		-	` ' —	aturation Visible				
	posits (B3)		Presence					unted or Stress		1)		
	at or Crust (B4)		Recent Iro			lled Soil	` '	eomorphic Posi				
	oosits (B5)		Thin Muck		, ,		F	AC-Neutral Test	: (D5)			
	on Visible on Aerial											
Sparsely	y Vegetated Concav	e Surface (B8)Other (Exp	olain in F	Remarks)		_					
Field Obse												
		es	No		nches):							
Water Table		es	No		nches):							
Saturation F		es	No	Depth (i	nches):		Wetland Hydro	logy Present?	Yes	No No		
	pillary fringe)		and the state of t	.1 1			(1) (6					
Describe Re	ecorded Data (strear	n gauge, m	unitoring well, aeria	ai pnotos	, previou	sinspec	cuons), if available:					
Remarks:												
iveillains.												

Project/Site: Forest Ridge		nty: Licking		Sampling Date:	Date: 11/4/202		
Applicant/Owner: Watcon Consulting Engineers & S	Surveyors, LI	LC		State: OH	Sampling Point:	DF	P5
Investigator(s): JM		Section, T	ownship, Ra	nge: Pataskala			
Landform (hillside, terrace, etc.): plain		I	Local relief (c	concave, convex, none):	concave		
Slope (%): 0 Lat:		Long:			Datum: NAD83		
Soil Map Unit Name:					fication: none		
Are climatic / hydrologic conditions on the site typical fo	or this time of	f year?	Yes X	No (If no, exp	plain in Remarks.)		
Are Vegetation, Soil, or Hydrologys							
Are Vegetation , Soil , or Hydrology n				plain any answers in Re	<u></u>		
SUMMARY OF FINDINGS – Attach site ma			ıg point lo	cations, transects	, important fe	atures,	, etc.
Wetland Hydrology Present? Yes X No)		Sampled Ar		No		
Remarks: Wetland C							
VEGETATION – Use scientific names of plan	nts.						
- C	Absolute	Dominant	Indicator	- ·			
Tree Stratum (Plot size: 30') 1. Quercus bicolor	% Cover 5	Species? No	Status FACW	Dominance Test wo			
Quercus bicolor Ulmus americana	60	Yes	FACW	Number of Dominant Are OBL, FACW, or F		5	(A)
3.		100		Total Number of Dom	-	<u> </u>	(, ,)
4.				Across All Strata:		5	(B)
5.				Percent of Dominant	Species That		
	65 =	=Total Cover		Are OBL, FACW, or F	FAC: 10	00.0%	(A/B)
Sapling/Shrub Stratum (Plot size: 15')	20	Voo	EAC\\\	Prevalence Index wo			
1. Ulmus americana	20	Yes	FACW	Total % Cover of		ly hy:	
2. 3.					$\frac{1}{x} = \frac{1}{x} \frac{1}{1}$	0	
4.				FACW species 9		190	
5.					5 x 3 =	15	
	20 =	=Total Cover) x 4 =	0	
Herb Stratum (Plot size: 5')				UPL species (x 5 =	0	
Fraxinus pennsylvanica	5	Yes	FACW		00 (A)		(B)
2. Agrimonia parviflora	5	Yes	FACW	Prevalence Index	= B/A = <u>2.0</u>	15	
3. Geum canadense	5	Yes	<u>FAC</u>	Ludrophytic Vogotat	tien Indicators:		
4 5.				Hydrophytic Vegetat	r Hydrophytic Vege	etation	
6.				X 2 - Dominance Te		tanon	
7.				X 3 - Prevalence In			
8.					Adaptations ¹ (Pro	vide supp	porting
9.				data in Remark	ks or on a separate	e sheet)	
10				Problematic Hydr	ophytic Vegetation	า ¹ (Explai	in)
Woody Vine Stratum (Plot size: 15')	15=	=Total Cover		¹ Indicators of hydric s be present, unless dis			nust
1				Hydrophytic			
2		=Total Cover		Vegetation Present? Yes	X No		
Describe. (Include photo numbers here or on a coper		= TOtal Cove.		Fiesent: 100			
Remarks: (Include photo numbers here or on a separa	ate sneer.						

Depth	Matrix		Redo	x Featur	es							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks			
0-10	2.5Y 4/2	100					Loamy/Clayey	<u></u>				
10-20	2.5Y 5/2	90	10YR 4/6	10	С	M	Loamy/Clayey	Promine	nt redox concentrations			
Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	/IS=Masl	ced Sand	d Grains.	² Locat	ion: PL=Pore L	ning, M=Matrix.			
Hydric Soil I	ndicators:						Indica	tors for Proble	matic Hydric Soils ³ :			
Histosol	(A1)		Sandy Gle		rix (S4)		C	oast Prairie Red	ox (A16)			
Histic Ep	ipedon (A2)		Sandy Red	dox (S5)			Irc	on-Manganese N	/lasses (F12)			
Black His	stic (A3)		Stripped M	latrix (S6	5)		R	ed Parent Mater	ial (F21)			
Hydroger	n Sulfide (A4)		Dark Surfa	ce (S7)			Ve	ery Shallow Darl	Surface (F22)			
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)		O	ther (Explain in l	Remarks)			
2 cm Mu	ck (A10)		Loamy Gle	yed Mat	rix (F2)							
Depleted	Below Dark Surface	e (A11)	X Depleted N	/latrix (F	3)							
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	e (F6)		³ Indica	ators of hydroph	tic vegetation and			
Sandy M	ucky Mineral (S1)		Depleted D	Oark Sur	face (F7))	We	etland hydrology	must be present,			
5 cm Mu	cky Peat or Peat (S	3)	Redox Dep	pression	s (F8)		unless disturbed or problematic.					
_	_ayer (if observed):											
Type:												
_												
This data for									Yes X No poils, Version 7.0, 2015			
Remarks: This data fori Errata. (http:/	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indica					
Remarks: This data for Errata. (http://	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indica					
Remarks: This data for Errata. (http://	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators:	//Internet/F	FSE_DOCUMENTS	/nrcs142			NRCS Field Indica	tors of Hydric S	oils, Version 7.0, 2015			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyder	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: ators (minimum of c	//Internet/F	ired; check all that	/nrcs142	2p2_0512	293.docx)	NRCS Field Indica	tors of Hydric S	pils, Version 7.0, 2015			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyd Primary Indic	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of co	//Internet/F	ired; check all that a	/nrcs142 apply) ined Lea	ves (B9)	293.docx)	NRCS Field Indica	tors of Hydric S dary Indicators urface Soil Crac	minimum of two requires (B6)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface \(\) High War	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control (A1) ter Table (A2)	//Internet/F	ired; check all that a water-Stai	apply) ined Lea	ep2_0512	293.docx)	NRCS Field Indica	tors of Hydric S dary Indicators urface Soil Cractrainage Patterns	minimum of two requires (B6)			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indice Surface N High Wat Saturatio	GY drology Indicators: eators (minimum of o	//Internet/F	ired; check all that a Water-Stai	apply) ined Lea iuna (B1 tic Plant	ves (B9) 3) s (B14)	293.docx)	NRCS Field Indica	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate	(minimum of two requires (B6) (B10) (Table (C2)			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface Notes the second secon	GY drology Indicators: eators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1)	//Internet/F	ired; check all that a Water-Stai Aquatic Fa True Aqua	apply) ined Lea iuna (B1 tic Plant: Sulfide C	ves (B9) 3) s (B14) Odor (C1)	293.docx)	NRCS Field Indica	dary Indicators urface Soil Cracinage Patterns ry-Season Wate	(minimum of two require to (B10) r Table (C2) (C8)			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface V High War Saturatio Water Ma Sedimen	GY drology Indicators: eators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	//Internet/F	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R	apply) ined Lea iuna (B1 tic Plant Sulfide C	ves (B9) 3) s (B14) Ddor (C1) eres on I	293.docx)	NRCS Field Indicated Indic	dary Indicators urface Soil Cractrainage Patterns ry-Season Waterayfish Burrows aturation Visible	(minimum of two require (ss (B6)) r Table (C2) (C8) on Aerial Imagery (C9)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyo Primary Indio Surface \(\) High Wat Saturatio Water Mater Mater Sedimen Drift Dep	GY drology Indicators: eators (minimum of or Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3)	//Internet/F	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen a Oxidized R	apply) ined Lea iuna (B1 tic Planti Sulfide C	ves (B9) 3) s (B14) Odor (C1) eres on I) Living Ro	Secon	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate rayfish Burrows aturation Visible	(minimum of two require (ss (B6)) (Table (C2)) (C8) on Aerial Imagery (C9) ed Plants (D1)			
Remarks: This data fori Errata. (http://	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of co // water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	//Internet/F	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Coxidized Recent Iro	apply) ined Lea iuna (B1 tic Plant Sulfide C thizosph of Reduc n Reduc	ves (B9) 3) s (B14) Odor (C1) eres on I ced Iron () Living Ro	Secon	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate rayfish Burrows aturation Visible cunted or Stresse	(minimum of two requires (ss (B6)) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depo	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	v/Internet/F	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence of Recent Iro	apply) ned Lea una (B1 tic Plant Sulfide C thizosph of Reduc n Reduc Surface	ep2_0512 vves (B9) 3) s (B14) Odor (C1) eres on I ded Iron (tion in Ti (C7)) Living Ro	Secon	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate rayfish Burrows aturation Visible	(minimum of two require (ss (B6)) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depr Inundation	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control (Ma) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I	nne is requ	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck T) Gauge or N	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduce n Reduce Nell Dat	ves (B9) 3) s (B14) Odor (C1) eres on I ed Iron (ction in Ti (C7) a (D9)) _iving Ro (C4) Iled Soils	Secon	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate rayfish Burrows aturation Visible cunted or Stresse	(minimum of two require (ss (B6)) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Mater Ma	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of co // water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave	nne is requ	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck T) Gauge or N	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduce n Reduce Nell Dat	ves (B9) 3) s (B14) Odor (C1) eres on I ed Iron (ction in Ti (C7) a (D9)) _iving Ro (C4) Iled Soils	Secon	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate rayfish Burrows aturation Visible cunted or Stresse	(minimum of two require (ss (B6)) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyd Surface V High Wat Saturatio Water Mater	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control //water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave //wations:	magery (B	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence of Recent Iro Thin Muck T) Gauge or N	apply) ned Lea una (B1 tic Plant Sulfide C thizosph of Reduc n Reduc Surface Well Dat	vves (B9) 3) s (B14) Odor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks)) _iving Ro (C4) Iled Soils	Secon	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate rayfish Burrows aturation Visible cunted or Stresse	(minimum of two require (ss (B6)) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatic Sparsely Field Observ Surface Water	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control (Mater (A1)) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present?	magery (B	iired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck T) Gauge or No Other (Exp.	apply) ined Lea iuna (B1 tic Plant Sulfide (Chizosph of Reduc n Reduc Surface Well Dat	vves (B9) 3) s (B14) Odor (C1) eres on I ted Iron (tion in Ti (C7) a (D9) emarks)) _iving Ro (C4) Iled Soils	Secon	dary Indicators urface Soil Crac rainage Patterns ry-Season Wate rayfish Burrows aturation Visible cunted or Stresse	(minimum of two require (ss (B6)) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depr Inundatio Sparsely Field Observ Surface Water Table	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control (Ma) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present? Yee Present?	magery (B	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Recent Iro Thin Muck 7) Gauge or No No No No	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduce n Reduce Nell Dat blain in R	ves (B9) 3) s (B14) Odor (C1) eres on I ted Iron ((C7) a (D9) emarks) nches): nches):) _iving Ro (C4) Iled Soils	Secon	dary Indicators urface Soil Cractrainage Patterns ry-Season Water rayfish Burrows aturation Visible tunted or Stresse eomorphic Posit	(minimum of two requires (B6) (B10) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2) (D5)			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indice Surface Note of the content of	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of	magery (B	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Recent Iro Thin Muck 7) Gauge or No No No No	apply) ined Lea iuna (B1 tic Plant Sulfide (Chizosph of Reduc n Reduc Surface Well Dat	ves (B9) 3) s (B14) Odor (C1) eres on I ted Iron ((C7) a (D9) emarks) nches): nches):) _iving Ro (C4) Iled Soils	Secon	dary Indicators urface Soil Cractrainage Patterns ry-Season Water rayfish Burrows aturation Visible tunted or Stresse eomorphic Posit	(minimum of two requires (B6) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Surface Network High Water Mand Sedimen Drift Dep Algal Mander Inon Depentation Iron Depentation Sparsely Field Observation Processory Surface Water Table Saturation Processory (includes capage)	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of	magery (Bessessessessesses	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck 7) Gauge or No No No No No	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduc n Reduc Surface Well Dat lain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4) Iled Soils	Secon Signature Secon Signature Sign	dary Indicators urface Soil Cractrainage Patterns ry-Season Water rayfish Burrows aturation Visible tunted or Stresse eomorphic Posit	(minimum of two requires (B6) (B10) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2) (D5)			
Remarks: This data fori Errata. (http:// HYDROLO Wetland Hyde Surface V High Water Mater Mater Mater Mater Table Sparsely Field Observ Surface Water Table Saturation Profincludes cap Describe Recommended Time Describe Recommended Describe Recommended The profit of the profined of the profit of the profit of the profined	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control of con	magery (Bessessessessesses	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck 7) Gauge or No No No No No	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduc n Reduc Surface Well Dat lain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4) Iled Soils	Secon Signature Secon Signature Sign	dary Indicators urface Soil Cractrainage Patterns ry-Season Water rayfish Burrows aturation Visible tunted or Stresse eomorphic Posit	(minimum of two requires (B6) (B10) r Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2) (D5)			
Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Surface Network High Water Mand Sedimen Drift Dep Algal Mander Inon Depentation Iron Depentation Sparsely Field Observation Processory Surface Water Table Saturation Processory (includes capage)	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of control of con	magery (Bessessessessesses	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck 7) Gauge or No No No No No	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduc n Reduc Surface Well Dat lain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4) Iled Soils	Secon Signature Secon Signature Sign	dary Indicators urface Soil Cractrainage Patterns ry-Season Water rayfish Burrows aturation Visible tunted or Stresse eomorphic Posit	(minimum of two requires (B6) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2) (D5)			

Project/Site: Forest Ridge	ect/Site: Forest Ridge City/County: Lick								
Applicant/Owner: Watcon Consulting Engineers & S	urveyors, Ll	_C		State: OH	Sampling Point:	DP6			
Investigator(s): JM		Section, T	ownship, Ra	nge: Pataskala					
Landform (hillside, terrace, etc.): plain		l	Local relief (c	concave, convex, none):	none				
Slope (%):0 _ Lat:		Long:			Datum: NAD83				
Soil Map Unit Name:			<u> </u>		fication: none				
Are climatic / hydrologic conditions on the site typical for	r this time of	f year?	Yes X	No (If no, exp	plain in Remarks.)				
Are Vegetation, Soil, or Hydrologysi	ignificantly d	listurbed? A	Are "Normal C	Dircumstances" present?	Yes X N	lo			
Are Vegetation, Soil, or Hydrologyna				plain any answers in Re	· · · · · · · · · · · · · · · · · · ·	<u> </u>			
SUMMARY OF FINDINGS – Attach site ma	p showin	ıg samplin	ıg point lo	cations, transects	i, important fe	atures, etc.			
Hydrophytic Vegetation Present? Yes No	Х	Is the	Sampled Ar	rea					
	X		n a Wetland?		No X				
	X								
Remarks:									
VEGETATION – Use scientific names of plar		Deminant	la dia otore T						
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wo	rksheet:				
1. Prunus serotina	10	No	FACU	Number of Dominant					
2. Fagus grandifolia	25	Yes	FACU	Are OBL, FACW, or F	•	0 (A)			
3. Acer saccharum	40	Yes	FACU	Total Number of Dom	inant Species				
4. Acer rubrum	15	No	FAC	Across All Strata:	·	4 (B)			
5				Percent of Dominant	•	· (A/D)			
Combined Charles (Plot size) 151	90 =	=Total Cover		Are OBL, FACW, or F	-AC: <u>(</u>	0.0% (A/B)			
Sapling/Shrub Stratum (Plot size: 15') 1.			ŀ	Prevalence Index wo	orkshoot				
2.				Total % Cover of		v hv:			
3.				_	$0 \qquad x = 1 = 0$	0			
4.					0 x 2 =	0			
5.				FAC species 1	5 x 3 =	45			
	=	=Total Cover			00 x 4 =	360			
Herb Stratum (Plot size: 5')		_		·	0 x 5 =	0(7)			
1. Rosa multiflora	5	Yes	FACU		`´	405 (B)			
Fagus grandifolia 3.	10	Yes	<u>FACU</u>	Prevalence Index	= B/A = <u>3.8</u>	6			
				Hydrophytic Vegetat	tion Indicators:				
5		<u> </u>			r Hydrophytic Vege	etation			
6.				2 - Dominance Te		tation			
7.				3 - Prevalence In	dex is ≤3.0 ¹				
8.					I Adaptations ¹ (Prov				
9					ks or on a separate				
10				Problematic Hydr	rophytic Vegetation	¹ (Explain)			
(Distriction	15 =	=Total Cover		¹ Indicators of hydric s					
Woody Vine Stratum (Plot size:)			ŀ	be present, unless dis	sturbed or problema	atic.			
1 2.				Hydrophytic					
		=Total Cover		Vegetation Present? Yes	No X				
Remarks: (Include photo numbers here or on a separa		-10101 0010.		11000111					
Кетакъ. (пісіййе рітою пиніреть неге от он а зерата	ile sneet.,								

	-	to the dept				tor or o	confirm the ab	sence of indicators	s.)		
Depth	Matrix		x Featur		. 2	_					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	·	Remarks		
0-6	2.5Y 4/3	100									
6-20	2.5Y 4/4	100									
¹ Type: C=C	oncentration, D=De	pletion RM=I	Reduced Matrix	MS=Mas	ked Sand	Grains	2	ocation: PL=Pore L	ining. M=Mat	rix.	
Hydric Soil		, , , , , , , , , , , , , , , , , , , ,	,					dicators for Proble			:
Histosol			Sandy Gle	eyed Mat	rix (S4)			Coast Prairie Red	-		
	pipedon (A2)		Sandy Re	•	, ,			Iron-Manganese I			
Black Hi	stic (A3)		Stripped N	Matrix (S	6)			Red Parent Mater	ial (F21)		
Hydroge	n Sulfide (A4)	Dark Surf	ace (S7)				Very Shallow Dar	k Surface (F2	2)		
Stratified	Layers (A5)		Loamy Mu	ucky Min	eral (F1)			Other (Explain in	Remarks)		
2 cm Mu	ck (A10)		Loamy Gl	eyed Ma	trix (F2)			_			
Depleted	Below Dark Surfac	e (A11)	Depleted	Matrix (F	3)						
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	ce (F6)		³ lr	ndicators of hydroph	ytic vegetatio	n and	
Sandy M	lucky Mineral (S1)		Depleted	Dark Sur	face (F7)			wetland hydrology	must be pre	sent,	
5 cm Mu	cky Peat or Peat (S	3)	Redox De	pression	s (F8)			unless disturbed	or problemation).	
Restrictive	Layer (if observed)):									
Type:			_								
Depth (ir	nches):		_				Hydric Soil F	Present?	Yes	No	Χ
Remarks:						-					
								dicators of Hydric S	oils, Version	7.0, 201	5
Errata. (http:	//www.nrcs.usda.go	v/Internet/FS	SE_DOCUMENTS	S/nrcs142	2p2_0512	293.doc	K)				
HYDROLO)GY										
		_									
_	drology Indicators cators (minimum of		ed: check all that	annly)			94	econdary Indicators	(minimum of	hwo roai	uired)
-	Water (A1)	one is require	eu, check an that Water-Sta		wes (BQ)			Surface Soil Crac	•	two requ	<u>uireu)</u>
	ter Table (A2)		Aquatic F		` ,			Drainage Patterns	` '		
Saturation	, ,		True Aqua					Dry-Season Wate			
	arks (B1)		Hydrogen)		Crayfish Burrows			
	nt Deposits (B2)		Oxidized I		` '		oots (C3)	Saturation Visible	` ,	agery (C	(9)
	oosits (B3)		Presence			_	. ,	Stunted or Stress			,
Algal Ma	t or Crust (B4)		Recent Iro	n Reduc	tion in Ti	lled Soil	s (C6)	Geomorphic Posi	tion (D2)		
Iron Dep	osits (B5)		Thin Mucl	c Surface	e (C7)			FAC-Neutral Test	(D5)		
Inundation	on Visible on Aerial	Imagery (B7)	Gauge or	Well Dat	ta (D9)						
Sparsely	Vegetated Concav	e Surface (B	8)Other (Ex	plain in F	Remarks)						
Field Obser	vations:										
Surface Wat	er Present? Y	es	No	Depth (i	nches):						
Water Table	Present? Y	es	No		nches):						
Saturation P	resent? Y	es	No	Depth (i	nches):		Wetland H	ydrology Present?	Yes	No	Χ
(includes ca											
Describe Re	corded Data (strear	n gauge, mor	nitoring well, aeria	al photos	, previou	s inspec	tions), if availa	ble:			
Dawin											
Remarks:											

Project/Site: Forest Ridge		City/Cour	nty: Licking		Sampling Date:	11/4/2020
Applicant/Owner: Watcon Consulting Engineers &	Surveyors, L	LC		State: OH	Sampling Point:	DP7
Investigator(s): JM		Section, T	ownship, Ra	ange: Pataskala		
Landform (hillside, terrace, etc.): plain		!	Local relief (d	concave, convex, none):	concave	
Slope (%):0 _ Lat:		Long:			Datum: NAD83	
Soil Map Unit Name:				NWI classi	fication: none	
Are climatic / hydrologic conditions on the site typical for	or this time o	of year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation, Soil, or Hydrologys	significantly o	disturbed? A	لــــــــــــــــــــــــــــــــــــ	Circumstances" present?	Yes X No)
Are Vegetation, Soil, or Hydrology	naturally prob	olematic? (If needed, ex	plain any answers in Re	marks.)	
SUMMARY OF FINDINGS – Attach site ma	ap showir	ng samplin	ıg point lo	ocations, transects	, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes X No	0	Is the	Sampled A	rea		
	0		n a Wetland		No	
Wetland Hydrology Present? Yes X No	o <u>——</u>					
Remarks:						
Wetland D						
VEGETATION – Use scientific names of pla		Deminant	la dicator	1		
<u>Tree Stratum</u> (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wo	rksheet:	
1. Quercus bicolor	30	Yes	FACW	Number of Dominant		
2. Ulmus americana	15	Yes	FACW	Are OBL, FACW, or F	•	4 (A)
3. Fraxinus pennsylvanica	10	No	FACW	Total Number of Dom	inant Species	
4				Across All Strata:		4 (B)
5		 -		Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size: 15'	55 =	=Total Cover		Are OBL, FACW, or F	AC: 100	0.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15') 1.)			Prevalence Index we	orksheet	
				Total % Cover of		bv:
3.						0
4.				FACW species 15		10
5.				FAC species (0
	-	=Total Cover		FACU species (x 4 =	0
Herb Stratum (Plot size: 5')				UPL species(x 5 =	0
1. Carex grayi	60	Yes	FACW	Column Totals: 15	. ,	10 (B)
2. Agrimonia parviflora	5	No	FACW	Prevalence Index	= B/A =2.00	
3. Agrostis gigantea	35	Yes	FACW		* * **	
4				Hydrophytic Vegetat		
5. 6.				X 2 - Dominance Te	Hydrophytic Veget	ation
7				X 3 - Prevalence In		
8.					Adaptations ¹ (Provi	de supporting
9.					s or on a separate	
10				Problematic Hydr	ophytic Vegetation ¹	(Explain)
	100 =	=Total Cover		¹ Indicators of hydric s		
Woody Vine Stratum (Plot size: 15')			be present, unless dis	turbed or problema	tic.
1				Hydrophytic		
2		T-1-1 0		Vegetation	V N-	
		=Total Cover		Present? Yes	No	_
Remarks: (Include photo numbers here or on a sepa	rate sheet.)					

<u> </u>	
0-6 2.5Y 4/2 90 10YR 4/6 10 C M Loamy/Clayey Prominent redo	narks
	x concentrations
6-20 2.5Y 5/2 85 10YR 4/6 15 C M Loamy/Clayey Prominent redo	ox concentrations
	_
¹ Times C. Consentration D. Depleties DM. Reduced Matrix MC. Maybed Cond. Conics	A Matrix
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, N Hydric Soil Indicators: Indicators for Problematic	
Histosol (A1) Sandy Gleyed Matrix (S4) ? Coast Prairie Redox (A1	•
Histic Epipedon (A2) Sandy Gleyed Matrix (34) Sandy Redox (S5) Iron-Manganese Masses	
Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F2:	
Hydrogen Sulfide (A4) Dark Surface (S7) Very Shallow Dark Surface	•
Stratified Layers (A5) Loamy Mucky Mineral (F1) Other (Explain in Remark	` ,
2 cm Muck (A10) Loamy Gleyed Matrix (F2)	1.0)
Depleted Below Dark Surface (A11) X Depleted Matrix (F3)	
Thick Dark Surface (A12) Redox Dark Surface (F6) Redox Dark Surface (F6) Redox Dark Surface (F6)	getation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must	
5 cm Mucky Peat or Peat (S3) ? Redox Depressions (F8) unless disturbed or prob	
Restrictive Layer (if observed):	
Type:	
· · · · · · · · · · · · · · · · · · ·	X No
Remarks:	
This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Ve	ersion 7.0. 2015
Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)	5101011 7.0, 2010
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of one is required; check all that apply)	um of two required)
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)	
)
Surface Water (A1)Water-Stained Leaves (B9)Surface Soil Cracks (B6))
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) X Drainage Patterns (B10))
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) X Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table	e (C2)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Water Marks (B1) Water Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Dry-Season Water Table Crayfish Burrows (C8)	e (C2)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Water Stained Leaves (B9) Aquatic Fauna (B13) Aquatic Fauna (B13) X Drainage Patterns (B10) Dry-Season Water Table (C1) Crayfish Burrows (C8) Saturation Visible on Aerong the Company of the Cartest (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2)	e (C2) rial Imagery (C9) nts (D1)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) In Marks (B5) Water Stained Leaves (B9) Aquatic Fauna (B13) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Surface Soil Cracks (B6) X Drainage Patterns (B10) Crayfish Burrows (C8) Saturation Visible on Aerospheres on Living Roots (C3) Saturation Visible on Aerosp	e (C2) rial Imagery (C9) nts (D1)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water Stained Leaves (B9) Aquatic Fauna (B13) Aquatic Fauna (B13) X Drainage Patterns (B10) Dry-Season Water Table (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Saturation Visible on C1 Facent Iron Reduction in Tilled Soils (C6) X FAC-Neutral Test (D5) Gauge or Well Data (D9)	e (C2) rial Imagery (C9) nts (D1)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) In Marks (B5) Water Stained Leaves (B9) Aquatic Fauna (B13) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Surface Soil Cracks (B6) X Drainage Patterns (B10) Crayfish Burrows (C8) Saturation Visible on Aerospheres on Living Roots (C3) Saturation Visible on Aerosp	e (C2) rial Imagery (C9) nts (D1)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stained Leaves (B9) Aquatic Fauna (B13) X Drainage Patterns (B10) X Drainage Patterns (B10) Dry-Season Water Table (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C1) Saturation Visible on Aerial Imagery (C1) Stunted or Stressed Plant (C2) X FAC-Neutral Test (D5) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (C8) Other (Explain in Remarks)	e (C2) rial Imagery (C9) nts (D1)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stained Leaves (B9) Aquatic Fauna (B13) X Drainage Patterns (B10) X Drainage Patterns (B10) Dry-Season Water Table (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Gauge or Reduced Iron (C4) Stunted or Stressed Plant (C7) X FAC-Neutral Test (D5) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Surface Water Present? Yes No Depth (inches):	e (C2) rial Imagery (C9) nts (D1)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Table (B2) Other (Explain in Remarks) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (B14) Dry-Season Water Table (B14) Dry-Season Water Table (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Gauge or Well Data (D9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	e (C2) rial Imagery (C9) nts (D1) 2)
Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Ves No Depth (inches): Saturation Leaves (B9) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aerial Burrows (C8) Saturation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes	e (C2) rial Imagery (C9) nts (D1)
Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation (B13) X Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Other (Explain in Remarks) Wetland Hydrology Present? Yes (includes capillary fringe)	e (C2) rial Imagery (C9) nts (D1) 2)
Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Ves No Depth (inches): Saturation Leaves (B9) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aerial Burrows (C8) Saturation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes	e (C2) rial Imagery (C9) nts (D1) 2)
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) X Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plant Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) X FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	e (C2) rial Imagery (C9) nts (D1) 2)
Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation (B13) X Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Other (Explain in Remarks) Wetland Hydrology Present? Yes (includes capillary fringe)	e (C2) rial Imagery (C9) nts (D1) 2)

Project/Site: Forest Ridge	City/C	ounty: Licking		Sampling Date:	11/4/2020
Applicant/Owner: Watcon Consulting Engineers & St	urveyors, LLC		State: OH	Sampling Point:	DP8
Investigator(s): JM	Section	ո, Township, Ra	nge: Pataskala		
Landform (hillside, terrace, etc.): plain		_ Local relief (c	concave, convex, none):	concave	
Slope (%):0 Lat:	Long	J:		Datum: NAD83	
Soil Map Unit Name:				fication: none	
Are climatic / hydrologic conditions on the site typical for	this time of year?	Yes X	No (If no, exp	plain in Remarks.)	
Are Vegetation, Soil, or Hydrologysi	gnificantly disturbed?	Are "Normal C	ircumstances" present?	Yes X No	0
Are Vegetation, Soil, or Hydrologyna	aturally problematic?	(If needed, ex	plain any answers in Re	marks.)	_
SUMMARY OF FINDINGS – Attach site ma	p showing samp	ling point lo	cations, transects	, important fea	atures, etc.
Wetland Hydrology Present? Yes X No		the Sampled Ar		No	
Remarks: Wetland E					
VEGETATION – Use scientific names of plan	ıts.	,			
Tree Stratum (Plot size: 30')	Absolute Dominant % Cover Species?		Dominance Test wor	rksheet:	
1	70 OOVCI CPOSICE.		Number of Dominant Are OBL, FACW, or F	Species That	3 (A)
3. 4.			Total Number of Dom Across All Strata:		4 (B)
5.			Percent of Dominant	Species That	
Continue Charles Charles (Plot sizes 15)	=Total Cove	er	Are OBL, FACW, or F	AC: 7!	5.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15') 1	20 Yes	ŀ	Prevalence Index wo	orksheet:	
2.			Total % Cover of		y by:
3.			OBL species 6		60
4.			FACW species 40	0 x 2 =	80
5				x 3 =	0
- Hart Overton	20 =Total Cove	er	FACU species 0		0
Herb Stratum (Plot size: 5')	20 Vos	OBI	UPL species 0 Column Totals: 10		0 140 (B)
Carex comosa Juncus effusus	20 Yes 10 No	OBL OBL	Column Totals: 10 Prevalence Index :	`´	140 (B)
3. Leersia oryzoides	30 Yes	OBL	FIEVAIGHUU HIGGA	= D/A = 1x	<u></u>
4. Carex vulpinoidea	25 Yes	FACW	Hydrophytic Vegetat	tion Indicators:	
5. Pycnanthemum virginianum	15 No	FACW		r Hydrophytic Veget	tation
6.		- <u> </u>	X 2 - Dominance Te		
7.			X 3 - Prevalence Inc		
8				Adaptations ¹ (Prov	0
9				ks or on a separate	
10				ophytic Vegetation	` ' '
Woody Vine Stratum (Plot size: 15')	100 =Total Cove	er	¹ Indicators of hydric some be present, unless dis		
1			Hydrophytic		
2	=Total Cove	<u> </u>	Vegetation Present? Yes	X No	<u> </u>
Remarks: (Include photo numbers here or on a separa	ate sheet.)				

	cription: (Describe	to the dept				ator or o	confirm the absenc	e of indicators.)
Depth	Matrix			x Featur		2		
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-6	2.5Y 4/2	95	10YR 4/6	5	С	M	Loamy/Clayey	Prominent redox concentrations
6-20	2.5Y 5/1	85	10YR 4/6	15	С	M	Loamy/Clayey	Prominent redox concentrations
			_				_	-
	-							
1 _{Type:} C. C.	anaantration D Dan	lotion DM	Doduced Metrix I				21 0001	on Di Doro Lining M Motriy
Hydric Soil	oncentration, D=Dep	iletion, Kivi=	Reduced Matrix, I	vio=ivias	keu Sanc	Giailis		on: PL=Pore Lining, M=Matrix. tors for Problematic Hydric Soils ³ :
Histosol			Sandy Gle	ved Mat	riv (S4)			ast Prairie Redox (A16)
	pipedon (A2)		Sandy Red		IIX (O4)			n-Manganese Masses (F12)
Black His			Stripped M		3)			d Parent Material (F21)
	n Sulfide (A4)		Dark Surfa		,			ry Shallow Dark Surface (F22)
	Layers (A5)		Loamy Mu	` '	eral (F1)			ner (Explain in Remarks)
2 cm Mu			Loamy Gle	-	, ,			(=
	d Below Dark Surface	e (A11)	X Depleted I					
	ark Surface (A12)	(,	Redox Da				³ Indica	tors of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted [` '			tland hydrology must be present,
	icky Peat or Peat (S	3)	? Redox De					less disturbed or problematic.
Restrictive I	Layer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soil Prese	ent? Yes X No
Remarks:	· · ·		<u> </u>					
	m is revised from Mi	dwest Regio	onal Supplement \	ersion 2	2.0 to inc	lude the	NRCS Field Indicat	ors of Hydric Soils, Version 7.0, 2015
	//www.nrcs.usda.gov							•
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of o	one is requir	ed; check all that	apply)			Second	dary Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Lea	ves (B9)		Su	rface Soil Cracks (B6)
High Wa	iter Table (A2)		Aquatic Fa	auna (B1	3)		X Dra	ainage Patterns (B10)
Saturation	on (A3)		True Aqua	tic Plant	s (B14)		Dr	y-Season Water Table (C2)
	arks (B1)		Hydrogen		` '			ayfish Burrows (C8)
	nt Deposits (B2)		Oxidized F			_		turation Visible on Aerial Imagery (C9)
	oosits (B3)		Presence			. ,		unted or Stressed Plants (D1)
	it or Crust (B4)		Recent Iro			lled Soil	` '	eomorphic Position (D2)
	osits (B5)	(DZ)	Thin Muck		` '		<u>X</u> FA	C-Neutral Test (D5)
	on Visible on Aerial I				. ,			
	Vegetated Concave	Surface (D	8)Other (Exp	naill iii r	emarks)		ı	
Field Obser			No	Donth "	nohe=\:			
Surface Wat		es			nches): _			
Water Table Saturation P		es		Depth (i	nches):		Wotland Hydro	logy Procent? Yes Y No
(includes car		, <u> </u>	No	ր <u>գ</u> ելու (լ			Wetland Hydro	logy Present? Yes X No
	corded Data (stream	gauge, moi	nitoring well, aeria	antona l	. previous	s insper	tions), if available	
3 333.103 110		- Jacgo, 11101			, p. 51100		,	
Remarks:								

Project/Site: Forest Ridge		City/Cour	nty: Licking	_	Sampling Date:	11/4/2	2020
Applicant/Owner: Watcon Consulting Engineers & S	surveyors, LI	∟C		State: OH	Sampling Point:	D	P9
Investigator(s): JM		Section, T	ownship, Ra	nge: Pataskala			
Landform (hillside, terrace, etc.): plain		I	Local relief (c	concave, convex, none):	concave		
Slope (%):0 Lat:		Long:			Datum: NAD83		
Soil Map Unit Name:					fication: none		
Are climatic / hydrologic conditions on the site typical fo	r this time o	f year?	Yes X	No (If no, exp	olain in Remarks.)		
Are Vegetation, Soil, or Hydrologys	ignificantly c	disturbed? A	Are "Normal C	 Dircumstances" present?	Yes X	10	=
Are Vegetation, Soil, or Hydrologyn				plain any answers in Re	<u></u>		
SUMMARY OF FINDINGS – Attach site ma	ıp showin	ıg samplin	g point lo	cations, transects	, important fe	atures,	, etc.
Hydrophytic Vegetation Present? Yes X No		Is the	Sampled Ar	rea			
		withir	n a Wetland?	Yes X	No		
Wetland Hydrology Present? Yes X No							
Remarks:							
Wetland F							
VEGETATION – Use scientific names of plan							
VEGETATION — Use scientine names of plan	Absolute	Dominant	Indicator				
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wo	rksheet:		
Quercus bicolor	15	Yes	FACW	Number of Dominant			
2. Ulmus americana	30	Yes	FACW	Are OBL, FACW, or F	AC:	6	(A)
3. Quercus palustris	10	No	FACW	Total Number of Dom	inant Species	-	(D)
4. Celtis occidentalis	15	Yes	<u>FAC</u>	Across All Strata:	<u> </u>	7	(B)
5	70 =	=Total Cover		Percent of Dominant : Are OBL, FACW, or F	•	35.7%	(A/B)
Sapling/Shrub Stratum (Plot size: 15')		-10141 0010.		A10 00E, 17.011, 5		JO.1 70	(,,,,
1. Lonicera tatarica	10	Yes	FACU	Prevalence Index wo	orksheet:		
2. Cornus amomum	10	Yes	FACW	Total % Cover of	f: Multipl	ly by:	
3.				OBL species 1	0 x 1 =	10	
4				FACW species 9		190	ı.
5				FAC species 1		45	ı.
Herb Stratum (Plot size: 5')	20 =	=Total Cover		FACU species 1 UPL species (0	
Herb Stratum (Plot size: 5') 1. Carex grayi	30	Yes	FACW	UPL species Column Totals: 13			(B)
Asclepias incarnata	10	Yes	OBL	Prevalence Index	`		(0)
3.							
4.				Hydrophytic Vegetat	ion Indicators:		
5.				1 - Rapid Test for	Hydrophytic Vege	etation	
6				X 2 - Dominance Te			
7				X 3 - Prevalence Inc			
8.					Adaptations ¹ (Pro		porting
9 10.					ophytic Vegetation		in)
10	40 =	=Total Cover		¹ Indicators of hydric s			•
Woody Vine Stratum (Plot size: 15')		-10.01 -0.13		be present, unless dis			ทนธเ
1				Hydrophytic	•		
2.				Vegetation			
	=	=Total Cover		Present? Yes	X No		
Remarks: (Include photo numbers here or on a separa	ate sheet.)						

Depth (Inches) Octor (most) % Color (molst) %		-	to the dep				ator or o	confirm the absence	of indicators.)
0-6 2.5Y 4/2 90 10YR 4/6 10 C M Loamy/Clayey Prominent redox concentrations 6-20 2.5Y 5/2 85 10YR 4/6 15 C M Loamy/Clayey Prominent redox concentrations 6-20 2.5Y 5/2 85 10YR 4/6 15 C M Loamy/Clayey Prominent redox concentrations 7-2 10 10 10 10 10 10 10 10 10 10 10 10 10	-						1002	Tandona	Demonstra
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: P: Case Prainte Reduced Matrix (S4) P: Coase Prainte Reduced Hydric Soils*: P: Coase Prainte Reduced Matrix (S4) P: Coase Prainte Reduced Hydric Soils*: P: Coase Prainte Reduced Matrix (S4) P: Coase Prainte Reduced Hydric Soils*:									
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. "Location: PL=Pore Lining, M=Matrix, Hydric Soils": Hydric Soil Indicators: Histosco (A1) Sandy Redox (S5) Indicators for Problematic Hydric Soils": Histosco (A1) Sandy Redox (S5) Iron-Manganese Masses (F12) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Dark Surface (S7) Very Shallow Dark Surface (F22) Stratified Layers (A5) Loarny Mucky Mineral (F1) Other (Explain in Remarks) Depleted Bellow Dark Surface (A11) X Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, so m Mucky Peat or Peat (S3) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if Observed): Type: Depth (inches): Hydric Soil Present? Yes X No Remarks: Primary Indicators Iminimum of one is required: check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (F1) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (F1) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (B10) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (B10) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (B10) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (B10) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (B10) Sarava (A3) True Aquatic Plants (B13) Depleted Dark Surface (B10) Sarava (B10) Deposits (B2) Doxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Iron Deposits (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Flot Observations: Valuer Present? Yes No Depth (Inches): Water Present? Yes No Depth (Inches): Water Alabe Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes X No Depth (Inches): Wetland Hydrology Present? Yes X No Depth (Inches): Wetland Hydrology Present? Yes X No Depth		-	· —— ·						
Hydric Soil Indicators:	6-20	2.5Y 5/2	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations
Hydric Soil Indicators:	<u> </u>								
Hydric Soil Indicators:									
Hydric Soil Indicators for Problematic Hydric Soils*: Histosci (A1)									
Hydric Soil Indicators:									
Hydric Soil Indicators for Problematic Hydric Soils*: Histosci (A1)									
Histosal (A1)	¹ Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, I	MS=Mas	ked Sand	d Grains	s. ² Location:	: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Masses (F12) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Dark Surface (S7) Stratified Layers (A5) Loamy Mucky Mineral (F1) Other (Explain in Remarks) 2 cm Muck (A10) Loamy Mucky Mineral (F1) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Som Mucky Peat or Peat (S3) Peat (S3) Redox Depressions (F8) Restrictive Layer (if observed): Type: Depth (inches): Remarks: This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Surface Water (A1) Water-Stained Leaves (B9) Surface Water (A1) Water-Stained Leaves (B9) Surface Water (A1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B3) Presence of Reduced Iron (C4) Sturted or Stressed Plants (D1) Iron Deposits (B3) Presence (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Genome Deposits (B2) Other (Explain in Remarks) Wetland Hydrology Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches):	Hydric Soil	Indicators:							_
Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Dark Surface (S7) Very Shallow Dark Surface (F22) Stratified Layers (A5) Learny Mucky Mineral (F1) Other (Explain in Remarks) 2 cm Muck (A10) Loamy Cleyed Matrix (F2) Depleted Below Dark Surface (A11) X Depleted Matrix (F3) Thick Dark Surface (A21) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No Remarks: Hydric Soil Present? Yes X No Remarks: Surface Material (F21) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water (A11) Surface (B13) X Drainage Patterns (B10) Surface Water (A1) Aquatic Fauna (B13) X Drainage Patterns (B10) Sauface Water (A3) True Aquatic Fauna (B13) X Drainage Patterns (B10) Sediment Deposits (B3) Presence of Reduced Iron (C4) Sutructed or Crayfish Burrows (C8) Sediment Deposits (B3) Presence of Reduced Iron (C4) Sutructed or Stressed Plants (D1) Aday Mater Or Crust (B4) Recent Iron Reduction in Titled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B3) Presence (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches):					•	, ,			
Hydrogen Sulfide (A4) Dark Surface (S7) Very Shallow Dark Surface (F22) Stratified Layers (A5) Loamy Mucky Mineral (F1) Other (Explain in Remarks) Depleted Below Dark Surface (A11) X Depleted Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Pepth (inches): Hydric Soil Present? Yes X No_									-
Stratified Layers (A5)	Black Hi	stic (A3)		Stripped N	/latrix (Se	6)		Red F	Parent Material (F21)
2 cm Muck (A10) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Mucky Mineral (S1) Som Mucky Mineral (S1) Som Mucky Peat or Peat (S3) Pedox Depressions (F8) Depleted Dark Surface (F7) Som Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Negrarks: This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Saturation (A3) Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) Surface (A2) Surface Water (A3) Surface Water (A1) Surface (A3) Surface (A1) Depy-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Metland Hydrology Present? Yes No Depsth (inches): Metland Hydrology Present? Yes No Depsth (inches): Saturation Present? Yes No Depth (inches): Metland Hydrology Present? Yes No Depsth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No De	Hydroge	en Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface (F22)
Depleted Below Dark Surface (A11)	Stratified	d Layers (A5)		Loamy Mu	icky Min	eral (F1)		Other	r (Explain in Remarks)
Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, on the present of th	2 cm Mu	uck (A10)		Loamy Gl	eyed Ma	trix (F2)			
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Depleted	d Below Dark Surface	e (A11)	X Depleted	Matrix (F	3)			
S cm Mucky Peat or Peat (S3) 7 Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Hydric Soil Present? Remarks: This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) X Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) X FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	Thick Da	ark Surface (A12)		Redox Da	rk Surfac	ce (F6)		³ Indicator	s of hydrophytic vegetation and
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Remarks: Hydric Soil Present? Research Reductors (Indicators of Hydric Soils, Version 7.0, 2015 Remarks: Hydrogay Judicators: Primary Indicators (Indicators (Indicator	Sandy M	lucky Mineral (S1)		Depleted	Dark Sur	face (F7))	wetla	nd hydrology must be present,
Type: Depth (inches):	5 cm Mu	ucky Peat or Peat (S	3)	? Redox De	pression	s (F8)		unles	s disturbed or problematic.
Pepth (inches):	Restrictive	Layer (if observed):							
Remarks: This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/internet/FSE_DOCUMENTS/nrcs142p2_051293.docx) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1)	Type:								
This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx) ### Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Depth (ii	nches):						Hydric Soil Present	? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) X Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) X FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **Test Surface Vater Table Present? Yes X No (includes): Wetland Hydrology Present? Yes X No (includes): Wetland Hydrol	Litata. (http://	, www.iiioo.dodd.go	, memour	CL_DOGGWENT)/111001+2		200.000	.,	
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Marks (B10) Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Squee or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes X No includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLO	OGY							
Surface Water (A1)	Wetland Hy	drology Indicators:							
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Avaturation (A3) Avaturation (A3) Avaturation (A3) Avaturation (A3) Avaturation (B14) Water Marks (B1) Avaturation (B16) Sediment Deposits (B2) Drift Deposits (B3) Avaturation Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Avaturation Visible on Aerial Imagery (B7) Algal Mat or Crust (B5) Avaturation Visible on Aerial Imagery (B7) Avaturation	Primary Indi	cators (minimum of o	one is requ	ired; check all that	apply)			<u>Secondar</u>	y Indicators (minimum of two required)
Saturation (A3)	Surface	Water (A1)		Water-Sta	ined Lea	aves (B9)		Surfa	ce Soil Cracks (B6)
Water Marks (B1)	High Wa	ater Table (A2)		Aquatic Fa	auna (B1	3)		X Drain	age Patterns (B10)
Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2) FAC-Neutral Test (D5) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation	on (A3)		True Aqua	tic Plant	s (B14)		Dry-S	Season Water Table (C2)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water M	larks (B1)		Hydrogen	Sulfide (Odor (C1)	Crayf	ish Burrows (C8)
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Sedimer	nt Deposits (B2)		Oxidized F	Rhizosph	eres on l	Living R	· · · —	
Iron Deposits (B5) Thin Muck Surface (C7) X FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Drift Dep	posits (B3)		Presence	of Redu	ced Iron	(C4)	Stunt	ed or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Recent Iro	n Reduc	tion in Ti	lled Soil	` '	
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		, ,				, ,		X FAC-	Neutral Test (D5)
Field Observations: Surface Water Present? Yes				· —		. ,			
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Sparsely	/ Vegetated Concave	Surface (B8)Other (Exp	olain in F	Remarks)			
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						_			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			es	No	Depth (i	nches): _		Wetland Hydrolog	gy Present? Yes X No
								1	
Remarks:	Describe Re	corded Data (stream	gauge, m	onitoring well, aeria	al photos	, previou	s inspec	ctions), if available:	
NGIIIdins.	Domorko								
	Remarks.								

Project/Site: Forest Ridge		City/Cou	nty: Licking		Sampling Date:	11/4/2020
Applicant/Owner: Watcon Consulting Engineers &	Surveyors, L	.LC		State: OH	Sampling Point:	DP10
Investigator(s): JM		Section, 7	Γownship, Ra	ange: Pataskala		
Landform (hillside, terrace, etc.): plain			Local relief (concave, convex, none):	concave	
Slope (%):0 _ Lat:		Long:			Datum: NAD83	
Soil Map Unit Name:				NWI classif	ication: none	
Are climatic / hydrologic conditions on the site typical	for this time o	of year?	Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed? /	Are "Normal (Circumstances" present?	Yes X N	lo
Are Vegetation, Soil, or Hydrology	naturally pro	blematic? (If needed, ex	κplain any answers in Rei	marks.)	'
SUMMARY OF FINDINGS – Attach site m	ap showii	ng samplir	ng point lo	ocations, transects	, important fea	atures, etc.
Hydrophytic Vegetation Present? Yes X N	lo	Is the	Sampled A	rea		
	lo		n a Wetland		No	
Wetland Hydrology Present? Yes X N	lo					
Remarks:						
Wetland G						
VEGETATION – Use scientific names of pla		Danisant	La Parter	T		
<u>Tree Stratum</u> (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1. Quercus bicolor	10	No	FACW	Number of Dominant		
2. Ulmus americana	45	Yes	FACW	Are OBL, FACW, or F	•	6 (A)
3. Acer rubrum	15	Yes	FAC	Total Number of Domi	inant Species	
4				Across All Strata:		6 (B)
5				Percent of Dominant S	•	
Openica (Obstate Obstate AFI		=Total Cover		Are OBL, FACW, or F	AC: 10	00.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15'	15	Voc	EACW/	Prevalence Index wo		
1. Cornus amomum 2.	15	Yes	FACW	Total % Cover of		v hv
3				OBL species 55		55
4				FACW species 10		210
5.				FAC species 15		45
	15	=Total Cover		FACU species 0		0
Herb Stratum (Plot size: 5')				UPL species 0	x 5 =	0
1. Carex grayi	15	Yes	FACW	Column Totals: 17	5 (A)	310 (B)
2. Carex comosa	35	Yes	OBL	Prevalence Index =	= B/A = 1.7	7
3. Carex vulpinoidea	15	Yes	FACW			
4. Leersia oryzoides	10	No No	OBL	Hydrophytic Vegetat		-
5. Typha angustifolia	5	No No	OBL	1 - Rapid Test for		tation
6. Eupatorium perfoliatum	5	No No	OBL	X 2 - Dominance Te		
7. Agrostis gigantea 8.	5	<u>No</u>	FACW	X 3 - Prevalence Inc 4 - Morphological		vide supporting
9.					s or on a separate	
10.					ophytic Vegetation	-
	90	=Total Cover		¹ Indicators of hydric so		` ' '
Woody Vine Stratum (Plot size: 15')			be present, unless dis		
1.				Hydrophytic		
2.				Vegetation		
		=Total Cover		Present? Yes	X No	_
Remarks: (Include photo numbers here or on a sepa	arate sheet.)					

Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	2.5Y 4/1	90	10YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations
3-20	2.5Y 5/1	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations
				<u> </u>	<u> </u>	<u> </u>		
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	MS=Masl	ked Sand	d Grains.	² Location	n: PL=Pore Lining, M=Matrix.
Black His Hydroger	(A1) ipedon (A2) stic (A3) n Sulfide (A4)		Sandy Gle Sandy Re Stripped M Dark Surfa	dox (S5) Matrix (S6 ace (S7)	5)		? Coar Iron- Red Very	rs for Problematic Hydric Soils ³ : st Prairie Redox (A16) Manganese Masses (F12) Parent Material (F21) Shallow Dark Surface (F22)
2 cm Mu	Below Dark Surface	e (A11)	Loamy Mu Loamy Gle X Depleted I	eyed Mat Matrix (F:	rix (F2) 3)			er (Explain in Remarks)
Sandy M	rk Surface (A12) ucky Mineral (S1) cky Peat or Peat (S3	3)	Redox Da Depleted I Redox De	Dark Surf	face (F7)	_	wetla	rs of hydrophytic vegetation and and hydrology must be present, as disturbed or problematic.
Restrictive L	_ayer (if observed):							
Type: Depth (in Remarks:	nches):						Hydric Soil Presen	t? Yes_X_ No
Depth (in Remarks: This data for	· -						NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015
Depth (in Remarks: This data for	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator	
Depth (in Remarks: This data for Errata. (http://	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator	
Depth (in Remarks: This data for Errata. (http://www.defand.com/de	m is revised from Mi //www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS	S/nrcs142			NRCS Field Indicator	
Depth (in Remarks: This data for Errata. (http://www.defand.com/de	m is revised from Mi //www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS ired; check all that Water-Sta	apply) ined Lea	ves (B9)		NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015
Depth (in Remarks: This data for Errata. (http://ht	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of co Water (A1) ter Table (A2)	//Internet/F	ired; check all that Water-Sta Aquatic Fa	apply) ined Lea	ves (B9)		NRCS Field Indicator Seconda Surfa X Drair	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10)
Depth (in Permarks: This data for Errata. (http://www.primary.lndicSurface \\ High WatSaturatio	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of company of the company of	//Internet/F	uired; check all that Water-Sta Aquatic Fa	apply) ined Lea auna (B1) atic Plants	ves (B9) 3) s (B14)	293.docx)	NRCS Field Indicator Seconda Surf: X Drain Dry-	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface \(\) High Wat Saturatio Water Ma	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of company of the company of	//Internet/F	uired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Lea auna (B1: tic Plants	ves (B9) 3) s (B14) Odor (C1)	(293.docx)	Seconda Surfa X Drain Dry- Cray	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) ffish Burrows (C8)
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface V High War Saturatio Water Ma Sedimen	m is revised from Mi //www.nrcs.usda.gov IGY drology Indicators: cators (minimum of own Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea auna (B1: stic Plants Sulfide C Rhizosph	ves (B9) 3) s (B14) Ddor (C1) eres on I	293.docx)	Seconda Surfa X Drai Dry- Cray ots (C3) Sato	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Depth (in Remarks: This data for Errata. (http://www.mc.) HYDROLO Wetland Hyden Surface (high War Marker	m is revised from Mi //www.nrcs.usda.gov IGY drology Indicators: cators (minimum of control of co	//Internet/F	uired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea auna (B1: stic Plants Sulfide C Rhizospho	ves (B9) 3) s (B14) Odor (C1) eres on I) Living Ro	Seconda Surfa X Drain Dry- Cray ots (C3) Satu	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) Ifish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Depth (in Remarks: This data for Errata. (http://www.mc.) HYDROLO Wetland Hyde Surface (high Water Mark) Saturatio Water Mark Sedimen Drift Dep Algal Mark	m is revised from Mi //www.nrcs.usda.gov IGY drology Indicators: cators (minimum of co Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	apply) ined Lea auna (B1: stic Plants Sulfide C Rhizosph of Reduc	ves (B9) 3) s (B14) Odor (C1) eres on Led Iron (tion in Ti) Living Ro	Seconda	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Surface V High Water Mater	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of company) Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	apply) ined Lea auna (B1: atic Plants Sulfide C Rhizosph of Reduc	ep2_0512 vves (B9) 3) s (B14) Odor (C1) eres on L ced Iron (tion in Ti (C7)) Living Ro	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) Ifish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Depth (in Remarks: This data for Errata. (http://www.communication.com/state) HYDROLO Wetland Hyde Surface V High War Saturatio Water Mary Sedimen Drift Dep Algal Mary Inon Deport Inundation.	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of company) Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I	nne is requ	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	apply) ined Lea auna (B1: stic Plant: Sulfide C Rhizosph of Reduce on Reduce & Surface Well Data	ves (B9) 3) s (B14) Odor (C1) eres on Led Iron (C7) a (D9)) Living Ro	Seconda	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface (High Wat Saturatio Water Mater	m is revised from Mi //www.nrcs.usda.gov IGY drology Indicators: cators (minimum of co Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave	nne is requ	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck	apply) ined Lea auna (B1: stic Plant: Sulfide C Rhizosph of Reduce on Reduce & Surface Well Data	ves (B9) 3) s (B14) Odor (C1) eres on Led Iron (C7) a (D9)) Living Ro	Seconda	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Surface \(\) High Wat Saturatio Water Mater Mat	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of company) water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present?	magery (B	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Lea auna (B1: stic Plant: Sulfide C Rhizosph of Reduce on Reduce & Surface Well Data	ves (B9) 3) s (B14) Odor (C1) eres on L ted Iron (tion in Ti (C7) a (D9) emarks)) Living Ro	Seconda	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Depth (in Remarks: This data for Errata. (http://www.primary.lndic	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of company) water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present? Yee	magery (Bessessex	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Lea auna (B1: atic Plant: Sulfide C Rhizosph of Reduct on Reduct surface Well Date blain in R	ves (B9) 3) s (B14) Odor (C1) eres on Led Iron (C7) a (D9) emarks) nches):nches):nches): _) Living Ro	Seconda	ry Indicators (minimum of two required ace Soil Cracks (B6) mage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Depth (in Remarks: This data for Errata. (http://www.primary.lndic	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present? Present? Ye resent? Ye	magery (Bessessex	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Lea auna (B1: atic Plant: Sulfide C Rhizosph of Reduce on Reduce x Surface Well Date blain in R Depth (ii	ves (B9) 3) s (B14) Odor (C1) eres on Led Iron (C7) a (D9) emarks) nches):nches):nches): _) Living Ro	Seconda Surfa X Drain Dry- Cray Satu Sturn (C6) X Geo X FAC	ry Indicators (minimum of two requires ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depu Inundatic Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present? Present? Ye resent? Ye	magery (Bessessessessesses	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Lea auna (B1: stic Plants Sulfide C Rhizosph of Reduc on Reduc Surface Well Data blain in R Depth (in	ves (B9) 3) s (B14) Ddor (C1) eres on Led Iron (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4)	Seconda	ry Indicators (minimum of two requires ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depu Inundatic Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap	m is revised from Mi //www.nrcs.usda.gov IGY drology Indicators: cators (minimum of company) water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present? Present? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent?	magery (Bessessessessesses	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Lea auna (B1: stic Plants Sulfide C Rhizosph of Reduc on Reduc Surface Well Data blain in R Depth (in	ves (B9) 3) s (B14) Ddor (C1) eres on Led Iron (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4)	Seconda	ry Indicators (minimum of two required ace Soil Cracks (B6) mage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)

Project/Site: Forest Ridge			City/Cou	ınty: Licking		Sampling Date:	11/4/2020
Applicant/Owner: Watcon 0	Consulting Engineers & S	Surveyors, Ll	LC		State: OH	Sampling Point:	DP11
Investigator(s): JM			Section, 7	Γownship, Ra	ange: Pataskala		
Landform (hillside, terrace, etc.	:.): plain			Local relief (c	concave, convex, none)	none	
Slope (%):0 Lat:			Long:			Datum: NAD83	
Soil Map Unit Name:				<u> </u>		ification: none	
Are climatic / hydrologic condit	tions on the site typical fo	or this time o	of year?	Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation, Soil	, or Hydrologys	significantly o	disturbed? /	Are "Normal C	Circumstances" present	? Yes <u>X</u> N	lo
Are Vegetation, Soil					κplain any answers in Re	<u></u>	
SUMMARY OF FINDING				ng point lo	ocations, transects	s, important fea	atures, etc.
Hydrophytic Vegetation Prese	ent? Yes No	o X	Is the	Sampled Ar	rea		
Hydric Soil Present?	Yes No	X		n a Wetland?		No X	
Wetland Hydrology Present?		X X	<u> </u>			·	
Remarks:							
YEST ATION House							
VEGETATION – Use sci	entific names of plai	Absolute	Dominant	Indicator	т		
Tree Stratum (Plot siz	ze: 30')	% Cover	Species?	Status	Dominance Test wo	orksheet:	
1. Prunus serotina	·	5	No	FACU	Number of Dominant	Species That	
2. Fagus grandifolia		80	Yes	FACU	Are OBL, FACW, or	•	0 (A)
3. Quercus alba		10	No	FACU	Total Number of Don	ninant Species	
4.					Across All Strata:		1 (B)
5			T-tal Cover		Percent of Dominant	•	0.00/ /A/D)
Sapling/Shrub Stratum	(Plot size: 15')	95 =	=Total Cover		Are OBL, FACW, or	-AU: <u> </u>	0.0% (A/B)
1.	·				Prevalence Index w	orksheet:	
2.					Total % Cover of		v by:
3						0 x 1 =	0
1						0 x 2 =	0
5.					FAC species	0 x 3 =	0
		:	=Total Cover		· —	95 x 4 =	380
	ze:)				· —	0 x 5 =	0(7)
0						``	380 (B)
2.					Prevalence Index	= B/A = 4.0	0
1					Hydrophytic Vegeta	tion Indicators:	
5	_					r Hydrophytic Vege	etation
6.					2 - Dominance T		tation
7.					3 - Prevalence Ir		
8.	-					l Adaptations ¹ (Prov	
٥					data in Remar	ks or on a separate	sheet)
10					Problematic Hyd	rophytic Vegetation	¹ (Explain)
	(Plot size:)	=	=Total Cover		¹ Indicators of hydric s be present, unless di		
1						standa di pidale	<u>ano.</u>
2.					Hydrophytic Vegetation		
			=Total Cover			No X	
Remarks: (Include photo num	nbers here or on a separ	rate sheet.)					

Profile Des	cription: (Describe Matrix	to the dep		u ment t x Featur		ator or c	onfirm the a	psence of indicato	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textur	re	Remarks	
0-6	2.5Y 4/3	100								
6-20	2.5Y 4/4	100								
0 20	2.01 4/4	100					-			
¹ Type: C=C	concentration, D=Dep	oletion, RM	=Reduced Matrix, N	/IS=Mas	ked San	d Grains.	. 2	Location: PL=Pore	Lining, M=Mat	rix.
Hydric Soil	Indicators:						I	ndicators for Prob	lematic Hydric	c Soils³:
Histosol	(A1)		Sandy Gle				_	Coast Prairie Re		
	pipedon (A2)		Sandy Red				_	Iron-Manganese		
	istic (A3)		Stripped M		6)		_	Red Parent Mate	, ,	
	en Sulfide (A4)		Dark Surfa	, ,			_	Very Shallow Da	`	22)
	d Layers (A5)		Loamy Mu				_	Other (Explain in	n Remarks)	
	uck (A10)	/ .	Loamy Gle	-						
	d Below Dark Surfac	e (A11)	Depleted N	•	,		3			
	ark Surface (A12)		Redox Dai		` '	`	3	Indicators of hydrop	-	
	Mucky Mineral (S1)	٥١	Depleted [)		wetland hydrolog		
	ucky Peat or Peat (S	•	Redox Dep	oression	IS (F8)			unless disturbed	or problemation	C.
	Layer (if observed)	•								
Type:										
Depth (i	nches):						Hydric Soil	Present?	Yes	No X
HYDROLO	OGY									
Wetland Hy	drology Indicators:									
Primary Indi	cators (minimum of	one is requ	ired; check all that	apply)				Secondary Indicators	s (minimum of	two required
Surface	Water (A1)		Water-Sta	ined Lea	aves (B9))	_	Surface Soil Cra	acks (B6)	
High Wa	ater Table (A2)		Aquatic Fa	iuna (B1	3)		_	Drainage Patter	ns (B10)	
Saturation	on (A3)		True Aqua	tic Plant	ts (B14)		_	Dry-Season Wa		
Water M	larks (B1)		Hydrogen	Sulfide (Odor (C1)	_	Crayfish Burrow	s (C8)	
	nt Deposits (B2)		Oxidized F			-	oots (C3)	Saturation Visib		
	posits (B3)		Presence				<u>-</u>	Stunted or Stres		1)
	at or Crust (B4)		Recent Iro			illed Soils	s (C6)	Geomorphic Pos	. ,	
	posits (B5)	/D:	Thin Muck				_	FAC-Neutral Te	st (D5)	
	on Visible on Aerial									
	y Vegetated Concave	e Surrace (i	B8)Other (Exp	nain in F	kemarks))	1			
Field Obser			NI.	D 11- /	S1					
		es			nches):					
Water Table Saturation P				Depth (i	_		Wetlend	Uvdralami Drasant	2 Vaa	No. V
	Present? Ye pillary fringe)		No	Depth (i	nches).		welland	Hydrology Present	? Yes	NoX_
,	ecorded Data (stream	n dalide mi	onitoring well aeria	Inhotos	previou	ıs inspec	tions) if avail	ahle:		
2000100110		. gg., illi			, p. 0 1 10 u	.sopou	,, avaii			
Remarks:										

Project/Site: Forest	Ridge				City/Cou	unty: Licking		Sampling Da	te: 11/4	/2020
Applicant/Owner:	Watcon Cons	ulting Engin	eers & S	Surveyors, L	.LC		State: OH	Sampling Poi	nt:	DP12
Investigator(s): JM					Section,	Township, Ra	ange: Pataskala			
Landform (hillside, to	.errace, etc.): pl	lain				Local relief (d	concave, convex, nor	ne): <u>none</u>		
Slope (%): 0	Lat:				Long:			Datum: NAD83	S	
Soil Map Unit Name						<u> </u>		assification: none		
Are climatic / hydrole	ogic conditions	on the site t	ypical fc	or this time c	of year?	Yes X	No (If no,	explain in Remark	s.)	
Are Vegetation	, Soil,	or Hydrology	<i>y</i> s	ignificantly (disturbed? i	Are "Normal (Circumstances" prese	ent? Yes X	No	
Are Vegetation							xplain any answers in	· <u></u>	•	_
						ng point lo	ocations, transed	cts, important	features	s, etc.
Hydrophytic Vegeta	ation Present?	Yes	No	. X	Is the	e Sampled A	rea			
Hydric Soil Present		Yes	No	X		in a Wetland		No <u>X</u>		
Wetland Hydrology	/ Present?	Yes		X				<u> </u>		
Remarks:										
										ļ
· · · · · · · · · · · · · · · · · · ·										
VEGETATION -	- Use scienti	fic names	of plar	nts. Absolute	Dominant	Indicator	T			
Tree Stratum	(Plot size:	30')	% Cover	Species?	Status	Dominance Test	worksheet:		ļ
Prunus serotina			., 	20	No	FACU	Number of Domina			
2. Acer saccharun	n			80	Yes	FACU	Are OBL, FACW,	•	0	(A)
3.				10	No		Total Number of D	Dominant Species		_
4							Across All Strata:	_	1	_ (B)
5				440	T :-! O		Percent of Domina	•	2.00/	(^ /D)
Sapling/Shrub Stra	otion (Dio	+ aiza: 1	15' \	110 :	=Total Cover		Are OBL, FACW,	or FAC:	0.0%	_ (A/B)
			15')				Prevalence Index	worksheet		
2.							Total % Cove		tiply by:	
3							OBL species	0 x 1 =	0	_
1							FACW species	0 x 2 =	0	_
5.							FAC species	0 x 3 =	0	_
_					=Total Cover		FACU species	100 x 4 =	400	_
Herb Stratum	(Plot size:	5'	_)				UPL species	0 x 5 =	0	_
							Column Totals:	100 (A)	400	_ (B)
							Prevalence Inde	ex = B/A =	4.00	_
1							Hydrophytic Veg	etation Indicators:	<u>-</u>	
5								etation indicators: t for Hydrophytic Ve		
6.								e Test is >50%	geranon	
7								e Index is ≤3.0 ¹		
8.								ical Adaptations ¹ (F	Provide su	pporting
0							data in Ren	narks or on a separ	ate sheet))
10.							Problematic H	lydrophytic Vegetat	ion¹ (Expl	ain)
					=Total Cover	_		ric soil and wetland		must
Woody Vine Stratu		t size:					be present, unless	s disturbed or proble	ematic.	
1.							Hydrophytic			
2					=Total Cover		Vegetation Present? Y	raa Na	V	
5					= I Ulai Cuvei		Fresent: i	'es No_		
Remarks: (Include	pnoto numbers	3 here or on	a separa	ate sneet.)						

Depth (in the s)	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	2.5Y 4/3	100						
6-20	2.5Y 4/4	100						
	=.0. // 1							
¹ Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, N	/IS=Mas	ked San	d Grains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicate	ors for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coa	ast Prairie Redox (A16)
	pipedon (A2)		Sandy Red					-Manganese Masses (F12)
Black His	` '		Stripped M		5)			d Parent Material (F21)
	n Sulfide (A4)		Dark Surfa	` ,				y Shallow Dark Surface (F22)
	Layers (A5)		Loamy Mu	-			Oth	er (Explain in Remarks)
2 cm Mu	` '		Loamy Gle	-				
	Below Dark Surface	e (A11)	Depleted N				3	
	irk Surface (A12)		Redox Dar		` '			ors of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted [)		land hydrology must be present,
5 cm Mu	cky Peat or Peat (S3	3)	Redox Dep	oression	s (F8)		unle	ess disturbed or problematic.
_	Layer (if observed):							
Type:								
Depth (in	nches):						Hydric Soil Prese	nt? Yes No_X
	//www.nrcs.usda.gov							ors of Hydric Soils, Version 7.0, 2015
Errata. (http:/	//www.nrcs.usda.gov							ors of Hydric Soils, Version 7.0, 2015
Errata. (http:/	//www.nrcs.usda.gov							ors of Hydric Soils, Version 7.0, 2015
Errata. (http:/	//www.nrcs.usda.gov							ors of Hydric Soils, Version 7.0, 2015
Errata. (http://	//www.nrcs.usda.gov	/Internet/F	SE_DOCUMENTS	/nrcs142			Second	ary Indicators (minimum of two require
HYDROLO Wetland Hyo Primary Indic	OGY drology Indicators: cators (minimum of co	/Internet/F	SE_DOCUMENTS red; check all that water-Star	/nrcs142 apply) ined Lea	ves (B9)	293.docx)	Second	ary Indicators (minimum of two required face Soil Cracks (B6)
HYDROLO Wetland Hyc Primary Indic Surface \ High Wat	oGY drology Indicators: cators (minimum of c	/Internet/F	SE_DOCUMENTS red; check all that Water-Stai Aquatic Fa	/nrcs142 apply) ined Lea uuna (B1	ves (B9)	293.docx)	Sur Sur Dra	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10)
HYDROLO Wetland Hyc Primary Indic Surface \ High Wat Saturatio	drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3)	/Internet/F	red; check all that Water-Stai Aquatic Fa True Aqua	apply) ined Lea iuna (B1	ves (B9) 3) s (B14)	293.docx)	Second Sur Dra	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)
HYDROLO Wetland Hyde Primary Indice Surface V High Wat Saturatio Water Ma	JGY drology Indicators: eators (minimum of of the county o	/Internet/F	red; check all that water-Star Aquatic Fa True Aqua Hydrogen	apply) ined Lea luna (B1 tic Plant Sulfide (ves (B9) 3) s (B14) Odor (C1	293.docx)	Second Sur Dra Dry Cra	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)
HYDROLO Wetland Hyde Primary Indice Surface N High Wat Saturatio Water Ma Sedimen	OGY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) of Deposits (B2)	/Internet/F	red; check all that water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R	apply) ined Lea iuna (B1 tic Plant Sulfide (thizosph	ves (B9) 3) s (B14) Ddor (C1 eres on	293.docx)	Second Sur Dra Dry Cra ots (C3) Sat	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
HYDROLO Wetland Hyde Primary Indic Surface V High Wat Saturatio Water Ma Sedimen Drift Dep	drology Indicators: cators (minimum of cowater (A1) ter Table (A2) on (A3) arks (B1) the Deposits (B2) cosits (B3)	/Internet/F	red; check all that Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence	apply) ined Lea una (B1 tic Plant Sulfide (thizosph of Reduce	ves (B9) 3) s (B14) Odor (C1 eres on ced Iron	293.docx)) Living Ro (C4)	Second Sur Dra Dry Cra ots (C3) Sat Stu	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1)
HYDROLO Wetland Hyc Primary Indic Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Mate	drology Indicators: cators (minimum of cowater (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) t or Crust (B4)	/Internet/F	red; check all that water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro	apply) ined Lea una (B1 tic Plant Sulfide (thizosph of Reduc n Reduc	ves (B9) 3) s (B14) Odor (C1 eres on ced Iron tion in T	293.docx)) Living Ro (C4)	Second Sur Dra Dry Cra ots (C3) Sat Stu G(C6) Geo	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Position (D2)
HYDROLO Wetland Hyo Primary Indio Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Mat	drology Indicators: cators (minimum of of the cators (Minimum of of of the cators (Minimum of	v/Internet/F	red; check all that a Water-State Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck	apply) ined Lea iuna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface	ep2_051: vves (B9) 3) s (B14) Odor (C1 eres on ced Iron tion in T (C7)	293.docx)) Living Ro (C4)	Second Sur Dra Dry Cra ots (C3) Sat Stu G(C6) Geo	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1)
HYDROLO Wetland Hyde Primary Indice Surface V High Water Ma Sediment Drift Dept Algal Mater Iron Depte Inundation	drology Indicators: eators (minimum of control (Ma) arks (B1) at Deposits (B2) aris (B3) t or Crust (B4) osits (B5) on Visible on Aerial In	v/Internet/Fi	red; check all that water-Star Aquatic Farrue Aqua Hydrogen Oxidized Recent Iro Recent Iro Gauge or V	apply) ined Lea tuna (B1 tic Plant Sulfide (Rhizosph of Reduce n Reduce Surface Well Dat	ves (B9) 3) s (B14) Odor (C1 eres on ted Iron tion in T (C7) a (D9)) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu G(C6) Geo	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Position (D2)
HYDROLO Wetland Hyde Primary Indice Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depot Inundatio Sparsely	drology Indicators: cators (minimum of control of contr	v/Internet/Fi	red; check all that a Water-Star Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck	apply) ined Lea tuna (B1 tic Plant Sulfide (Rhizosph of Reduce n Reduce Surface Well Dat	ves (B9) 3) s (B14) Odor (C1 eres on ted Iron tion in T (C7) a (D9)) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu G(C6) Geo	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Position (D2)
HYDROLO Wetland Hyo Primary Indio Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Inundatio Sparsely Field Observ	drology Indicators: cators (minimum of of the cators (minimum of of of the cators (minimum of	magery (B7	red; check all that a Water-State Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck (7) Gauge or Vass (88) Other (Exp.	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat	ves (B9) 3) s (B14) Ddor (C1 eres on tion in T (C7) a (D9)) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu G(C6) Geo	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Position (D2)
HYDROLO Wetland Hyde Primary Indice Surface V High Water Ma Sedimen Drift Dep Algal Mater Inon Deport Inundation ? Sparsely Field Observes	drology Indicators: cators (minimum of of other Table (A2) on (A3) arks (B1) other Deposits (B2) osits (B3) other or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave vations: er Present?	magery (B7	red; check all that a Water-Stal Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Thin Muck (7) Gauge or (88) Other (Exp.	apply) ined Lea tuna (B1 tic Plant Sulfide (thizosph of Reduc n Reduc Surface Well Dat blain in R	vves (B9) 3) s (B14) Ddor (C1 eres on tion in T (C7) a (D9) emarks)) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu G(C6) Geo	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Position (D2)
HYDROLO Wetland Hyde Primary Indice Surface V High Water Mater M	drology Indicators: cators (minimum of control (Ma) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave vations: er Present? Ye Present?	magery (B7 Surface (E	red; check all that water-Star Aquatic Farrue Aqua Hydrogen Oxidized Recent Iro Thin Muck (7) Gauge or No No No	apply) ined Lea luna (B1 tic Plant Sulfide (Rhizosph of Reduce n Reduce Nell Dat blain in R Depth (ii	ves (B9) 3) s (B14) Odor (C1 eres on ted Iron tion in T (C7) a (D9) emarks) nches): _nches):) Living Ro (C4) illed Soils	Second	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
HYDROLO Wetland Hyde Primary Indice Surface V High Water Mater M	drology Indicators: eators (minimum of control of contr	magery (B7 Surface (E	red; check all that water-Star Aquatic Farrue Aqua Hydrogen Oxidized Recent Iro Thin Muck (7) Gauge or No No No	apply) ined Lea tuna (B1 tic Plant Sulfide (thizosph of Reduc n Reduc Surface Well Dat blain in R	ves (B9) 3) s (B14) Odor (C1 eres on ted Iron tion in T (C7) a (D9) emarks) nches): _nches):) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu G(C6) Geo	ary Indicators (minimum of two require face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
HYDROLO Wetland Hyde Primary Indice Surface V High War Saturatio Water Ma Sedimen Drift Depo Algal Mar Iron Depo Inundation ? Sparsely Field Observ Surface Wate Water Table Saturation Pr (includes cap	drology Indicators: eators (minimum of control of contr	magery (B7 Surface (E	red; check all that water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Recent Iro Thin Muck Gauge or No No No No No	apply) ined Lea iuna (B1 tic Plant Sulfide (thizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1 eres on ted Iron tion in T (C7) a (D9) nches): nches): nches):) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu Gee FAC	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Position (D2) C-Neutral Test (D5)
HYDROLO Wetland Hyde Primary Indice Surface V High War Saturation Water Ma Sedimen Drift Depo Algal Mar Iron Depo Inundation Primary Indice Primary Indice Saturation Water Ma Sedimen Drift Depo Algal Mar Iron Depo Inundation Primary Indice Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap	drology Indicators: eators (minimum of control of contr	magery (B7 Surface (E	red; check all that water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Recent Iro Thin Muck Gauge or No No No No No	apply) ined Lea iuna (B1 tic Plant Sulfide (thizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1 eres on ted Iron tion in T (C7) a (D9) nches): nches): nches):) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu Gee FAC	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) comorphic Position (D2) C-Neutral Test (D5)
HYDROLO Wetland Hyde Primary Indice Surface V High War Saturatio Water Ma Sedimen Drift Depo Algal Mar Iron Depo Inundation ? Sparsely Field Observ Surface Wate Water Table Saturation Pr (includes cap	drology Indicators: eators (minimum of control of contr	magery (B7 Surface (E	red; check all that water-Stai Aquatic Fa True Aqua Hydrogen Oxidized Recent Iro Recent Iro Thin Muck Gauge or No No No No No	apply) ined Lea iuna (B1 tic Plant Sulfide (thizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1 eres on ted Iron tion in T (C7) a (D9) nches): nches): nches):) Living Ro (C4) illed Soils	Second Sur Dra Dry Cra ots (C3) Sat Stu Gee FAC	ary Indicators (minimum of two required face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Position (D2) C-Neutral Test (D5)

Applicant/Owner: Watcon Consulting Engineers & Surveyors, LLC State: OH Sampling Investigator(s): JM Section, Township, Range: Pataskala	g Point:	DD40
Investigator(s): IM Section Township Range: Pataskala	_	DP13
investigator(s). Jivi Section, Township, Italige. I atasitata		
Landform (hillside, terrace, etc.): plain Local relief (concave, convex, none): concave		
Slope (%): 0 Lat: Long: Datum: N	AD83	
Soil Map Unit Name: NWI classification: no	one	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Re	marks.)	
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yes	X No_	
Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, explain any answers in Remarks.)	_	_
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, import	ant featu	res, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Hydric Soil Present? Yes X No within a Wetland? Yes X No Wetland Hydrology Present? Yes X No		
Remarks: Wetland H		
VEGETATION – Use scientific names of plants.		
Absolute Dominant Indicator Tree Stratum (Plot size: 30') % Cover Species? Status Dominance Test worksheet:		
1. Platanus occidentalis 50 Yes FACW Number of Dominant Species T	hat	
2 Are OBL, FACW, or FAC:	4	(A)
3 Total Number of Dominant Spec		
4 Across All Strata:	4	(B)
5 Percent of Dominant Species Ti	hat 100.0	0% (A/B)
Sapling/Shrub Stratum (Plot size: 15') 1 Prevalence Index worksheet:		
2. Total % Cover of:	Multiply by	y: _
3 OBL species10 x	1 = 10	
	2 = 180	
	3 = 0	
	4 = 0 $5 = 0$	
1. Carex grayi 15 Yes FACW Column Totals: 100 (A)	190	O (B)
2. Agrostis gigantea 25 Yes FACW Prevalence Index = B/A =	1.90	<u> </u>
3. Rosa palustris 10 Yes OBL		
4 Hydrophytic Vegetation Indica		
5 1 - Rapid Test for Hydrophy 6. X 2 - Dominance Test is >509	-	on
V. 2. Proviolence Index is <2.0		
84 - Morphological Adaptatio		supporting
9. data in Remarks or on a	separate sh	eet)
10 Problematic Hydrophytic Ve	getation1 (F	Explain)
<u>So</u> =Total Cover Indicators of hydric soil and we be present, unless disturbed or		
1 Hydrophytic		
2	No	
Remarks: (Include photo numbers here or on a separate sheet.)		

Depth	Matrix		Redo	x Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-3	2.5Y 4/1	90	10YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations	
3-20	2.5Y 5/1	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations	
				<u> </u>	<u> </u>				
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	//S=Masl	ked Sand	d Grains.	² Location	n: PL=Pore Lining, M=Matrix.	
Black His Hydroger	(A1) ipedon (A2) stic (A3) n Sulfide (A4)		Sandy Gle Sandy Rec Stripped M Dark Surfa	dox (S5) latrix (S6 ace (S7)	5)		? Coas Iron- Red Very	rs for Problematic Hydric Soils ³ : st Prairie Redox (A16) Manganese Masses (F12) Parent Material (F21) Shallow Dark Surface (F22)	
2 cm Mu	Below Dark Surface	e (A11)	Loamy Mu Loamy Gle X Depleted I	eyed Mat Matrix (F	rix (F2) 3)			er (Explain in Remarks)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)		Redox Da Depleted I Redox De	Oark Surf	face (F7)	·	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
Restrictive L	_ayer (if observed):								
Type: _ Depth (in Remarks:	iches):						Hydric Soil Presen	t? Yes_X_No	
Depth (in Remarks: This data for	· ·						NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015	
Depth (in Remarks: This data for Errata. (http:/	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://www.defand.com/de	m is revised from Mi //www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS	/nrcs142			NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://www.defand.com/de	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators:	//Internet/F	SE_DOCUMENTS ired; check all that Water-Sta	/nrcs142 apply) ined Lea	ves (B9)	293.docx)	NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015	
Depth (in Remarks: This data for Errata. (http://ht	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of of Water (A1) ter Table (A2)	//Internet/F	ired; check all that Water-Sta Aquatic Fa	/nrcs142 apply) ined Lea uuna (B1:	ves (B9)	293.docx)	NRCS Field Indicator Seconda Surfa X Drair	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10)	
Depth (in Permarks: This data for Errata. (http://www.primary.lndicSurface \\ High WatSaturatio	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) in (A3)	//Internet/F	uired; check all that Water-Sta Aquatic Fa	apply) ined Lea una (B1:	ves (B9) 3) s (B14)	293.docx)	NRCS Field Indicator Seconda Surfa X Drain Dry-	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)	
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface \(\) High Wat Saturatio Water Ma	GY drology Indicators: eators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1)	//Internet/F	uired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Lea una (B1: tic Plants	ves (B9) 3) s (B14) Odor (C1)	293.docx)	NRCS Field Indicator Seconda Surfa X Drair Dry- Cray	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) ffish Burrows (C8)	
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface V High War Saturatio Water Ma Sedimen	GY drology Indicators: eators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea iuna (B1: tic Plants Sulfide C	ves (B9) 3) s (B14) Ddor (C1) eres on I	293.docx)	Seconda Surfa X Drair Dry- Cray ots (C3) Satu	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)	
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Project/Site: Forest Ridge		City/Cou	ınty: Licking		Sampling Date:	11/4/2020
Applicant/Owner: Watcon Consulting Engineers &	Surveyors, L	LC		State: OH	Sampling Point:	DP14
Investigator(s): JM		Section, 7	Γownship, Rε	ange: Pataskala		
Landform (hillside, terrace, etc.): plain			Local relief (d	concave, convex, none):	concave	
Slope (%):0 _ Lat:		Long:			Datum: NAD83	
Soil Map Unit Name:	<u> </u>			NWI classi	fication: none	
Are climatic / hydrologic conditions on the site typical f	for this time c	of year?	Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed? /	Are "Normal (Circumstances" present?	Yes X No)
Are Vegetation, Soil, or Hydrology	naturally prol	blematic? ((If needed, ex	plain any answers in Re	marks.)	
SUMMARY OF FINDINGS – Attach site m	ap showir	ng samplin	ng point lo	ocations, transects	, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes X N	lo	Is the	e Sampled A	rea		
Hydric Soil Present? Yes X N	lo		n a Wetland'		No	
Wetland Hydrology Present? Yes X N	lo					
Remarks:		-				
Wetland J						
VEGETATION – Use scientific names of pla		Deminant	Ilicator	1		1
<u>Tree Stratum</u> (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wo	rksheet:	
1. Ulmus americana	30	Yes	FACW	Number of Dominant		
2. Acer rubrum	10	No	FAC	Are OBL, FACW, or F	•	6 (A)
3. Acer saccharinum	40	Yes	FACW	Total Number of Dom	inant Species	
4				Across All Strata:		6 (B)
5				Percent of Dominant	•	
C. Pariotech Otenham (Plataina) 451	80	=Total Cover		Are OBL, FACW, or F	FAC: 10	0.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15'	.)	Voc	FACW	Prevalence Index we	kahaati	
1. Cornus amomum 2.	15	Yes	FACVV	Total % Cover of		hv.
3.				==		15
4.						330
5.				· —		30
	15	=Total Cover				0
Herb Stratum (Plot size: 5')) x 5 =	0
1. Carex grayi	30	Yes	FACW	Column Totals: 19	90 (A) 3	875 (B)
2. Agrostis gigantea	20	Yes	FACW	Prevalence Index	= B/A = 1.97	<u> </u>
3. Rosa palustris	15	No	OBL			
4. Carex vulpinoidea	20	Yes	FACW	Hydrophytic Vegeta		
5. Agrimonia parviflora	10	No	FACW		r Hydrophytic Veget	ation
6.				X 2 - Dominance To X 3 - Prevalence In		
7. 8.					dex is ≤3.0° I Adaptations¹ (Prov	ide cunnorting
					ks or on a separate	
10.					ophytic Vegetation ¹	
	95	=Total Cover		¹ Indicators of hydric s		` '
Woody Vine Stratum (Plot size: 15')			be present, unless dis		
1.	·			Hydrophytic		
2.				Vegetation		
_	;	=Total Cover	_	_	X No	_
Remarks: (Include photo numbers here or on a sepa	arate sheet.)					

Depth	Matrix		Redo	x Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-3	2.5Y 4/1	90	10YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations	
3-20	2.5Y 5/1	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations	
				<u> </u>	<u> </u>				
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	//S=Masl	ked Sand	d Grains.	² Location	n: PL=Pore Lining, M=Matrix.	
Black His Hydroger	(A1) ipedon (A2) stic (A3) n Sulfide (A4)		Sandy Gle Sandy Rec Stripped M Dark Surfa	dox (S5) latrix (S6 ace (S7)	5)		? Coas Iron- Red Very	rs for Problematic Hydric Soils ³ : st Prairie Redox (A16) Manganese Masses (F12) Parent Material (F21) Shallow Dark Surface (F22)	
2 cm Mu	Below Dark Surface	e (A11)	Loamy Mu Loamy Gle X Depleted I	eyed Mat Matrix (F	rix (F2) 3)			er (Explain in Remarks)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)		Redox Da Depleted I Redox De	Oark Surf	face (F7)	·	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
Restrictive L	_ayer (if observed):								
Type: _ Depth (in Remarks:	iches):						Hydric Soil Presen	t? Yes_X_No	
Depth (in Remarks: This data for	· ·						NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015	
Depth (in Remarks: This data for Errata. (http:/	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://www.defand.com/de	m is revised from Mi //www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS	/nrcs142			NRCS Field Indicator		
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Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface V High War Saturatio Water Ma Sedimen	GY drology Indicators: eators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea iuna (B1: tic Plants Sulfide C	ves (B9) 3) s (B14) Ddor (C1) eres on I	293.docx)	Seconda Surfa X Drair Dry- Cray ots (C3) Satu	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)	
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Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Surface \(\) High Wat Saturatio Water Mater Mat	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave vations: er Present?	magery (B	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Lea iuna (B1: tic Plants Sulfide C Rhizosphof Reduc n Reduc Surface Well Data	ves (B9) 3) s (B14) Odor (C1) eres on L ted Iron (tion in Ti (C7) a (D9) emarks)) Living Ro (C4) Iled Soils	Seconda	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)	
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Project/Site: Forest Ridge							11/4/2020	
Applicant/Owner: Watcon Consulting Engineers & S	Surveyors, LI	_C		State: OH	Sampling Point:	DP1	5	
Investigator(s): JM		Section, T	ownship, Ra	inge: Pataskala				
Landform (hillside, terrace, etc.): plain		I	Local relief (c	concave, convex, none):	concave			
Slope (%): 0 Lat:		Long:		_	Datum: NAD83			
Soil Map Unit Name:					fication: none			
Are climatic / hydrologic conditions on the site typical fo	or this time of	f year?	Yes X	No (If no, exp	olain in Remarks.)			
Are Vegetation, Soil, or Hydrologys								
Are Vegetation, Soil, or Hydrologyn				plain any answers in Re	· <u></u>			
SUMMARY OF FINDINGS – Attach site ma	ıp showin	ıg samplin	ıg point lo	cations, transects	, important fe	atures, e	etc.	
Hydrophytic Vegetation Present? Yes X No)	Is the	Sampled Ar	rea				
)		n a Wetland?		No			
Wetland Hydrology Present? Yes X No								
Remarks:								
Wetland L								
VESTATION Lies esignific names of plan	- 1 -							
VEGETATION – Use scientific names of plan	Absolute	Dominant	Indicator					
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wor	rksheet:			
1. Ulmus americana	30	Yes	FACW	Number of Dominant	Species That			
2. Quercus palustris	30	Yes	FACW	Are OBL, FACW, or F	AC:	5 (A	۹)	
3				Total Number of Dom	inant Species			
4.				Across All Strata:		(E	3)	
5	<u> </u>	=Total Cover		Percent of Dominant S	•	20.00/ //	^ /D)	
Sapling/Shrub Stratum (Plot size: 15')	60 =	- lotal Covei		Are OBL, FACW, or F	AC:	00.0% (A	4/B)	
1. Cornus amomum	20	Yes	FACW	Prevalence Index wo	 orksheet:			
2.				Total % Cover of		ly by:		
3.				OBL species 20		20		
4.				FACW species 12	20 x 2 =	240		
5				FAC species 0	x 3 =	0		
	=	=Total Cover		FACU species 0		0		
Herb Stratum (Plot size: 5')	22		= 1 011/	UPL species 0		0 (5		
1. Carex grayi	20	Yes	FACW	Column Totals: 14	`		3)	
Agrostis gigantea Rosa palustris	20	No Yes	FACW OBL	Prevalence Index :	= B/A = <u>1.8</u>	6		
Rosa palustris Agrimonia parviflora	10	No Yes	FACW	Hydrophytic Vegetat	ion Indicators:			
	10	INU	TAGV		· Hydrophytic Vege	etation		
6.				X 2 - Dominance Te		,tution		
7.				X 3 - Prevalence Inc				
8.				4 - Morphological	Adaptations ¹ (Pro	vide suppc	orting	
9.				data in Remark	ks or on a separate	e sheet)		
10				Problematic Hydr	ophytic Vegetation	າ ¹ (Explain))	
	60 =	=Total Cover		¹ Indicators of hydric s			ust	
Woody Vine Stratum (Plot size: 15')				be present, unless dis	turbed or problem	atic.		
1.				Hydrophytic				
2		=Total Cover		Vegetation	Y No			
		=10tai Covei		Present? Yes	<u>X</u> No			
Remarks: (Include photo numbers here or on a separa	ate sheet.)							

Depth	Matrix		Redo	x Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-3	2.5Y 4/1	90	10YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations	
3-20	2.5Y 5/1	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations	
				<u> </u>	<u> </u>				
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	//S=Masl	ked Sand	d Grains.	² Location	n: PL=Pore Lining, M=Matrix.	
Black His Hydroger	(A1) ipedon (A2) stic (A3) n Sulfide (A4)		Sandy Gle Sandy Rec Stripped M Dark Surfa	dox (S5) latrix (S6 ace (S7)	5)		? Coas Iron- Red Very	rs for Problematic Hydric Soils ³ : st Prairie Redox (A16) Manganese Masses (F12) Parent Material (F21) Shallow Dark Surface (F22)	
2 cm Mu	Below Dark Surface	e (A11)	Loamy Mu Loamy Gle X Depleted I	eyed Mat Matrix (F	rix (F2) 3)			er (Explain in Remarks)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)		Redox Da Depleted I Redox De	Oark Surf	face (F7)	·	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
Restrictive L	_ayer (if observed):								
Type: _ Depth (in Remarks:	iches):						Hydric Soil Presen	t? Yes_X_No	
Depth (in Remarks: This data for	· ·						NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015	
Depth (in Remarks: This data for Errata. (http:/	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://	m is revised from Mi //www.nrcs.usda.gov						NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://www.defand.com/de	m is revised from Mi //www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS	/nrcs142			NRCS Field Indicator		
Depth (in Remarks: This data for Errata. (http://www.defand.com/de	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators:	//Internet/F	SE_DOCUMENTS ired; check all that Water-Sta	/nrcs142 apply) ined Lea	ves (B9)	293.docx)	NRCS Field Indicator	rs of Hydric Soils, Version 7.0, 2015	
Depth (in Remarks: This data for Errata. (http://ht	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of of Water (A1) ter Table (A2)	//Internet/F	ired; check all that Water-Sta Aquatic Fa	/nrcs142 apply) ined Lea uuna (B1:	ves (B9)	293.docx)	NRCS Field Indicator Seconda Surfa X Drair	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10)	
Depth (in Permarks: This data for Errata. (http://www.primary.lndicSurface \\ High WatSaturatio	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) in (A3)	//Internet/F	uired; check all that Water-Sta Aquatic Fa	apply) ined Lea una (B1:	ves (B9) 3) s (B14)	293.docx)	NRCS Field Indicator Seconda Surfa X Drain Dry-	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)	
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface \(\) High Wat Saturatio Water Ma	GY drology Indicators: eators (minimum of o Nater (A1) ter Table (A2) in (A3) arks (B1)	//Internet/F	uired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Lea una (B1: tic Plants	ves (B9) 3) s (B14) Odor (C1)	293.docx)	NRCS Field Indicator Seconda Surfa X Drair Dry- Cray	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) ffish Burrows (C8)	
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Primary Indic Surface V High War Saturatio Water Ma Sedimen	GY drology Indicators: eators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea iuna (B1: tic Plants Sulfide C	ves (B9) 3) s (B14) Ddor (C1) eres on I	293.docx)	Seconda Surfa X Drair Dry- Cray ots (C3) Satu	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)	
Depth (in Remarks: This data for Errata. (http://www.mc.) HYDROLO Wetland Hyden Surface (high War Marker	GY drology Indicators: eators (minimum of of Mater (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3)	//Internet/F	uired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea iuna (B1: tic Plant: Sulfide C thizosphof Reduc	ves (B9) 3) s (B14) Odor (C1) eres on I) Living Ro	Seconda Surfa X Draii Dry- Cray ots (C3) Satu	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) Ifish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)	
Depth (in Permarks: This data for Errata. (http://www.permarks.) HYDROLO Wetland Hyde Surface (High Water Mater	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	apply) ined Lea auna (B1: tic Plants Sulfide C thizosph of Reduc n Reduc	ves (B9) 3) s (B14) Odor (C1) eres on Led Iron (tion in Ti) Living Ro	Seconda	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)	
Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyde Surface V High Water Mater	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	apply) ined Lea auna (B1: tic Plants Sulfide C thizosph of Reduc n Reduc Surface	ep2_0512 vves (B9) 3) s (B14) Odor (C1) eres on L ced Iron (tion in Ti (C7)) Living Ro	Seconda	ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) Ifish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)	
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Depth (in Remarks: This data for Errata. (http:// HYDROLO Wetland Hyd Primary Indic Surface (High Wat Saturatio Water Mater	m is revised from Mi //www.nrcs.usda.gov GY drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial I Vegetated Concave	nne is requ	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck	apply) ined Lea iuna (B1: tic Plants Sulfide C Rhizosphof Reduc n Reduc Surface Well Data	ves (B9) 3) s (B14) Odor (C1) eres on Led Iron (C7) a (D9)) Living Ro (C4) Iled Soils	Seconda	rs of Hydric Soils, Version 7.0, 2015 ry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)	
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Project/Site: Forest I	Ridge		City/Cou	nty: Licking		Sampling Date:	11/4/2020
Applicant/Owner:	Watcon Consulting Engineer	rs & Surveyors, Ll	LC		State: OH	Sampling Point:	DP17
Investigator(s): JM			Section, 7	ownship, Ra	ange: Pataskala		
Landform (hillside, te	errace, etc.): plain			Local relief (d	concave, convex, none):	none	
Slope (%): 0	Lat:		Long:			Datum: NAD83	
Soil Map Unit Name:					NIMI classit	fication: none	
Are climatic / hydrolo	ogic conditions on the site typi				No (If no, exp	olain in Remarks.)	
Are Vegetation	, Soil, or Hydrology	_significantly of	disturbed? F	\re "Normal (Circumstances" present?	Yes X N	o
·	, Soil , or Hydrology				xplain any answers in Re		
·	FINDINGS – Attach site			ıg point lo	ocations, transects	, important fea	atures, etc.
Hydrophytic Vegeta	ation Present? Yes	No X	Is the	Sampled A	rea		
Hydric Soil Present		No X		n a Wetland		No X	
Wetland Hydrology			<u> </u>				
Remarks:							
· · · · · · · · · · · · · · · · · · ·		• 1 ,					
VEGETATION -	- Use scientific names of	f plants. Absolute	Dominant	Indicator	т		
Tree Stratum	(Plot size:		Dominant Species?	Indicator Status	Dominance Test wo	rksheet:	
1	<u> </u>				Number of Dominant	Species That	
2.					Are OBL, FACW, or F	AC:	0 (A)
3.					Total Number of Dom	inant Species	
4					Across All Strata:		1 (B)
5		_	=Total Cover		Percent of Dominant	•	0.0% (A/B)
Sapling/Shrub Strat	tum (Plot size:	١	=10tal Cover		Are OBL, FACW, or F	AC. <u>C</u>	1.0% (A/D)
1.	(1 101 0120.	_ ′			Prevalence Index wo	 orksheet:	
					Total % Cover of		y by:
2					OBL species 0	x 1 =	0
4					FACW species 0	x 2 =	0
5						x 3 =	0
_		=	=Total Cover		FACU species 0		0
Herb Stratum	(Plot size:)	100			UPL species 10		500 (B)
1. Zea mays		100	Yes	UPL	Column Totals: 10	`` /	500 (B)
					Prevalence Index	= B/A = 5.00	<u>) </u>
					Hydrophytic Vegetat	ion Indicators:	
5			-			· Hydrophytic Vege	tation
6.					2 - Dominance Te		lation
7					3 - Prevalence Inc		
					l ——	Adaptations ¹ (Prov	vide supporting
0					data in Remark	ks or on a separate	sheet)
10.					Problematic Hydr	ophytic Vegetation	¹ (Explain)
		100 =	=Total Cover	_	¹ Indicators of hydric s		
Woody Vine Stratur)			be present, unless dis	turbed or problema	atic.
					Hydrophytic		
2		<u> </u>	Total Cover		Vegetation	No. Y	
			=Total Cover		Present? Yes	No X	
Remarks: (Include	photo numbers here or on a s	eparate sneet.)					

Depth	Matrix		Redo	x Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-12	2.5Y 4/3	100	_							
12-20	2.5Y 5/2	55	2.5Y 4/2	25	D	M	Loamy/Clayey			
			10YR 4/6	20	С	M		Prominent redox concentrations		
1- 0.0							21	BL B. III M M III		
Hydric Soil	oncentration, D=Dep	letion, RIVI	=Reduced Matrix, N	/IS=IVIasi	ked Sand	d Grains.		on: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :		
Histosol			Sandy Gle	ved Mat	riv (S4)			ast Prairie Redox (A16)		
	oipedon (A2)		Sandy Red		IX (O+)			n-Manganese Masses (F12)		
	stic (A3)		Stripped M		5)			d Parent Material (F21)		
	en Sulfide (A4)		Dark Surfa		·)			ry Shallow Dark Surface (F22)		
	d Layers (A5)		Loamy Mu	` ,	eral (F1)			ner (Explain in Remarks)		
	uck (A10)		Loamy Gle	-				ior (Explain in Normanio)		
	d Below Dark Surface	e (A11)	Depleted N	-						
·	ark Surface (A12)		Redox Dai				³ Indica	ors of hydrophytic vegetation and		
Sandy M	Mucky Mineral (S1)		Depleted [Dark Sur	ace (F7))		tland hydrology must be present,		
	ucky Peat or Peat (S3	3)	Redox De	oression	s (F8)		unless disturbed or problematic.			
Restrictive	Layer (if observed):									
Type:	,									
Denth (ii	nches):						Hardela Oall Baras			
Doptii (ii							Hydric Soil Prese	ent?		
Remarks: This data for	· <u></u>						NRCS Field Indicat	ors of Hydric Soils, Version 7.0, 2015		
Remarks: This data for	rm is revised from Mi						NRCS Field Indicat			
Remarks: This data for Errata. (http:	rm is revised from Mi ://www.nrcs.usda.gov						NRCS Field Indicat			
Remarks: This data for Errata. (http://	rm is revised from Mi ://www.nrcs.usda.gov						NRCS Field Indicat			
Remarks: This data for Errata. (http://www.h	rm is revised from Mi ://www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS	/nrcs142			NRCS Field Indicat			
Remarks: This data for Errata. (http://www.defand.com/d	rm is revised from Mi ://www.nrcs.usda.gov	//Internet/F	SE_DOCUMENTS	/nrcs142	2p2_0512	293.docx	NRCS Field Indicat) Second	ors of Hydric Soils, Version 7.0, 2015		
Remarks: This data for Errata. (http://www.defand.com/d	rm is revised from Mi ://www.nrcs.usda.gov DGY drology Indicators: cators (minimum of c	//Internet/F	SE_DOCUMENTS	/nrcs142 apply) ined Lea	ves (B9)	293.docx	NRCS Field Indicat Second	ors of Hydric Soils, Version 7.0, 2015		
Remarks: This data for Errata. (http://www.defand.com/d	orm is revised from Mic//www.nrcs.usda.gov	//Internet/F	ired; check all that Water-Sta	/nrcs142 apply) ined Lea uuna (B1	ep2_0512	293.docx	NRCS Field Indicat Second Lack Draw	dary Indicators (minimum of two required		
Remarks: This data for Errata. (http://www.defand.com/mary.indians/mar	orm is revised from Mi //www.nrcs.usda.gov OGY rdrology Indicators: cators (minimum of company o	//Internet/F	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Lea luna (B1 tic Plant: Sulfide C	ves (B9) 3) s (B14) Odor (C1))	NRCS Field Indicat Second Su Dra Cra	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Wa Saturation Water M Sedimer	orm is revised from Mi c://www.nrcs.usda.gov OGY Idrology Indicators: cators (minimum of company	//Internet/F	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea iuna (B1 tic Plant Sulfide C	ves (B9) 3) s (B14) Ddor (C1) eres on I) Living Ra	NRCS Field Indicat Second Su Dra Dra Cra oots (C3) Sa	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) v-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep	orm is revised from Mic//www.nrcs.usda.gov	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	apply) ined Lea tuna (B1 tic Plant: Sulfide C thizosph of Reduce	ves (B9) 3) s (B14) Odor (C1) eres on I) Living Ro	Second Su Dra Dry Cra oots (C3) Sa St	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Water M Saturatic Water M Sedimer Drift Dep Algal Ma	orm is revised from Mic//www.nrcs.usda.gov OGY drology Indicators: cators (minimum of company) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4)	//Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence	apply) ined Lea una (B1 tic Plant Sulfide C thizosph of Reduc n Reduc	ves (B9) 3) s (B14) Odor (C1) eres on I ced Iron () Living Ro	Second	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	orm is revised from Mic//www.nrcs.usda.gov OGY drology Indicators: cators (minimum of company) ater (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)	v/Internet/F	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck	apply) ined Lea auna (B1 tic Plant Sulfide C thizosph of Reduc n Reduc Surface	ep2_0512 vves (B9) 3) s (B14) Odor (C1) eres on I ded Iron (tion in Ti (C7)) Living Ro	Second	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati	rm is revised from Mic//www.nrcs.usda.gov DGY drology Indicators: cators (minimum of company) ater (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial In	nne is requ	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or V	apply) ined Lea luna (B1 tic Plant: Sulfide C thizosph of Reduce n Reduce Surface Well Dat	ves (B9) 3) s (B14) Odor (C1) eres on I ed Iron (ction in Ti (C7) a (D9)) Living Ro (C4)	Second	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely	orm is revised from Mic//www.nrcs.usda.gov	nne is requ	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or V	apply) ined Lea luna (B1 tic Plant: Sulfide C thizosph of Reduce n Reduce Surface Well Dat	ves (B9) 3) s (B14) Odor (C1) eres on I ed Iron (ction in Ti (C7) a (D9)) Living Ro (C4)	Second	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely	orm is revised from Mic//www.nrcs.usda.gov OGY Idrology Indicators: cators (minimum of company) ater Table (A2) on (A3) larks (B1) on t Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aerial Individuals	magery (B	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or N B8) Other (Exp	apply) ined Lea auna (B1 tic Plant Sulfide C thizosph of Reduc n Reduc Surface Well Dat	ep2_0512 vves (B9) 3) s (B14) Odor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks)) Living Ro (C4)	Second	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2)		
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Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wat Water Table Saturation P	rm is revised from Mi c://www.nrcs.usda.gov OGY Idrology Indicators: cators (minimum of company o	magery (B	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck 7) Gauge or No No No	apply) ined Lea tuna (B1 tic Plant Sulfide (thizosph of Reduc n Reduc Surface Well Dat blain in R	ves (B9) 3) s (B14) Odor (C1) eres on I ted Iron ((C7) a (D9) emarks) nches): nches):) Living Ro (C4)	Second	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)		
Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	rm is revised from Mi c://www.nrcs.usda.gov OGY orology Indicators: cators (minimum of company) water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial In y Vegetated Concave rvations: ter Present? Present? Ye prillary fringe)	magery (B	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or N B8) Other (Exp	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4) Illed Soils	Second Su Dra Dry Cra ots (C3) Sa Stu Ge FA	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)		
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Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	rm is revised from Mi c://www.nrcs.usda.gov OGY orology Indicators: cators (minimum of company) water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial In y Vegetated Concave rvations: ter Present? Present? Ye prillary fringe)	magery (B	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or N B8) Other (Exp	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4) Illed Soils	Second Su Dra Dry Cra ots (C3) Sa Stu Ge FA	dary Indicators (minimum of two required rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)		
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Remarks: This data for Errata. (http: HYDROLO Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Water Table Saturation P (includes ca Describe Re	rm is revised from Mi c://www.nrcs.usda.gov OGY orology Indicators: cators (minimum of company) water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial In y Vegetated Concave rvations: ter Present? Present? Ye prillary fringe)	magery (B	ired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or N B8) Other (Exp	apply) ined Lea iuna (B1 tic Plant: Sulfide C thizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1) eres on I ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4) Illed Soils	Second Su Dra Dry Cra ots (C3) Sa Stu Ge FA	dary Indicators (minimum of two require rface Soil Cracks (B6) ainage Patterns (B10) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)		

Project/Site: Forest Ridge		nty: Licking		Sampling Date:	11/4/2020	
Applicant/Owner: Watcon Consulting Engineers & S	Surveyors, LI		State: OH	Sampling Point:	DP17	
Investigator(s): JM		Section, T	Township, Ra	nge: Pataskala		
Landform (hillside, terrace, etc.): plain		!	Local relief (c	concave, convex, none):	none	
Slope (%): 0 Lat:		Long:			Datum: NAD83	
Soil Map Unit Name:					fication: none	<u> </u>
Are climatic / hydrologic conditions on the site typical fo	or this time o	f year?	Yes X	No (If no, exp	plain in Remarks.)	
Are Vegetation, Soil, or Hydrologys	significantly c	disturbed? A	Are "Normal C	Dircumstances" present?	Yes X N	0
Are Vegetation, Soil, or Hydrologyn				plain any answers in Re	<u> </u>	
SUMMARY OF FINDINGS – Attach site ma			g point lo	cations, transects	i, important fea	atures, etc.
Hydrophytic Vegetation Present? Yes No	. X	Is the	Sampled Ar	rea		
	X		n a Wetland?		No X	
	<u> </u>					
Remarks:						
VEGETATION – Use scientific names of plan		Deminant	la disotor			
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wo	rksheet:	
1. Prunus serotina	5	No	FACU	Number of Dominant		
2. Fagus grandifolia	55	Yes	FACU	Are OBL, FACW, or F	•	0 (A)
3. Quercus alba	10	No	FACU	Total Number of Dom	inant Species	
4. Acer saccharum	25	Yes	FACU	Across All Strata:	· .	2 (B)
5		=		Percent of Dominant	•	· (A/D)
Combined Character (Districts 45)	95 =	=Total Cover		Are OBL, FACW, or F	-AC: <u>C</u>	0.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15') 1.			}	Prevalence Index wo	orkeheet:	
				Total % Cover of		v hv:
2. 3.				_	x 1 =	0 0
4.					0 x 2 =	0
5.					0 x 3 =	0
	=	=Total Cover			05 x 4 =	380
Herb Stratum (Plot size: 5')				· -	0 x 5 =	0
1					`` /	380 (B)
2.				Prevalence Index	= B/A = 4.00	0
3				Hydrophytic Vegetat	tion Indicators:	
5					r Hydrophytic Vege	tation .
6.				2 - Dominance Te		tation
7.				3 - Prevalence Inc		
8.				4 - Morphological	I Adaptations ¹ (Prov	
9.				data in Remark	ks or on a separate	sheet)
10				Problematic Hydr	rophytic Vegetation	¹ (Explain)
Woody Vine Stratum (Plot size:)	=	=Total Cover		¹ Indicators of hydric s be present, unless dis		
1			<u> </u>		701000 0. p. 1201	<u> </u>
2.				Hydrophytic Vegetation		
		=Total Cover			No X	
Remarks: (Include photo numbers here or on a separa	ate sheet.)					

SOIL Sampling Point: DP17

Profile Des	cription: (Describe Matrix	to the dep		u ment t x Featur		ator or c	onfirm the a	psence of indicato	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textur	re	Remarks	
0-6	2.5Y 4/3	100								
6-20	2.5Y 4/4	100								
0 20	2.01 4/4	100					-			
¹ Type: C=C	concentration, D=Dep	oletion, RM	=Reduced Matrix, N	/IS=Mas	ked San	d Grains.	. 2	Location: PL=Pore	Lining, M=Mat	rix.
Hydric Soil	Indicators:						I	ndicators for Prob	lematic Hydric	c Soils³:
Histosol	(A1)		Sandy Gle				_	Coast Prairie Re		
	pipedon (A2)		Sandy Red				_	Iron-Manganese		
	istic (A3)		Stripped M		6)		_	Red Parent Mate	, ,	
	en Sulfide (A4)		Dark Surfa	` '			_	Very Shallow Da	`	22)
	d Layers (A5)		Loamy Mu				_	Other (Explain in	n Remarks)	
	uck (A10)	/ .	Loamy Gle	-						
	d Below Dark Surfac	e (A11)	Depleted N	•	,		3			
	ark Surface (A12)		Redox Dai		` '	`	3	Indicators of hydrop	-	
	Mucky Mineral (S1)	٥١	Depleted [)		wetland hydrolog		
	ucky Peat or Peat (S	•	Redox Dep	oression	IS (F8)			unless disturbed	or problemation	C.
	Layer (if observed)	•								
Type:										
Depth (i	nches):						Hydric Soil	Present?	Yes	No X
HYDROLO	OGY									
Wetland Hy	drology Indicators:									
Primary Indi	cators (minimum of	one is requ	ired; check all that	apply)				Secondary Indicators	s (minimum of	two required
Surface	Water (A1)		Water-Sta	ined Lea	aves (B9))	_	Surface Soil Cra	acks (B6)	
High Wa	ater Table (A2)		Aquatic Fa	iuna (B1	3)		_	Drainage Patter	ns (B10)	
Saturation	on (A3)		True Aqua	tic Plant	ts (B14)		_	Dry-Season Wa		
Water M	larks (B1)		Hydrogen	Sulfide (Odor (C1)	_	Crayfish Burrow	s (C8)	
	nt Deposits (B2)		Oxidized F			-	oots (C3)	Saturation Visib		
	posits (B3)		Presence				<u>-</u>	Stunted or Stres		1)
	at or Crust (B4)		Recent Iro			illed Soils	s (C6)	Geomorphic Pos	. ,	
	posits (B5)	/D:	Thin Muck				_	FAC-Neutral Te	st (D5)	
	on Visible on Aerial									
	y Vegetated Concave	e Surrace (i	B8)Other (Exp	nain in F	kemarks))	1			
Field Obser			NI.	D 11- /	S1					
		es			nches):					
Water Table Saturation P				Depth (i	_		Wetlend	Uvdralami Drasant	2 Vaa	No. V
	Present? Ye pillary fringe)		No	Depth (i	nches).		welland	Hydrology Present	? Yes	NoX_
,	ecorded Data (stream	n dalide mi	onitoring well aeria	Inhotos	previou	ıs inspec	tions) if avail	ahle:		
2000100110		. gg., illi			, p. 0 1 10 u	.sopou	,, avaii			
Remarks:										

US Army Corps of Engineers

Midwest Region – Version 2.0

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland A
Vegetation Communit(ies):	Forested, Emergent, Shrub/Scrub
HGM Class(es):	Depressional, Riverine
See Report.	
Lat/Lon or UTM Coordinate	40.040000.000
USGS Quad Name	40.0132, -82.666
County	Jersey Licking
Township	Pataskala
Section and Subsection	i ataskala
Hydrologic Unit Code	05040006
Site Visit	Yes
National Wetland Inventory Ma	p Yes
Ohio Wetland Inventory Map	No
Soil Survey	Yes

Name: Wetland A	
Wetland Size (acres, hectares)	~2.21
Sketch (include north arrow, relationship with other surface waters, vegetation z	zones, etc.
See Report.	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 46.0 Category:	2

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

	T	
#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One	
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8b
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9d	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES Wetland is a Category 3 wetland. Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10	NO Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	YES Wetland should be evaluated for possible Category 3 status. Go to Question 6	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
invasive/exotic spp. Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamagrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge			Rater(s): JM Date:2/23/2021				
	1	7					
2.0	2.0						
		Metric 1. Wetland Area (size).					
max 6 pts.	Subtotal	Select one size class and assign score.					
		>50 acres (>20.2ha) (6 pts)					
		25 to <50 acres (10.1 to <20.2ha) (5 pts	3)				
		10 to <25 acres (4 to <10.1ha) (4 pts)					
		3 to <10 acres (1.2 to <4ha) (3 pts)					
		2 0.3 to <3 acres (0.12 to <1.2ha) (2 pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt	n				
		<0.1 acres (<0.04ha) (0 pts)	4)				
6.0	8.0	1011 dollos (1010 lind) (0 p10)					
0.0	0.0	Metric 2. Upland buffers and sur	rounding land use				
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select only		ole check			
max 14 pts.	Oubiolai	WIDE. Buffers average 50m (164ft) or r		DIE GLIECK.			
		4 MEDIUM. Buffers average 25m to<50m		neter (4)			
		NARROW. Buffers average 10m to <25					
		VERY NARROW. Buffers average <10r					
		2b. Intensity of surrounding land use. Select of					
		VERY LOW. 2 nd growth or older forest,		(7)			
		LOW. Old field (>10 years), shrubland,		(11 (6)			
		3 MODERATELY HIGH. Residential, fend					
47.0	05.0	1 HIGH. Urban, industrial, open pasture,	row cropping, mining, construction. (1)			
17.0	25.0						
		Metric 3. Hydrology.					
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity. Sc				
		High pH groundwater (5)	100 year floo				
		Other groundwater (3) Precipitation (1)		eam/lake and other human use. (1) nd/upland (e.g. forest) complex (1)			
		1 Precipitation (1) 3 Seasonal/Intermittent surface water (3)		an or upland corridor (1)			
		Perennial surface water (lake or stream)		ion/saturation. Score 1 or dbl chk.			
		3c. Maximum water depth. Select only one and		manently inundated/saturated (4)			
		>0.7 (>27.6in) (3)		indated/saturated (3)			
		0.4 to 0.7m (15.7 to 27.6in) (2)	2 Seasonally in				
		1 <0.4m (<15.7in) (1)		aturated in upper 30cm (12in) (1)			
		3e. Modifications to natural hydrological regime		verage.			
			neck all disturbances observed				
		7 Recovered (7)		source (nonstormwater)			
		Recovering (3) Recent or no recovery (1)		grading ped/RR track			
		Recent of no recevery (1)	Weir Dredg				
			x stormwater input other:	_			
14.0	39.0	<u>——</u>					
14.0	03.0	Metric 4. Habitat Alteration and I	Development.				
max 20 pts.	Subtotal	4a. Substrate disturbance. Score one or doubl	<u>-</u>				
·		4 None or none apparent (4)	o chock and a chago.				
		Recovered (3)					
		Recovering (2)					
		Recent or no recovery (1)					
		4b. Habitat Development. Select only one and	assign score.				
		Excellent (7)					
		Very good (6) Good (5)					
		4 Moderately good (4)					
		Fair (3)					
		Poor to fair (2)					
		Poor (1)					
		4c. Habitat alteration. Score one or double che					
			Il disturbances observed				
				ub/sapling removal			
				baceous/aquatic bed removal			
00.0			~ 	limentation			
39.0				dging ming			
Subtotal this	page	I I	· · · · · · · · · · · · · · · · · · ·	rient enrichment			

ORAM v. 5.0 Field Form Quantitative Rating

DRAM v. 5.0 Field Form Quantitative Rating		
Site: Forest Ridge	Rater(s): .IM	Date:2/23/2021

39.0

Subtotal first	page			
0.0	39.0	Metric 5. Special Wetlands.		
max 10 pts.	Subtotal	Check all that apply and score as indicate Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland Lake Erie coastal/tributary wetland Lake Plain Sand Prairies (Oak Oper Relict Wet Prairies (10) Known occurrence state/federal the Significant migratory songbird/water Category 1 Wetland. See Question	-unrestricted -restricted enings) (10 reatened e er fowl hab	hydrology (5) ndangered species (10) itat or usage (10)
7.0	46.0	Metric 6. Plant communities,	interspe	ersion, microtopography.
max 20 pts.	Subtotal	6a. Wetland Vegetation Communities Score all present using 0 to 3 scale.	Vegetati	ion Community Cover Scale
		Aquatic Bed 2 Emergent Shrub 2 Forest	1	Absent or comprises <0.1ha (0.2471 acres) contiguous area Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
		Mudflats Open water Other:	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
			3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
		6b. horizontal (plan view) interspersion Select only one.		e Description of Vegetation Community
		High (5) Moderately high (4)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
		Moderate (3) Moderately low (2) Low (1) None (0)	mod	Native spp are dominant component of the vegetation, althoug nonnative and/or disturbance tolerant native spp can be present, and species diversity moderate to moderately high, bu generally w/o presence of rare threatened or endangered spp
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for	high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity, and often, but not always, the presence of rare, threatened, or endangered spp
		List. Add or deduct points for coverage Extensive >75% cover (-5)	Mudflat	and Open Water Class Quality
		Moderate 25-75% cover (-3)	0	Absent < 0.1ha (0.247 acres)
		Sparse 5-25% cover (-1)	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
		0 Nearly absent <5% cover (0)	2	Moderate 1 to <4ha (2.47 to 9.88 acres)
		Absent (1)	3	High 4ha (9.88 acres) or more
		6d. Microtopography. Score all present using 0 to 3 scale.	Microto	pography Cover Scale
		1 Vegetated hummucks/tussucks	0	Absent
		1 Coarse woody debris >15cm (6in)	1	Present very small amounts or if more common of marginal
		Standing dead >25cm (10in) dbh		quality
		Amphibian breeding pools	2	Present in moderate amounts, but not of highest quality or in

3

46.0 GRAND TOTAL (max 100 pts)

CATEGORY: 2

Present in moderate or greater amounts and of highest qualities

small amounts of highest qualities

ORAM Summary Worksheet

		Circle a or ins	sert	
Narrative Rating	Question 1. Critical Habitat	YES	(NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES	NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES	NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES	NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES	NO	If yes, Category 1.
	Question 6. Bogs	YES	NO	If yes, Category 3.
	Question 7. Fens	YES	_OMO_	If yes, Category 3.
	Question 8a. Old Growth Forest	YES	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES	NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES	NO	If yes, Category 3.
	Question 11. Relict Wet Prairies	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	2.0)	category or may be to et al.
	Metric 2. Buffers and surrounding land use	6.0	0	
	Metric 3. Hydrology	17.	.0	
	Metric 4. Habitat	14.	.0	
	Metric 5. Special Wetland Communities	0.0		
	Metric 6. Plant communities, interspersion, microtopography	7.0)	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	46.	0	Category based on score breakpoints: 2

Wetland Categorization Worksheet

	T a		
Choices	Circle one	I	
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit <i>moderate</i> OR <i>superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	No Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland B
Vegetation Communit(ies):	Forested, Emergent
HGM Class(es):	Depressional
See Report.	
Lat/Lon or UTM Coordinate	40 0141 92 6642
USGS Quad Name	40.0141, -82.6643 Jersey
County	Licking
Township	Pataskala
Section and Subsection	raidskald
	05040000
Hydrologic Unit Code	05040006
Site Visit	
	Yes
National Wetland Inventory Ma	
National Wetland Inventory Ma Ohio Wetland Inventory Map	
	p Yes

Name: Wetland B	
Wetland Size (acres, hectares)	~0.05
Sketch (include north arrow, relationship with other surface waters, vegetation	zones, etc.
Sketch (include north arrow, relationship with other surface waters, vegetation See Report.	zones, etc.
Comments, Narrative Discussion, Justification of Category Changes	
	4
Final Score: 27.0 Category:	1

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	Wetland is a Category 3 Go to Question 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES NO Wetland is a Category 3 Go to Question 4 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES NO Wetland is a Category 3 Go to Question 5 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 Go to Question 6 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES NO Wetland is a Category 3 Go to Question 8b wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES NO Wetland is a Category 3 Go to Question 11 wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Co to Question 6

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
invasive/exotic spp. Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamagrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Fo	rest Rid	ge	Rater(s): JM	Date:2/23/2021
0.0	0.0	٦		
0.0	0.0	Metric 1. Wetland Area (size).		
max 6 pts.	Subtotal	Select one size class and assign score.		
		>50 acres (>20.2ha) (6 pts)	to)	
		25 to <50 acres (10.1 to <20.2ha) (5 pt 10 to <25 acres (4 to <10.1ha) (4 pts)	18)	
		3 to <10 acres (1.2 to <4ha) (3 pts)		
		0.3 to <3 acres (0.12 to <1.2ha) (2 pts)		
		0.1 to <0.3 acres (0.04 to <0.12ha) (1 o <0.1 acres (<0.04ha) (0 pts)	pt)	
6.0	6.0	<u>0</u> <0.1 acres (<0.04ha) (0 pts)		
6.0	6.0	Metric 2. Upland buffers and su	ırrounding land us	se.
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select or	_	
		WIDE. Buffers average 50m (164ft) or	r more around wetland pe	erimeter (7)
		4 MEDIUM. Buffers average 25m to<50		
		NARROW. Buffers average 10m to <2 VERY NARROW. Buffers average <1		
		2b. Intensity of surrounding land use. Select		
		VERY LOW. 2 nd growth or older fores	t, prairie, savannah, wildli	ife area, etc. (7)
		LOW. Old field (>10 years), shrubland		
		3 MODERATELY HIGH. Residential, fer HIGH. Urban, industrial, open pasture		
9.0	15.0		, row oropping, mining, oc	
0.0	10.0	Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.		nectivity. Score all that apply.
		High pH groundwater (5)		100 year floodplain (1)
		Other groundwater (3) 1 Precipitation (1)		Between stream/lake and other human use. (Part of wetland/upland (e.g. forest) complex (
		Seasonal/Intermittent surface water (3		Part of riparian or upland corridor (1)
		Perennial surface water (lake or stream	n) (5) 3d <u>. Du</u> ra	ation inundation/saturation. Score 1 or dbl chl
		3c. Maximum water depth. Select only one a		Semi- to permanently inundated/saturated (4
		>0.7 (>27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)		Regularly inundated/saturated (3) Seasonally inundated (2)
		1 <0.4m (<15.7in) (1)		Seasonally saturated in upper 30cm (12in) (1
		3e. Modifications to natural hydrological regin	ne. Score one or double	check and average.
			Check all disturbances ob	
		Recovered (7) 3 Recovering (3)	Ditch x Tile	point source (nonstormwater) filling/grading
		Recent or no recovery (1)	Dike	road bed/RR track
			Weir	Dredging
400	0= 0	, <u> </u>	x stormwater input	other:
10.0	25.0	Matria 4 Habitat Altaration and	Davalanment	
max 20 pts.	Subtotal	Metric 4. Habitat Alteration and 4a. Substrate disturbance. Score one or dou		
max 20 pto.	04510141	4 None or none apparent (4)	bic officer and average.	
		Recovered (3)		
		Recovering (2)		
		Recent or no recovery (1) 4b. Habitat Development. Select only one an	nd assign score	
		Excellent (7)	a accigir cocici	
		Very good (6)		
		Good (5)		
		Moderately good (4) 3 Fair (3)		
		Poor to fair (2)		
		Poor (1)		
		4c. Habitat alteration. Score one or double cl	heck and average. all disturbances observed	d
		None or none apparent (9) Check Recovered (6)	Mowing	Shrub/sapling removal
		3 Recovering (3)	Grazing	Herbaceous/aquatic bed removal
		Recent or no recovery (1)	Clearcutting	Sedimentation
25.0			selective cutting woody debris removal	Dredging Farming
Subtotal this	2000	Last revised 1 February 2001 iim	toxic pollutants	y Nutrient enrichment

Site: Fo	rest Ridg	je	Rate	er(s): JM	Date:2/23/2021
25.0					
Subtotal first	nage				
Subtotal IIIst	page				
0.0	25.0				
		Metric 5. Special Wetlands.			
max 10 pts.	Subtotal	Check all that apply and score as indicate	ed.		
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5) Lake Erie coastal/tributary wetland	d_unrestrict	ed hydrology (10)	
		Lake Erie coastal/tributary wetland			
		Lake Plain Sand Prairies (Oak Op			
		Relict Wet Prairies (10)	3 , (,	
		Known occurrence state/federal th			0)
		Significant migratory songbird/wat			
		Category 1 Wetland. See Question	on 1 Qualita	ative Rating (-10)	
2.0	27.0				_
		Metric 6. Plant communities,	intersp	ersion, microtop	oography.
max 20 pts.	Subtotal	6a. Wetland Vegetation Communities			
		Score all present using 0 to 3 scale.		tion Community Cove	
		Aquatic Bed 2 Emergent	<u>0</u> 1		s <0.1ha (0.2471 acres) contiguous area omprises small part of wetland's vegetation
		Shrub	1		puality, or comprises a significant part but is
		Forest		of low quality	daily, or comprises a digrimodite part but to
		Mudflats	2		omprises significant part of wetland's
		Open water			moderate quality or comprises a small part
		Other:		and is of high quality	
			3		ses significant part, or more, of wetland's
				vegetation and is of	high quality
		6b. horizontal (plan view) interspersion Select only one.	Marratio	o Description of Voc	otation Community
		High (5)	low	ve Description of Veg	d/or predominance of nonnative or
		Moderately high (4)	1011	disturbance tolerant	
		Moderate (3)	mod		nant component of the vegetation, although
		Moderately low (2)		nonnative and/or dis	turbance tolerant native spp can be
		Low (1)			s diversity moderate to moderately high, but
		0 None (0)			nce of rare threatened or endangered spp
			high		native species, with nonnative spp and/or
		6c. Coverage of invasive plants.			native spp absent or virtually absent, and nd often, but not always, the presence of
		Refer to Table 1 ORAM long form for		rare, threatened, or	
		List. Add or deduct points for coverage		raio, illicatorica, or t	chadingered app
		Extensive >75% cover (-5)		and Open Water Clas	ss Quality
		Moderate 25-75% cover (-3)	0	Absent < 0.1ha (0.24	
		Sparse 5-25% cover (-1)	1	Low 0.1 to <1ha (0.2	247 to 2.47 acres)
		0 Nearly absent <5% cover (0)	2	Moderate 1 to <4ha	
		Absent (1)	3	High 4ha (9.88 acres	s) or more

27.0 GRAND TOTAL (max 100 pts)

6d. Microtopography.

Score all present using 0 to 3 scale.

Vegetated hummucks/tussucks

Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools

CATEGORY: 1

small amounts of highest qualities

Present very small amounts or if more common of marginal

Present in moderate amounts, but not of highest quality or in

Present in moderate or greater amounts and of highest qualities

Microtopography Cover Scale

Absent

2

3

ORAM Summary Worksheet

		Circle an or inse	ert	
Narrative Rating	Question 1. Critical Habitat	YES	(NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES	NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES	NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES	(NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES	(NO	If yes, Category 1.
	Question 6. Bogs	YES	NO	If yes, Category 3.
	Question 7. Fens	YES	JOE JOE	If yes, Category 3.
	Question 8a. Old Growth Forest	YES	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES	AO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES	00	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES	(NO	If yes, Category 3.
	Question 11. Relict Wet Prairies	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	0.0		category or may be to et al.
	Metric 2. Buffers and surrounding land use	6.0		
	Metric 3. Hydrology	9.0		
	Metric 4. Habitat	10.0		
	Metric 5. Special Wetland Communities	0.0		
	Metric 6. Plant communities, interspersion, microtopography	2.0		
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	27.0		Category based on score breakpoints: 1

Wetland Categorization Worksheet

Choices	Circle one	1	
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	No Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
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Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland C
Vegetation Communit(ies):	Forested, Emergent
HGM Class(es):	Depressional
Latter and ITM Constitution	40.040000.0007
Lat/Lon or UTM Coordinate USGS Quad Name	40.0138, -82.6627
County	Jersey Licking
Township	Pataskala
Section and Subsection	ralaskala
Hydrologic Unit Code	05040000
, -	05040006
Site Visit	Yes
National Wetland Inventory Ma	p Yes
Ohio Wetland Inventory Map	No
Soil Survey	Yes
Delineation Report/Map	Yes

Name: Wetland C	
Wetland Size (acres, hectares)	~0.26
Sketch (include north arrow, relationship with other surface waters, vegetation	zones, etc.
See Report.	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 37.0 Category:	Mod 2

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

г		T
#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES NO Wetland is a Category 3 Go to Question 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES NO Wetland is a Category 3 Go to Question 11 Wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge			Rater(s): JM	Date:2/23/2021
		٦		
1.0	1.0			
		Metric 1. Wetland Area (size).		
max 6 pts.	Subtotal	Select one size class and assign score.		
		>50 acres (>20.2ha) (6 pts)	-)	
		25 to <50 acres (10.1 to <20.2ha) (5 pt 10 to <25 acres (4 to <10.1ha) (4 pts)	S)	
		3 to <10 acres (1.2 to <4ha) (3 pts)		
		0.3 to <3 acres (0.12 to <1.2ha) (2 pts)		
		1 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pto)		
		<0.1 acres (<0.04ha) (0 pts)	,	
6.0	7.0			
0.0	7.0	Metric 2. Upland buffers and su	rrounding land use.	
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select on		ıble check.
		WIDE. Buffers average 50m (164ft) or		
		4 MEDIUM. Buffers average 25m to<50i		
		NARROW. Buffers average 10m to <2		
		VERY NARROW. Buffers average <10		(0)
		2b. Intensity of surrounding land use. Select		(7)
		VERY LOW. 2 nd growth or older forest LOW. Old field (>10 years), shrubland		. (7)
		3 MODERATELY HIGH. Residential, fer		ge new fallow field (3)
		1 HIGH. Urban, industrial, open pasture		
12.0	19.0	, , , , , ,		,
12.0	10.0	Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity. So	core all that apply.
•		High pH groundwater (5)	100 year flo	
		Other groundwater (3)	Between str	eam/lake and other human use. (
		1 Precipitation (1)		and/upland (e.g. forest) complex (
		Seasonal/Intermittent surface water (3)		ian or upland corridor (1)
		Perennial surface water (lake or stream		tion/saturation. Score 1 or dbl chk
		3c. Maximum water depth. Select only one ar		rmanently inundated/saturated (4)
		>0.7 (>27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)		undated/saturated (3) inundated (2)
		1 <0.4m (<15.7in) (1)		saturated in upper 30cm (12in) (1)
		3e. Modifications to natural hydrological regim		
			heck all disturbances observed	J
		7 Recovered (7)	Ditch point	source (nonstormwater)
		Recovering (3)		/grading
		Recent or no recovery (1)		bed/RR track
			Weir Dred	
440	00.0	L_	x stormwater input other	:
14.0	33.0	Matria 4 Habitat Altaration and	Development	
may 20 pto	Subtotal	Metric 4. Habitat Alteration and	<u>-</u>	
max 20 pts.	Subtotal	4a. Substrate disturbance. Score one or doubted. 4 None or none apparent (4)	ble check and average.	
		Recovered (3)		
		Recovering (2)		
		Recent or no recovery (1)		
		4b. Habitat Development. Select only one and	d assign score.	
		Excellent (7)		
		Very good (6)		
		Good (5)		
		4 Moderately good (4)		
		Fair (3) Poor to fair (2)		
		Poor (1)		
		4c. Habitat alteration. Score one or double ch	neck and average.	
			all disturbances observed	
		6 Recovered (6)		rub/sapling removal
		Recovering (3)		rbaceous/aquatic bed removal
		Recent or no recovery (1)	~ 	dimentation
33.0				edging
Subtotal this	page	Last revised 1 February 2001 jjm		rming trient enrichment
200.300 0110	r-3-	Last to vioca i i obtadily 2001 jjill	N IVU	anona oriniorini

ORAM v. 5.0 Field Form Quantitative Rating

33.0				
Subtotal first	page			
0.0	33.0	Metric 5. Special Wetlands.		
max 10 pts.	Subtotal	Check all that apply and score as indicate Bog (10)	ed.	
		Fen (10) Old growth forest (10) Mature forested wetland (5)		
		Lake Erie coastal/tributary wetland		
		Lake Plain Sand Prairies (Oak Operation Relict Wet Prairies (10)	enings) (10	
		Known occurrence state/federal th Significant migratory songbird/wate Category 1 Wetland. See Questio	er fowl hab	pitat or usage (10)
4.0	37.0	Metric 6. Plant communities,		
max 20 pts.	Subtotal	6a. Wetland Vegetation Communities	•	
		Score all present using 0 to 3 scale.		tion Community Cover Scale
		Aquatic Bed 1 Emergent	<u>0</u> 1	Absent or comprises <0.1ha (0.2471 acres) contiguous area Present and either comprises small part of wetland's vegetation
		Shrub	Į.	and is of moderate quality, or comprises a significant part but is
		2 Forest		of low quality
		Mudflats	2	Present and either comprises significant part of wetland's
		Open water		vegetation and is of moderate quality or comprises a small part
		Other:		and is of high quality
			3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
		6b. horizontal (plan view) interspersion Select only one.	Narrativ	ve Description of Vegetation Community
		High (5) Moderately high (4)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
		Moderate (3) Moderately low (2) Low (1)	mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can be present, and species diversity moderate to moderately high, but a composition of the vegetation, although
		0 None (0)	high	generally w/o presence of rare threatened or endangered spp A predominance of native species, with nonnative spp and/or
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for		disturbance tolerant native spp absent or virtually absent, and high spp diversity, and often, but not always, the presence of rare, threatened, or endangered spp
		List. Add or deduct points for coverage		
		Extensive >75% cover (-5)		and Open Water Class Quality
		Moderate 25-75% cover (-3)	0	Absent <0.1ha (0.247 acres)
		Sparse 5-25% cover (-1) Nearly absent <5% cover (0)	1	Low 0.1 to <1ha (0.247 to 2.47 acres) Moderate 1 to <4ha (2.47 to 9.88 acres)
		Absent (1)	3	High 4ha (9.88 acres) or more
		6d. Microtopography. Score all present using 0 to 3 scale.	Microto	pography Cover Scale
		Vegetated hummucks/tussucks	0	Absent
		1 Coarse woody debris >15cm (6in)	1	Present very small amounts or if more common of marginal
		Standing dead >25cm (10in) dbh	•	quality
		Amphibian breeding pools	2	Present in moderate amounts, but not of highest quality or in

3

37.0 GRAND TOTAL (max 100 pts)

CATEGORY: Mod 2

Present in moderate or greater amounts and of highest qualities

small amounts of highest qualities

ORAM Summary Worksheet

		Circle ar or ins scor	ert	
Narrative Rating	Question 1. Critical Habitat	YES	(NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES	NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES	NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES	NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES	NO	If yes, Category 1.
	Question 6. Bogs	YES	NO	If yes, Category 3.
	Question 7. Fens	YES	NO.	If yes, Category 3.
	Question 8a. Old Growth Forest	YES	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES	AQ.	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES	NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES	NO	If yes, Category 3.
	Question 11. Relict Wet Prairies	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	1.0		
	Metric 2. Buffers and surrounding land use	6.0		
	Metric 3. Hydrology	12.0)	
	Metric 4. Habitat	14.0		
	Metric 5. Special Wetland Communities	0.0		
	Metric 6. Plant communities, interspersion, microtopography	4.0		
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	37.0)	Category based on score breakpoints: Mod 2

Wetland Categorization Worksheet

01 :	l o: .	
Choices	Circle one	
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes No Wetland is categorized as a Category 3 wetland	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes No Wetland should be evaluated for possible Category 3 status	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes No Wetland is categorized as a Category 1 wetland	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes Wetland is assigned to the appropriate category based on the scoring range.	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	categorized by this assi method. A written cate justification for dete	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category Final Category				
Choose one	Category 1	Category 2	Category 3	

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Allillation.	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland D
Vegetation Communit(ies):	Forested, Emergent
HGM Class(es):	Depressional
Location of Wetland include ma	ap, address, north arrow, landmarks, distances, roads, etc.
Coo Donort	
See Report.	
	40.045000.0005
Lat/Lon or UTM Coordinate	40.0156, -82.6625
USGS Quad Name	Jersey
USGS Quad Name County	Jersey Licking
USGS Quad Name County Township	Jersey
USGS Quad Name County	Jersey Licking
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code	Jersey Licking
USGS Quad Name County Township Section and Subsection	Jersey Licking Pataskala
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code	Jersey Licking Pataskala 05040006 Yes
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code Site Visit	Jersey Licking Pataskala 05040006 Yes
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code Site Visit National Wetland Inventory Ma	Jersey Licking Pataskala 05040006 Yes P Yes
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code Site Visit National Wetland Inventory Ma Ohio Wetland Inventory Map	Jersey Licking Pataskala 05040006 Yes P Yes No

Name: Wetland D	
Wetland Size (acres, hectares)	~0.48
Sketch (include north arrow, relationship with other surface waters, vegetation	zones, etc.
See Report.	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 53.0 Category:	2

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	Wetland is a Category 3 Go to Question 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES NO Wetland is a Category 3 Go to Question 4 wetland. Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES NO Wetland is a Category 3 Go to Question 5 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES NO Wetland is a Category 3 Go to Question 8b wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES NO Wetland is a Category 3 Go to Question 11 wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Co to Question 6

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
invasive/exotic spp. Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamagrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge			Rater(s): JM	Date:2/23/2021
2.0	2.0			
max 6 pts.	Subtotal	Select one size class and assign score.		
		>50 acres (>20.2ha) (6 pts)		
		25 to <50 acres (10.1 to <20.2ha) (5 pt	rs)	
		10 to <25 acres (4 to <10.1ha) (4 pts)		
		3 to <10 acres (1.2 to <4ha) (3 pts)		
		2 0.3 to <3 acres (0.12 to <1.2ha) (2 pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pts)		
		<0.1 acres (<0.04ha) (0 pts)	51)	
9.0	11.0	terr deree (tere may (e pie)		
9.0	11.0	Metric 2. Upland buffers and su	rrounding land use	
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select on		hle check
111ax 14 pts.	Gubtotai	7 WIDE. Buffers average 50m (164ft) or		ble check.
		MEDIUM. Buffers average 25m to<50		neter (4)
		NARROW. Buffers average 10m to <2		
		VERY NARROW. Buffers average <10		
		2b. Intensity of surrounding land use. Select	one or double check and average.	
		VERY LOW. 2 nd growth or older forest		(7)
		LOW. Old field (>10 years), shrubland		((() ()
		3 MODERATELY HIGH. Residential, fer		
00.0	00.0	1 HIGH. Urban, industrial, open pasture	, row cropping, mining, construction.	(1)
22.0	33.0			
		Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity. So	
		High pH groundwater (5)	100 year floo	
		Other groundwater (3) 1 Precipitation (1)		eam/lake and other human use. (1) and/upland (e.g. forest) complex (1)
		3 Seasonal/Intermittent surface water (3)		ian or upland corridor (1)
		Perennial surface water (lake or stream		tion/saturation. Score 1 or dbl chk.
		3c. Maximum water depth. Select only one a		manently inundated/saturated (4)
		>0.7 (>27.6in) (3)		undated/saturated (3)
		0.4 to 0.7m (15.7 to 27.6in) (2)		nundated (2)
		1 <0.4m (<15.7in) (1)		saturated in upper 30cm (12in) (1)
		3e. Modifications to natural hydrological regin		verage.
			Check all disturbances observed	
		Recovered (7)		source (nonstormwater)
		Recovering (3) Recent or no recovery (1)		/grading bed/RR track
		Recent of no recovery (1)	Weir Dredg	
			stormwater input other	
14.0	47.0			
14.0	₹7.0	Metric 4. Habitat Alteration and	Develonment	
max 20 pts.	Subtotal	4a. Substrate disturbance. Score one or doub		
		4 None or none apparent (4)	ord orlean and average.	
		Recovered (3)		
		Recovering (2)		
		Recent or no recovery (1)		
		4b. Habitat Development. Select only one an	d assign score.	
		Excellent (7)		
		Very good (6)		
		Good (5) 4 Moderately good (4)		
		Fair (3)		
		Poor to fair (2)		
		Poor (1)		
		4c. Habitat alteration. Score one or double ch		
			all disturbances observed	
		6 Recovered (6)		rub/sapling removal
		Recovering (3)		rbaceous/aquatic bed removal
		Recent or no recovery (1)	• -	dimentation
47.0		X		edging
Subtotal this	page	Last revised 1 February 2001 jjm		ming trient enrichment
· · · · ·	. •		1100	

ORAM v. 5.0 Field Form Quantitative Rating

Site: Fo	rest Rido	је	Rate	r(s): JM	Date:2/23/2021
47.0					
Subtotal first	page				
0.0	47.0	Metric 5. Special Wetlands.			
max 10 pts.	Subtotal	Check all that apply and score as indicate Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland Lake Erie coastal/tributary wetland Lake Plain Sand Prairies (Oak Op Relict Wet Prairies (10) Known occurrence state/federal the Significant migratory songbird/wat Category 1 Wetland. See Questic	d-unrestrict d-restricted enings) (10 nreatened e er fowl hab	hydrology (5))) endangered species (10) itat or usage (10))
6.0	53.0	Metric 6. Plant communities,		5 . ,	ography
max 20 pts.	Subtotal	6a. Wetland Vegetation Communities Score all present using 0 to 3 scale. Aquatic Bed Emergent Shrub Forest Mudflats Open water Other:	•	ion Community Cover Absent or comprises Present and either co and is of moderate qu of low quality Present and either co vegetation and is of n and is of high quality	 Scale <0.1ha (0.2471 acres) contiguous area omprises small part of wetland's vegetation uality, or comprises a significant part but is omprises significant part of wetland's noderate quality or comprises a small part es significant part, or more, of wetland's
		6b. horizontal (plan view) interspersion Select only one.	Narrativ	e Description of Vege	
		High (5) Moderately high (4)	low	Low spp diversity and disturbance tolerant r	d/or predominance of nonnative or
		Moderate (3) Moderately low (2) Low (1) None (0)	mod	Native spp are domin nonnative and/or distr present, and species	ant component of the vegetation, although urbance tolerant native spp can be diversity moderate to moderately high, but ce of rare threatened or endangered spp
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for List. Add or deduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3)	high Mudflat	disturbance tolerant r	s Quality
		Sparse 5-25% cover (-1)	1	Low 0.1 to <1ha (0.24)	
		0 Nearly absent <5% cover (0)	2	Moderate 1 to <4ha (
		Absent (1)	3	High 4ha (9.88 acres)	,

53.0 GRAND TOTAL (max 100 pts)

6d. Microtopography.

Score all present using 0 to 3 scale.

Vegetated hummucks/tussucks

Coarse woody debris >15cm (6in)

Standing dead >25cm (10in) dbh Amphibian breeding pools

CATEGORY: 2

Present very small amounts or if more common of marginal

Present in moderate amounts, but not of highest quality or in

Present in moderate or greater amounts and of highest qualities

small amounts of highest qualities

Microtopography Cover Scale

Absent

2

3

ORAM Summary Worksheet

		Circle answer or insert score	
Narrative Rating	Question 1. Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	
	Question 9d. Lake Erie Wetlands – Unrestricted	YES NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES NO	
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	2.0	
	Metric 2. Buffers and surrounding land use	9.0	
	Metric 3. Hydrology	22.0	
	Metric 4. Habitat	14.0	
	Metric 5. Special Wetland Communities	0.0	
	Metric 6. Plant communities, interspersion, microtopography	6.0	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	53.0	Category based on score breakpoints: 2

Wetland Categorization Worksheet

Choices	Circle one		
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes (Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit <i>moderate</i> OR <i>superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category				
Choose one	Category 1	Category 2	Category 3	

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland E
Vegetation Communit(ies):	Forested, Emergent
HGM Class(es):	Depressional, Riverine
Location of Wetland include ma	ap, address, north arrow, landmarks, distances, roads, etc.
See Report.	
Lat/Lon or UTM Coordinate	40.0166, -82.6709
USGS Quad Name	Jersey
County	Licking
Township	Pataskala
Section and Subsection	
Hydrologic Unit Code	05040006
Site Visit	Yes
National Wetland Inventory Ma	p Yes
Ohio Wetland Inventory Map	No
Soil Survey	Yes
Delineation Report/Map	Yes

Name: Wetland E	
Wetland Size (acres, hectares)	~0.15
Sketch (include north arrow, relationship with other surface waters, vegetation	n zones, etc.
Sketch (include north arrow, relationship with other surface waters, vegetation See Report.	n zones, etc.
Comments Narrative Discussion, Justification of Category Changes	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 24.5 Category:	1

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

	T	
#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES (NO) Wetland is a Category 3 Go to Question 11 Wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Complete Quantitative Rating Go to Question 6

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge			Rater(s): JM	Date:2/23/2021		
1.0	1.0					
		Metric 1. Wetland Area (size).				
max 6 pts.	Subtotal	Select one size class and assign score.				
		>50 acres (>20.2ha) (6 pts)				
		25 to <50 acres (10.1 to <20.2ha) (5 pts	s)			
		10 to <25 acres (4 to <10.1ha) (4 pts)				
		3 to <10 acres (1.2 to <4ha) (3 pts)				
		0.3 to <3 acres (0.12 to <1.2ha) (2 pts) 1 0.1 to <0.3 acres (0.04 to <0.12ha) (1 p	+)			
		<0.1 acres (<0.04ha) (0 pts)	· ·			
2.0	3.0	(viio ma) (o pio)				
2.0	3.0	letric 2. Upland buffers and surrounding land use.				
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select onl		hle check		
111ax 14 pts.	Oubtotal	WIDE. Buffers average 50m (164ft) or		ble check.		
		MEDIUM. Buffers average 25m to<50n		neter (4)		
		NARROW. Buffers average 10m to <25				
		0 VERY NARROW. Buffers average <10				
		2b. Intensity of surrounding land use. Select of	one or double check and average.			
		VERY LOW. 2 nd growth or older forest,		(7)		
		LOW. Old field (>10 years), shrubland,		() () ()		
		3 MODERATELY HIGH. Residential, fen				
400	40.0	1 HIGH. Urban, industrial, open pasture,	row cropping, mining, construction.	(1)		
10.0	13.0					
		Metric 3. Hydrology.				
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity. So			
		High pH groundwater (5)	100 year floo			
		Other groundwater (3) 1 Precipitation (1)		eam/lake and other human use. (1) nd/upland (e.g. forest) complex (1)		
		3 Seasonal/Intermittent surface water (3)		an or upland corridor (1)		
		Perennial surface water (lake or stream		ion/saturation. Score 1 or dbl chk.		
		3c. Maximum water depth. Select only one an		manently inundated/saturated (4)		
		>0.7 (>27.6in) (3)		undated/saturated (3)		
		0.4 to 0.7m (15.7 to 27.6in) (2)		nundated (2)		
		1 <0.4m (<15.7in) (1)		saturated in upper 30cm (12in) (1)		
		3e. Modifications to natural hydrological regime		verage.		
			heck all disturbances observed			
		Recovered (7)		source (nonstormwater)		
		Recovering (3) 1 Recent or no recovery (1)		grading bed/RR track		
		1 Recent of no recovery (1)	Weir A load			
			x stormwater input other:			
6.5	19.5					
0.5	19.0	Metric 4. Habitat Alteration and	Develonment			
max 20 pts.	Subtotal	4a. Substrate disturbance. Score one or doub				
		None or none apparent (4)	no oneon and average.			
		3 Recovered (3)				
		Recovering (2)				
		Recent or no recovery (1)				
		4b. Habitat Development. Select only one and	d assign score.			
		Excellent (7)				
		Very good (6)				
		Good (5) Moderately good (4)				
		3 Fair (3)				
		2 Poor to fair (2)				
		Poor (1)				
		4c. Habitat alteration. Score one or double ch	eck and average.			
		None or none apparent (9) Check a	all disturbances observed			
				ub/sapling removal		
				baceous/aquatic bed removal		
			~ 	dimentation		
19.5				edging ming		
Subtotal this	page		· · · · · · · · · · · · · · · · · · ·	rient enrichment		
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

ORAM v. 5.0 Field Form Quantitative Rating

Site: Fo	rest Ridg	je		Rate	r(s): JM	Date:2/23/2021
19.5						
Subtotal first	page					
0.0	19.5					
			ric 5. Special Wetlands.			
max 10 pts.	Subtotal	Check	call that apply and score as indicate	a.		
			Bog (10) Fen (10)			
			Old growth forest (10)			
			Mature forested wetland (5)			
			Lake Erie coastal/tributary wetland	-unrestrict	ed hydrology (10)	
			Lake Erie coastal/tributary wetland			
			Lake Plain Sand Prairies (Oak Ope			
			Relict Wet Prairies (10)			
			Known occurrence state/federal th			
			Significant migratory songbird/wate			
	T	, L	Category 1 Wetland. See Questio	n 1 Qualita	ative Rating (-10)	
5.0	24.5					
			ric 6. Plant communities,	intersp	ersion, microtopoເ	graphy.
max 20 pts.	Subtotal		/etland Vegetation Communities			
		Score	e all present using 0 to 3 scale.	Vegetat	ion Community Cover S	
			Aquatic Bed	0		.1ha (0.2471 acres) contiguous area
		2	Emergent	1		prises small part of wetland's vegetation
		0	Shrub Forest		of low quality	ity, or comprises a significant part but is
		U	Mudflats	2		prises significant part of wetland's
			Open water	2		derate quality or comprises a small part
			Other:		and is of high quality	aorato quanty or compriscos a cirian part
			•	3		significant part, or more, of wetland's
					vegetation and is of high	h quality
			orizontal (plan view) interspersion		5	
		Selec	ct only one.		ve Description of Vegeta	r predominance of nonnative or
			High (5) Moderately high (4)	low	disturbance tolerant nat	
			Moderate (3)	mod		It component of the vegetation, although
			Moderately low (2)	mod		pance tolerant native spp can be
		1	Low (1)			versity moderate to moderately high, but
			None (0)		generally w/o presence	of rare threatened or endangered spp
			. ,	high	A predominance of nativ	ve species, with nonnative spp and/or
						ive spp absent or virtually absent, and
			Coverage of invasive plants.			often, but not always, the presence of
			r to Table 1 ORAM long form for		rare, threatened, or end	angered spp
		LIST.	Add or deduct points for coverage	Mudflat	and Open Mater Class (Quality
			Extensive >75% cover (-5) Moderate 25-75% cover (-3)	0 Wildingt	and Open Water Class (Absent < 0.1ha (0.247 a	
			Sparse 5-25% cover (-1)	1	Low 0.1 to <1ha (0.247 a)	
			Nearly absent <5% cover (0)	2	Moderate 1 to <4ha (2.4	
		1	Absent (1)	3	High 4ha (9.88 acres) o	,
				-	, , , , , , , , , , , , , , , , , , , ,	

6d. Microtopography.

Score all present using 0 to 3 scale.

1 Vegetated hummucks/tussucks
Coarse woody debris >15cm (6in)
Standing dead >25cm (10in) dbh
Amphibian breeding pools

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal
	quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest qualities
3	Present in moderate or greater amounts and of highest qualities

24.5 GRAND TOTAL (max 100 pts)

CATEGORY: 1

ORAM Summary Worksheet

		Circle answer or insert score	
Narrative Rating	Question 1. Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO.	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO.	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted	YES NO	If yes, evaluate for
	with invasive plants	V50 (NO	Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3.
	Question 11. Relict Wet Prairies	YES (NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	1.0	catogory of may be 1 of 21
	Metric 2. Buffers and surrounding land use	2.0	
	Metric 3. Hydrology	10.0	
	Metric 4. Habitat	6.5	
	Metric 5. Special Wetland Communities	0.0	
	Metric 6. Plant communities, interspersion,	5.0	
	microtopography TOTAL SCORE	24.5	Category based on score
	Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its	24.5	breakpoints: 1
	quantitative score		

Wetland Categorization Worksheet

		
Choices	Circle one	
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes No Wetland is categorized as a Category 3 wetland	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes Wetland should be evaluated for possible Category 3 status	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes No Wetland is categorized as a Category 1 wetland	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes Wetland is assigned to the appropriate category based on the scoring range.	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	categorized by this method. A written justification for de	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Einal Category					
Choose one	Category 1	Category 2	Category 3		

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	001
Amilation.	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland F
Vegetation Communit(ies):	Forested, Emergent, Shrub/Scrub
HGM Class(es):	Depressional, Riverine
Location of Wetland include m	ap, address, north arrow, landmarks, distances, roads, etc.
See Report.	
Lat/Lon or UTM Coordinate	40.0153, -82.666
Lat/Lon or UTM Coordinate USGS Quad Name	40.0153, -82.666 Jersey
USGS Quad Name	Jersey
USGS Quad Name County	Jersey Licking
USGS Quad Name County Township	Jersey Licking
USGS Quad Name County Township Section and Subsection	Jersey Licking Pataskala
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code	Jersey Licking Pataskala 05040006 Yes
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code Site Visit	Jersey Licking Pataskala 05040006 Yes
USGS Quad Name County Township Section and Subsection Hydrologic Unit Code Site Visit National Wetland Inventory Ma	Jersey Licking Pataskala 05040006 Yes PYes

Name: Wetland F	
Wetland Size (acres, hectares)	~0.59
Sketch (include north arrow, relationship with other surface waters, vegetation	zones, etc.
See Report.	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 46.0 Category:	2

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

	T	
#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One	
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8b
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9d	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES Wetland is a Category 3 wetland. Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10	NO Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	YES Wetland should be evaluated for possible Category 3 status. Go to Question 6	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge			Rater(s): JM	Date:2/23/2021
		1		
2.0	2.0			
		Metric 1. Wetland Area (size).		
max 6 pts.	Subtotal	Select one size class and assign score.		
		>50 acres (>20.2ha) (6 pts)	\	
		25 to <50 acres (10.1 to <20.2ha) (5 pts)	
		10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts)		
		2 0.3 to <3 acres (0.12 to <1.2ha) (2 pts)		
		0.1 to <0.3 acres (0.04 to <0.12ha) (1 pts)	•)	
		<0.1 acres (<0.04ha) (0 pts)	,	
6.0	8.0			
0.0	0.0	Metric 2. Upland buffers and sur	rounding land use.	
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select only		ole check.
		WIDE. Buffers average 50m (164ft) or r		
		4 MEDIUM. Buffers average 25m to<50m		
		NARROW. Buffers average 10m to <25		
		VERY NARROW. Buffers average <10r		(0)
		2b. Intensity of surrounding land use. Select of		(-)
		VERY LOW. 2 nd growth or older forest, LOW. Old field (>10 years), shrubland,		(7)
		3 MODERATELY HIGH. Residential, fend		e new fallow field (3)
		1 HIGH. Urban, industrial, open pasture,		
17.0	25.0			,
17.0	25.0	Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity. Sc	ore all that apply.
		High pH groundwater (5)	100 year floo	
		Other groundwater (3)		eam/lake and other human use. (1)
		1 Precipitation (1)		nd/upland (e.g. forest) complex (1)
		3 Seasonal/Intermittent surface water (3)		an or upland corridor (1)
		Perennial surface water (lake or stream)		ion/saturation. Score 1 or dbl chk.
		3c. Maximum water depth. Select only one and		manently inundated/saturated (4)
		>0.7 (>27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)	2 Seasonally in	undated/saturated (3)
		1 <0.4m (<15.7in) (1)		aturated in upper 30cm (12in) (1)
		3e. Modifications to natural hydrological regime		
			eck all disturbances observed	
		7 Recovered (7)		source (nonstormwater)
				grading
		Recent or no recovery (1)		ped/RR track
			Weir Dredg	-
440	20.0	<u> </u>	x stormwater input other:	
14.0	39.0	Matria 4 Habitat Altaration and I	Davalanment	
max 20 pts.	Subtotal	Metric 4. Habitat Alteration and I	• • • • • • • • • • • • • • • • • • •	
παχ 20 μιδ.	Subtotal	4a. Substrate disturbance. Score one or doubl 4 None or none apparent (4)	e check and average.	
		Recovered (3)		
		Recovering (2)		
		Recent or no recovery (1)		
		4b. Habitat Development. Select only one and	assign score.	
		Excellent (7)		
		Very good (6)		
		Good (5)		
		4 Moderately good (4)		
		Fair (3) Poor to fair (2)		
		Poor (1)		
		4c. Habitat alteration. Score one or double che	eck and average.	
			Il disturbances observed	
				ub/sapling removal
				baceous/aquatic bed removal
			~ <u>—</u>	limentation
39.0				dging ming
Subtotal this	page			rient enrichment

ORAM v. 5.0 Field Form Quantitative Rating

DRAM v. 5.0 Field Form Quantitative Rating		
Site: Forest Ridge	Rater(s): .IM	Date:2/23/2021

39.0

Subtotal first	page			
0.0	39.0	Metric 5. Special Wetlands.		
max 10 pts.	Subtotal	Check all that apply and score as indicated Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland- Lake Erie coastal/tributary wetland- Lake Plain Sand Prairies (Oak Ope Relict Wet Prairies (10) Known occurrence state/federal thre Significant migratory songbird/wate Category 1 Wetland. See Question	unrestrict restricted nings) (10 eatened e r fowl hab	hydrology (5) endangered species (10) eitat or usage (10)
7.0	46.0	Metric 6. Plant communities, i		
max 20 pts.	Subtotal	6a. Wetland Vegetation Communities	Vanatat	ion Community Cover Socie
		Score all present using 0 to 3 scale.		ion Community Cover Scale Absent or comprises <0.1ha (0.2471 acres) contiguous area
		Aquatic Bed 2 Emergent Shrub 2 Forest	<u> </u>	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
		Mudflats Open water Other:	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
			3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
		6b. horizontal (plan view) interspersion		
		Select only one.		ve Description of Vegetation Community
		High (5) Moderately high (4)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
		Moderate (3) Moderately low (2) Low (1) None (0)	mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for List. Add or deduct points for coverage	high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity, and often, but not always, the presence of rare, threatened, or endangered spp
		Extensive >75% cover (-5)	Mudflat	and Open Water Class Quality
		Moderate 25-75% cover (-3)	0	Absent <0.1ha (0.247 acres)
		Sparse 5-25% cover (-1)	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
		0 Nearly absent <5% cover (0)	2	Moderate 1 to <4ha (2.47 to 9.88 acres)
		Absent (1)	3	High 4ha (9.88 acres) or more
		6d. Microtopography. Score all present using 0 to 3 scale.	Microto	pography Cover Scale
		1 Vegetated hummucks/tussucks	0	Absent
		1 Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	1	Present very small amounts or if more common of marginal quality
		Amphibian breeding pools	2	Present in moderate amounts, but not of highest quality or in
				small amounts of highest qualities
			3	Present in moderate or greater amounts and of highest qualities

46.0 GRAND TOTAL (max 100 pts)

CATEGORY: 2

ORAM Summary Worksheet

		Circle a or ins	sert	
Narrative Rating	Question 1. Critical Habitat	YES	(NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES	NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES	NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES	NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES	NO	If yes, Category 1.
	Question 6. Bogs	YES	NO	If yes, Category 3.
	Question 7. Fens	YES	_OMO_	If yes, Category 3.
	Question 8a. Old Growth Forest	YES	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES	NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES	NO	If yes, Category 3.
	Question 11. Relict Wet Prairies	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	2.0)	category or may so r or an
	Metric 2. Buffers and surrounding land use	6.0	0	
	Metric 3. Hydrology	17.	.0	
	Metric 4. Habitat	14.	.0	
	Metric 5. Special Wetland Communities	0.0)	
	Metric 6. Plant communities, interspersion, microtopography	7.0)	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	46.	0	Category based on score breakpoints: 2

Wetland Categorization Worksheet

Choices	Circle one	1	
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit <i>moderate</i> OR <i>superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	No Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland G
Vegetation Communit(ies):	Forested, Emergent, Shrub/Scrub
HGM Class(es):	Depressional, Riverine
See Report.	
Lat/Lon or UTM Coordinate	40.0405 00.0000
USGS Quad Name	40.0195, -82.6632
County	Jersey Licking
Township	Pataskala
Section and Subsection	i ataskala
Hydrologic Unit Code	05040006
Site Visit	Yes
National Wetland Inventory Ma	p Yes
Ohio Wetland Inventory Map	No
Soil Survey	Yes
	100

Name: Wetland G	
Wetland Size (acres, hectares)	~1.44
Sketch (include north arrow, relationship with other surface waters, vegetation	n zones, etc.
See Report.	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 54.0 Category:	2
Social one	_

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	Wetland is a Category 3 Go to Question 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES NO Wetland is a Category 3 Go to Question 4 wetland. Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES NO Wetland is a Category 3 Go to Question 5 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES NO Wetland is a Category 3 Go to Question 11 wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Co to Question 6

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Fo	rest Rid	ge	Rater(s): JM	Date:2/23/2021
2.0	2.0	٦		
2.0	2.0	Metric 1. Wetland Area (si	ize)	
max 6 pts.	Subtotal	Select one size class and assign scol	•	
		>50 acres (>20.2ha) (6 pts)		
		25 to <50 acres (10.1 to <20.2h		
		10 to <25 acres (4 to <10.1ha) (3 to <10 acres (1.2 to <4ha) (3		
		2 0.3 to <3 acres (0.12 to <1.2ha)		
		0.1 to <0.3 acres (0.04 to <0.12	Pha) (1 pt)	
0.0	44.0	<pre> <0.1 acres (<0.04ha) (0 pts)</pre>		
9.0	11.0	Metric 2. Upland buffers a	nd surrounding land use	
max 14 pts.	Subtotal		elect only one and assign score. Do not	double check
			64ft) or more around wetland perimeter	
			n to<50m (82 to <164ft) around wetland	
			m to <25 m (32 to <82ft) around wetland age <10m (<32ft) around wetland perime	
			Select one or double check and average	
		VERY LOW. 2 nd growth or olde	er forest, prairie, savannah, wildlife area,	etc. (7)
			rubland, young second growth forest. (5) ntial, fenced pasture, park, conservation	
			pasture, row cropping, mining, constructi	
18.0	29.0	<u> </u>	7 11 37 37	· /
		Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that a		y. Score all that apply.
		High pH groundwater (5) Other groundwater (3)		r floodplain (1) n stream/lake and other human use. (1
		1 Precipitation (1)		wetland/upland (e.g. forest) complex (
		3 Seasonal/Intermittent surface w		iparian or upland corridor (1)
		Perennial surface water (lake or 3c. Maximum water depth. Select only		Indation/saturation. Score 1 or dbl chk
		>0.7 (>27.6in) (3)	· —	ly inundated/saturated (3)
		0.4 to 0.7m (15.7 to 27.6in) (2)	Seasona	ally inundated (2)
		1 <0.4m (<15.7in) (1)	Seasona al regime. Score one or double check a	ally saturated in upper 30cm (12in) (1)
		None or none apparent (12)	Check all disturbances observed	nu average.
		7 Recovered (7)	Ditch x p	oint source (nonstormwater)
		Recovering (3)		lling/grading
		Recent or no recovery (1)	Dike 5	oad bed/RR track
				Predging
1		1	x stormwater input o	ther:
15.0	44.0	Matria 4 Habitat Altanation	and Davidania	
max 20 pts.	Subtotal	Metric 4. Habitat Alteration 4a. Substrate disturbance. Score one		
1110X 20 pto.	Oubtotai	4 None or none apparent (4)	or double check and average.	
		Recovered (3)		
		Recovering (2) Recent or no recovery (1)		
		4b. Habitat Development. Select only	one and assign score.	
		Excellent (7)	Ğ	
		Very good (6)		
		5 Good (5) Moderately good (4)		
		Fair (3)		
		Poor to fair (2)		
		Poor (1) 4c. Habitat alteration. Score one or do	puble check and average	
			Check all disturbances observed	
		6 Recovered (6)	Mowing	Shrub/sapling removal
		Recovering (3)	Grazing	Herbaceous/aquatic bed removal
110		Recent or no recovery (1)	x Clearcutting selective cutting	Sedimentation Dredging
44.0			woody debris removal	Farming
Subtotal this	page	Last revised 1 February 2001 jjm	toxic pollutants x	Nutrient enrichment

Site: Fo	rest Ridg	je		Rate	r(s): JM	Date:2/23/2021
44.0						
Subtotal first	page					
0.0	440	7				
0.0	44.0	Motric	5. Special Wetlands.			
max 10 pts.	Subtotal		that apply and score as indicate	ed		
max 10 pto.			g (10)	· ·		
		Fe	n (10)			
			d growth forest (10)			
			ature forested wetland (5)			
			ke Erie coastal/tributary wetlan ke Erie coastal/tributary wetlan			
			ke Plain Sand Prairies (Oak Op			
			elict Wet Prairies (10)	701m1g0) (10	,	
			own occurrence state/federal th	hreatened e	ndangered species (10)	
		Sig	gnificant migratory songbird/wa	ter fowl hab	itat or usage (10)	
	1	Ca	tegory 1 Wetland. See Question	on 1 Qualita	tive Rating (-10)	
10.0	54.0					
			Plant communities,	interspe	ersion, microtopo	graphy.
max 20 pts.	Subtotal		and Vegetation Communities			
			present using 0 to 3 scale.		ion Community Cover S	
			uatic Bed nergent	0		0.1ha (0.2471 acres) contiguous area prises small part of wetland's vegetation
			irub	Ī		lity, or comprises a significant part but is
			rest		of low quality	,,
		Mu	udflats	2	Present and either com	prises significant part of wetland's
		Op.	en water			derate quality or comprises a small part
		Ot	her:		and is of high quality	
				3		significant part, or more, of wetland's
		6h hariz	ontal (plan view) interspersion		vegetation and is of hig	n quality
		Select on		Narrativ	e Description of Vegeta	tion Community
			gh (5)	low	Low spp diversity and/o	or predominance of nonnative or
			oderately high (4)		disturbance tolerant nat	
			oderate (3)	mod		nt component of the vegetation, although
			oderately low (2)			bance tolerant native spp can be
			w (1)			versity moderate to moderately high, but of rare threatened or endangered spp
		INC	one (0)	high		ve species, with nonnative spp and/or
				riigii		tive species, with normative spp and/or
		6c. Cove	rage of invasive plants.			often, but not always, the presence of
		Refer to	Table 1 ORAM long form for		rare, threatened, or end	
			d or deduct points for coverage			Overlite.
			tensive >75% cover (-5) oderate 25-75% cover (-3)		Absort of the (0.247 a	
			earse 5-25% cover (-1)	<u>0</u>	Absent <0.1ha (0.247 a	
		1 7			1 == 0 10 71110 (012 11	

6d. Microtopography.

Absent (1)

Score all present using 0 to 3 scale.

Vegetated hummucks/tussucks
 Coarse woody debris >15cm (6in)
 Standing dead >25cm (10in) dbh
 Amphibian breeding pools

Nearly absent <5% cover (0)

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal
	quality
2	Present in moderate amounts, but not of highest quality or in
	small amounts of highest qualities
3	Present in moderate or greater amounts and of highest qualities

Moderate 1 to <4ha (2.47 to 9.88 acres)

High 4ha (9.88 acres) or more

54.0 GRAND TOTAL (max 100 pts)

CATEGORY: 2

ORAM Summary Worksheet

		Circle and or inse	ert	
Narrative Rating	Question 1. Critical Habitat	YES	(NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES	NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES	NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES	(NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES	(NO	If yes, Category 1.
	Question 6. Bogs	YES	NO	If yes, Category 3.
	Question 7. Fens	YES	DAK	If yes, Category 3.
	Question 8a. Old Growth Forest	YES	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES	AQ O	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES	NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES	(NO	If yes, Category 3.
	Question 11. Relict Wet Prairies	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	2.0		
	Metric 2. Buffers and surrounding land use	9.0		
	Metric 3. Hydrology	18.0		
	Metric 4. Habitat	15.0		
	Metric 5. Special Wetland Communities	0.0		
	Metric 6. Plant communities, interspersion, microtopography	10.0		
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	54.0		Category based on score breakpoints: 2

Wetland Categorization Worksheet

	T a		
Choices	Circle one	ı	
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit <i>moderate</i> OR <i>superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	No Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland H
Vegetation Communit(ies):	Forested, Emergent
HGM Class(es):	Depressional, Riverine
Location of Wetland include ma	ap, address, north arrow, landmarks, distances, roads, etc.
Lat/Lon or UTM Coordinate	40.0175, -82.6601
USGS Quad Name	Jersey
County	Licking
Township	Pataskala
Section and Subsection	
Hydrologic Unit Code	05040006
Site Visit	Yes
National Wetland Inventory Ma	p Yes
Ohio Wetland Inventory Map	No
Soil Survey	Yes
Delineation Report/Map	Yes

Wetland Size (acres, hectares) -0.26 Sketch (include north arrow, relationship with other surface waters, vegetation zones, etc. See Report. Comments, Narrative Discussion, Justification of Category Changes Final Score: 54.0 Category: 2	Name: Wetland H	
See Report. Comments, Narrative Discussion, Justification of Category Changes	Wetland Size (acres, hectares)	~0.26
Comments, Narrative Discussion, Justification of Category Changes	Sketch (include north arrow, relationship with other surface waters, vegetation	zones, etc.
	See Report.	
		_
Final Score: 54.0 Category: 2	Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 54.0 Category: 2		
Final Score: 54.0 Category: 2		
Final Score: 54.0 Category: 2		
Final Score: 54.0 Category: 2		
Final Score: 54.0 Category: 2		
Final Score: 54.0 Category: 2		
Final Score: 54.0 Category: 2		
Final Score: 54.0 Category: 2		
	Final Score: 54.0 Category:	2

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

	T	
#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES (NO) Wetland is a Category 3 Go to Question 11 wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Complete Quantitative Rating Go to Question 6

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Fo	rest Ridg	je	Rater(s): JM	Date:2/23/2021
1.0	1.0			
		Metric 1. Wetland Area (size).		
max 6 pts.	Subtotal	Select one size class and assign score.		
		>50 acres (>20.2ha) (6 pts)		
		25 to <50 acres (10.1 to <20.2ha) (5 pts	5)	
		10 to <25 acres (4 to <10.1ha) (4 pts)		
		3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2 pts)		
		1 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pts)	t)	
		<0.1 acres (<0.04ha) (0 pts)	•	
9.0	10.0			
3.0	10.0	Metric 2. Upland buffers and sur	rrounding land use.	
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select only		ole check.
,		7 WIDE. Buffers average 50m (164ft) or i		
		MEDIUM. Buffers average 25m to<50m		neter (4)
		NARROW. Buffers average 10m to <25		
		VERY NARROW. Buffers average <10		(0)
		2b. Intensity of surrounding land use. Select o		
		VERY LOW. 2 nd growth or older forest,		(7)
		LOW. Old field (>10 years), shrubland, MODERATELY HIGH. Residential, fend		no now fallow field (2)
		MODERATELY HIGH. Residential, fendHIGH. Urban, industrial, open pasture,		
22.0	22.0	There. Orban, madernar, open pastare,	Tow Gropping, mining, construction. (• '
22.0	32.0	Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity. Sc	ore all that apply
	o ao total	High pH groundwater (5)	100 year floo	
		Other groundwater (3)		eam/lake and other human use. (1)
		1 Precipitation (1)		nd/upland (e.g. forest) complex (1)
		3 Seasonal/Intermittent surface water (3)		an or upland corridor (1)
		Perennial surface water (lake or stream)		ion/saturation. Score 1 or dbl chk.
		3c. Maximum water depth. Select only one an		manently inundated/saturated (4)
		>0.7 (>27.6in) (3)		undated/saturated (3)
		0.4 to 0.7m (15.7 to 27.6in) (2) 1 <0.4m (<15.7in) (1)	Seasonally in	aturated in upper 30cm (12in) (1)
		3e. Modifications to natural hydrological regime		
			neck all disturbances observed	volugo.
		Recovered (7)		source (nonstormwater)
		Recovering (3)	Tile filling/	grading
		Recent or no recovery (1)		ped/RR track
			Weir Dredg	- I
			stormwater input other:	
15.0	47.0			
		Metric 4. Habitat Alteration and	-	
max 20 pts.	Subtotal	4a. Substrate disturbance. Score one or doub	le check and average.	
		4 None or none apparent (4) Recovered (3)		
		Recovering (2)		
		Recent or no recovery (1)		
		4b. Habitat Development. Select only one and	l assign score.	
		Excellent (7)	-	
		Very good (6)		
		5 Good (5)		
		Moderately good (4)		
		Fair (3)		
		Poor to fair (2) Poor (1)		
		4c. Habitat alteration. Score one or double che	eck and average.	
			all disturbances observed	
				ub/sapling removal
				baceous/aquatic bed removal
		Recent or no recovery (1)	Clearcutting Sec	limentation
47.0				dging
				ming
Subtotal this	page	Last revised 1 February 2001 jjm	toxic pollutants x Nut	rient enrichment

ORAM v. 5.0 Field Form Quantitative Rating

Site: Fo	rest Rido	je	Rate	er(s): JM Date:2/23/2021
47.0				
Subtotal first	page			
0.0	47.0	Metric 5. Special Wetlands.		
max 10 pts.	Subtotal	Check all that apply and score as indicated Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetlar Lake Erie coastal/tributary wetlar Lake Plain Sand Prairies (Oak O Relict Wet Prairies (10) Known occurrence state/federal Significant migratory songbird/wa	nd-unrestrict nd-restricted penings) (10 threatened e ater fowl hab	d hydrology (5) 0) endangered species (10) bitat or usage (10)
7.0	54.0	Category 1 Wetland. See Quest Metric 6. Plant communities		
max 20 pts.	Subtotal	6a. Wetland Vegetation Communities Score all present using 0 to 3 scale.	•	tion Community Cover Scale
		Aquatic Bed 1 Emergent Shrub 2 Forest	1	Absent or comprises <0.1ha (0.2471 acres) contiguous area Present and either comprises small part of wetland's vegetatio and is of moderate quality, or comprises a significant part but i of low quality
		Mudflats Open water Other:	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small par and is of high quality
			3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
		6b. horizontal (plan view) interspersion Select only one.	Narrativ	ve Description of Vegetation Community
		High (5) Moderately high (4)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
		Moderate (3) Moderately low (2) Low (1) None (0)	mod	Native spp are dominant component of the vegetation, althoug nonnative and/or disturbance tolerant native spp can be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for List. Add or deduct points for coverage Extensive >75% cover (-5)		A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity, and often, but not always, the presence of rare, threatened, or endangered spp
		Moderate 25-75% cover (-3)	0	Absent <0.1ha (0.247 acres)

Extensive >75% cover (-5)

Moderate 25-75% cover (-3)

Sparse 5-25% cover (-1)

Nearly absent <5% cover (0)

Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

1	Vegetated hummucks/tussucks
	Coarse woody debris >15cm (6in)
	Standing dead >25cm (10in) dbh
	Amphibian breeding pools

Microtopography Cover Scale

Wile oto	ography dover deale
0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest qualities
3	Present in moderate or greater amounts and of highest qualities

Low 0.1 to <1ha (0.247 to 2.47 acres)

High 4ha (9.88 acres) or more

Moderate 1 to <4ha (2.47 to 9.88 acres)

54.0 GRAND TOTAL (max 100 pts)

CATEGORY: 2

ORAM Summary Worksheet

		Circle answe or insert score	er e
Narrative Rating	Question 1. Critical Habitat	YES (N	O If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES N	O If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES N	O If yes, Category 3.
	Question 4. Significant bird habitat	YES N	O If yes, Category 3.
	Question 5. Category 1 Wetlands	YES N	O If yes, Category 1.
	Question 6. Bogs	YES N	O If yes, Category 3.
	Question 7. Fens	YES N	O If yes, Category 3.
	Question 8a. Old Growth Forest	YES N	O If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (N	O If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES N	O If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	ke Erie Wetlands – YES NO	
	Question 9e. Lake Erie Wetlands – Unrestricted YES No with invasive plants		O If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES N	O of yes, Category 3.
			O If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	1.0	category of may be 1 of 21
	Metric 2. Buffers and surrounding land use	9.0	
	Metric 3. Hydrology	22.0	
	Metric 4. Habitat	15.0	
	Metric 5. Special Wetland Communities	0.0	
	Metric 6. Plant communities, interspersion, microtopography	7.0	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	54.0	Category based on score breakpoints: 2

Wetland Categorization Worksheet

Choices	Circle one		
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes (Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit <i>moderate</i> OR <i>superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci		
Date:	2/23/2021		
Affiliation:	GCI		
Address:	720 Green Crest Dr., Westerville, OH 43081		
Phone Number:	614-895-1400		
e-mail address:	jmaniaci@gci2000.com		
Name of Wetland:	Wetland I		
Vegetation Communit(ies):	Forested, Emergent		
HGM Class(es):	Depressional, Riverine		
See Report.	ap, address, north arrow, landmarks, distances, roads, etc.		
Lat/Lon or UTM Coordinate	40.0214, -82.6597		
USGS Quad Name	Jersey		
County	Licking		
Township	Pataskala		
Section and Subsection	· auditura		
Hydrologic Unit Code	05040006		
•			
Site Visit	Yes		
National Wetland Inventory Ma			
Ohio Wetland Inventory Map			
Soil Survey	Yes		
Delineation Report/Map Yes			

Name: Wetland I	
Wetland Size (acres, hectares)	~1.15
Sketch (include north arrow, relationship with other surface waters, vegetation	zones, etc.
See Report.	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 49.0 Category:	2

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

	T	
#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES (NO) Wetland is a Category 3 Go to Question 11 Wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Complete Quantitative Rating Go to Question 6

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge		ge	Rater(s): JM	Date:2/23/2021		
2.0	2.0					
max 6 pts.	Subtotal	Select one size class and assign score.				
		>50 acres (>20.2ha) (6 pts)				
		25 to <50 acres (10.1 to <20.2ha) (5 pts)				
		10 to <25 acres (4 to <10.1ha) (4 pts)				
		3 to <10 acres (1.2 to <4ha) (3 pts)				
		2 0.3 to <3 acres (0.12 to <1.2ha) (2 pts)				
		0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)				
		<0.1 acres (<0.04ha) (0 pts)				
6.0	8.0					
		Metric 2. Upland buffers and surr	ounding land use.			
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select only		ole check.		
		WIDE. Buffers average 50m (164ft) or mo				
		4 MEDIUM. Buffers average 25m to<50m (
		NARROW. Buffers average 10m to <25 r				
		VERY NARROW. Buffers average <10m		(0)		
		2b. Intensity of surrounding land use. Select one VERY LOW. 2 nd growth or older forest, p		(7)		
		LOW. Old field (>10 years), shrubland, yo		(1)		
		3 MODERATELY HIGH. Residential, fence		e new fallow field (3)		
		1 HIGH. Urban, industrial, open pasture, ro				
17.0	25.0		w cropping, mining, conduction. (• /		
17.0	25.0	Motrio 2 Hydrology				
may 20 nto	Subtotal	Metric 3. Hydrology.	Ob Compositivity Co	ana all that amply		
max 30 pts.	Subtotai	3a. Sources of Water. Score all that apply.	3b. Connectivity. Sci			
		High pH groundwater (5) Other groundwater (3)	100 year floo	am/lake and other human use. (1)		
		1 Precipitation (1)		nd/upland (e.g. forest) complex (1)		
		3 Seasonal/Intermittent surface water (3)		an or upland corridor (1)		
		Perennial surface water (lake or stream) (on/saturation. Score 1 or dbl chk.		
		3c. Maximum water depth. Select only one and		manently inundated/saturated (4)		
		>0.7 (>27.6in) (3)		indated/saturated (3)		
		0.4 to 0.7m (15.7 to 27.6in) (2)	Seasonally in			
		1 <0.4m (<15.7in) (1)	Seasonally s	aturated in upper 30cm (12in) (1)		
		3e. Modifications to natural hydrological regime.	Score one or double check and av	verage.		
			eck all disturbances observed			
		7 Recovered (7)		source (nonstormwater)		
		Recovering (3)		grading		
		Recent or no recovery (1)	 1	ed/RR track		
		<u> </u> -	Weir Dredg	ing		
45.0	40.0	<u> </u>	x stormwater input other:			
15.0	40.0					
		Metric 4. Habitat Alteration and D				
max 20 pts.	Subtotal	4a. Substrate disturbance. Score one or double	check and average.			
		4 None or none apparent (4)				
		Recovered (3)				
		Recovering (2) Recent or no recovery (1)				
		4b. Habitat Development. Select only one and a	sesian score			
		Excellent (7)	assign score.			
		Very good (6)				
		5 Good (5)				
		Moderately good (4)				
		Fair (3)				
		Poor to fair (2)				
		Poor (1)				
		4c. Habitat alteration. Score one or double chec				
			disturbances observed			
				ub/sapling removal		
				baceous/aquatic bed removal		
			· —	imentation		
40.0				dging		
Subtotal this	nage			ming		
อนมเปเสเ เกิโร	paye	Last revised 1 February 2001 jjm to	oxic pollutants x Nuti	rient enrichment		

ORAM v. 5.0 Field Form Quantitative Rating

DRAM v. 5.0 Field Form Quantitative Rating				
Site: Forest Ridge	Rater(s): JM	Date:2/23/2021		

40.0

Subtotal first	page				
0.0	40.0				
0.0	40.0	Metric 5. Special Wetlands.			
max 10 pts.	Subtotal	Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5)			
		Lake Erie coastal/tributary wetland- Lake Erie coastal/tributary wetland- Lake Plain Sand Prairies (Oak Ope	restricted	hydrology (5)	
		Relict Wet Prairies (10) Known occurrence state/federal thr Significant migratory songbird/wate	r fowl hab	itat or usage (10)	
		Category 1 Wetland. See Question	1 Qualita	tive Rating (-10)	
9.0	49.0	Metric 6. Plant communities, i 6a. Wetland Vegetation Communities	nterspe	ersion, microtopography.	
max 20 pts.	Subtotal	Score all present using 0 to 3 scale.	Vegetat	ion Community Cover Scale	
		Aquatic Bed	0	Absent or comprises <0.1ha (0.2471 acres) contiguous area	
		2 Emergent Shrub 2 Forest	1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality	
		Mudflats Open water Other:	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality	
			3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality	
		6b. horizontal (plan view) interspersion	Morrotiv	a Description of Variation Community	
		Select only one. High (5) Moderately high (4)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species	
		Moderate (3) Moderately low (2) Low (1) None (0)	mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp	
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for List. Add or deduct points for coverage	high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity, and often, but not always, the presence of rare, threatened, or endangered spp	
		Extensive >75% cover (-5)	Mudflat	and Open Water Class Quality	
		Moderate 25-75% cover (-3)	0	Absent <0.1ha (0.247 acres)	
		Sparse 5-25% cover (-1)	1	Low 0.1 to <1ha (0.247 to 2.47 acres)	
		Nearly absent <5% cover (0)	2	Moderate 1 to <4ha (2.47 to 9.88 acres)	
		1 Absent (1)	3	High 4ha (9.88 acres) or more	
		6d. Microtopography. Score all present using 0 to 3 scale.	Microto	pography Cover Scale	
		2 Vegetated hummucks/tussucks	0	Absent	
		1 Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	1	Present very small amounts or if more common of marginal quality	
		Amphibian breeding pools	2	Present in moderate amounts, but not of highest quality or in small amounts of highest qualities	
			3	Present in moderate or greater amounts and of highest qualities	

49.0 **GRAND TOTAL (max 100 pts)** **CATEGORY: 2**

ORAM Summary Worksheet

		Circle answer or insert score	
Narrative Rating	Question 1. Critical Habitat	YES (NC	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NC	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NC	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	
Question 9d. Lake Erie Wetlands – Yunrestricted		YES NO	
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES NO	
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	2.0	Catagory or may be 1 or 2
	Metric 2. Buffers and surrounding land use	6.0	
	Metric 3. Hydrology	17.0	
	Metric 4. Habitat	15.0	
	Metric 5. Special Wetland Communities	0.0	
	Metric 6. Plant communities, interspersion, microtopography	9.0	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	49.0	Category based on score breakpoints: 2

Wetland Categorization Worksheet

Choices	Circle one		
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes (Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	No Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland J
Vegetation Communit(ies):	Forested, emergent
HGM Class(es):	Depressional
Location of Wetland include ma	ap, address, north arrow, landmarks, distances, roads, etc.
San Banart	
See Report.	
Lat/Lon or UTM Coordinate	40.0204, -82.6607
USGS Quad Name	Jersey
County	Licking
Township	Pataskala
Section and Subsection	
Hydrologic Unit Code	05040006
Site Visit	Yes
National Wetland Inventory Ma	p Yes
Ohio Wetland Inventory Map	No
Soil Survey	Yes
Delineation Report/Map	Yes

Name: Wetland J	
Wetland Size (acres, hectares)	~0.34
Sketch (include north arrow, relationship with other surface waters, vegetation	zones, etc.
See Report.	
Comments, Narrative Discussion, Justification of Category Changes	
Final Score: 43.0 Category:	Mod 2

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

г		T
#	Question	Circle One
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES NO Wetland is a Category 3 Go to Question 3 wetland. Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4
4	Significant Breeding or Concentration Area . Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b
8b	Mature forested wetlands . Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES NO Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES NO Wetland is a Category 3 Go to Question 11 Wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	Wetland should be evaluated for possible Category 3 status. Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp.	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnum frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinos Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge			Rater(s): JM	Date:2/23/2021
		٦		
2.0	2.0			
		Metric 1. Wetland Area (size).		
max 6 pts.	Subtotal	Select one size class and assign score.		
		>50 acres (>20.2ha) (6 pts)	4-)	
		25 to <50 acres (10.1 to <20.2ha) (5 pi 10 to <25 acres (4 to <10.1ha) (4 pts)	is)	
		3 to <10 acres (1.2 to <4ha) (3 pts)		
		2 0.3 to <3 acres (0.12 to <1.2ha) (3 pts))	
		0.1 to <0.3 acres (0.04 to <0.12ha) (1		
		<0.1 acres (<0.04ha) (0 pts)	,	
9.0	11.0			
0.0		Metric 2. Upland buffers and su	ırrounding land use.	
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select or		uble check.
		7 WIDE. Buffers average 50m (164ft) or		
		MEDIUM. Buffers average 25m to<50		
		NARROW. Buffers average 10m to <2		
		VERY NARROW. Buffers average <1		r. (0)
		2b. Intensity of surrounding land use. Select		- (7)
		VERY LOW. 2 nd growth or older fores LOW. Old field (>10 years), shrubland		<i>5.</i> (7)
		3 MODERATELY HIGH. Residential, fe		age new fallow field (3)
		1 HIGH. Urban, industrial, open pasture		
17.0	28.0	, , , , , , , , , , , , , , , , , , , ,	, 11 3, 3,	
17.0	20.0	Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity. S	Score all that apply.
•		High pH groundwater (5)		oodplain (1)
		Other groundwater (3)		ream/lake and other human use. (
		1 Precipitation (1)		land/upland (e.g. forest) complex (
		Seasonal/Intermittent surface water (3		rian or upland corridor (1)
		Perennial surface water (lake or stream		ation/saturation. Score 1 or dbl chk
		3c. Maximum water depth. Select only one a		ermanently inundated/saturated (4)
		>0.7 (>27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)		nundated/saturated (3) rinundated (2)
		1 <0.4m (<15.7in) (1)		saturated in upper 30cm (12in) (1)
		3e. Modifications to natural hydrological regin		
		x None or none apparent (12)	Check all disturbances observed	
		Recovered (7)		t source (nonstormwater)
		Recovering (3)		g/grading
		Recent or no recovery (1)		I bed/RR track
			Weir Drece stormwater input other	dging
12.0	41 O	L_	Stormwater input Othe	ii.
13.0	41.0	Metric 4. Habitat Alteration and	Develonment	
max 20 pts.	Subtotal	4a. Substrate disturbance. Score one or dou	<u>-</u>	
		4 None or none apparent (4)	bio chock and avolage.	
		Recovered (3)		
		Recovering (2)		
		Recent or no recovery (1)		
		4b. Habitat Development. Select only one ar	nd assign score.	
		Excellent (7)		
		Very good (6) Good (5)		
		Moderately good (4)		
		3 Fair (3)		
		Poor to fair (2)		
		Poor (1)		
		4c. Habitat alteration. Score one or double cl		
			all disturbances observed	
		6 Recovered (6)		hrub/sapling removal
		Recovering (3) Recent or no recovery (1)		erbaceous/aquatic bed removal edimentation
110		Recent or no recovery (1) x x		redging
41.0				arming
Subtotal this	page	Last revised 1 February 2001 jjm		utrient enrichment

ORAM v. 5.0 Field Form Quantitative Rating

Site: Fo	rest Ridg	je	Rate	er(s): JM	Date:2/23/2021
41.0					
Subtotal first	2000				
Subtotal ilist	page				
0.0	41.0]			
0.0	11.0	Metric 5. Special Wetland	ls.		
max 10 pts.	Subtotal	Check all that apply and score as inc			
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)	tland unraatriat	tod bydrology (10)	
		Lake Erie coastal/tributary we Lake Erie coastal/tributary we			
		Lake Plain Sand Prairies (Oa			
		Relict Wet Prairies (10)		-,	
		Known occurrence state/fede	ral threatened	endangered species (1	10)
		Significant migratory songbire			
		Category 1 Wetland. See Qu	iestion 1 Qualita	ative Rating (-10)	
2.0	43.0				
		Metric 6. Plant communiti		ersion, microto _l	pography.
max 20 pts.	Subtotal	6a. Wetland Vegetation Communitie			
		Score all present using 0 to 3 scale.		tion Community Cove	
		Aquatic Bed 0 Emergent	<u>0</u>		s <0.1ha (0.2471 acres) contiguous area comprises small part of wetland's vegetation
		0 Emergent Shrub	1		quality, or comprises a significant part but is
		2 Forest		of low quality	quality, or comprisce a significant part but to
		Mudflats	2		comprises significant part of wetland's
		Open water			moderate quality or comprises a small part
		Other:		and is of high quality	
			3		ses significant part, or more, of wetland's
				vegetation and is of	high quality
		6b. horizontal (plan view) interspers Select only one.		ve Description of Veg	retation Community
		High (5)	low	Low spp diversity ar	nd/or predominance of nonnative or
		Moderately high (4)	1011	disturbance tolerant	
		Moderate (3)	mod		inant component of the vegetation, although
		Moderately low (2)			sturbance tolerant native spp can be
		Low (1)			s diversity moderate to moderately high, but
		0 None (0)		<u> </u>	nce of rare threatened or endangered spp
			high		native species, with nonnative spp and/or
		6c. Coverage of invasive plants.			t native spp absent or virtually absent, and and often, but not always, the presence of
		Refer to Table 1 ORAM long form for	or	rare, threatened, or	
		List. Add or deduct points for cover		,,,	
		Extensive >75% cover (-5)		and Open Water Cla	
		Moderate 25-75% cover (-3)	0	Absent < 0.1ha (0.24	
		Sparse 5-25% cover (-1)	1	Low 0.1 to <1ha (0.2	
		Nearly absent <5% cover (0)	2	Moderate 1 to <4ha	
		1 Absent (1)	3	High 4ha (9.88 acre	es) or more

6d. Microtopography.

Score all present using 0 to 3 scale.

Vegetated hummucks/tussucks
Coarse woody debris >15cm (6in)
Standing dead >25cm (10in) dbh
Amphibian breeding pools

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal
	quality
2	Present in moderate amounts, but not of highest quality or in
	small amounts of highest qualities
3	Present in moderate or greater amounts and of highest qualities

43.0 GRAND TOTAL (max 100 pts)

CATEGORY: Mod 2

ORAM Summary Worksheet

		Circle ar or inse	ert	
Narrative Rating	Question 1. Critical Habitat	YES	(NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES	NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES	NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES	NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES	NO	If yes, Category 1.
	Question 6. Bogs	YES	NO	If yes, Category 3.
	Question 7. Fens	YES	_OM	If yes, Category 3.
	Question 8a. Old Growth Forest	YES	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES	NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES	NO	If yes, Category 3.
	Question 11. Relict Wet Prairies	YES	NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	2.0		category or may be to et al.
	Metric 2. Buffers and surrounding land use	9.0		
	Metric 3. Hydrology	17.0)	
	Metric 4. Habitat	13.0)	
	Metric 5. Special Wetland Communities	0.0		
	Metric 6. Plant communities, interspersion, microtopography	2.0		
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	43.0)	Category based on score breakpoints: Mod 2

Wetland Categorization Worksheet

	T a		
Choices	Circle one	ı	
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes (Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes (Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes (Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes (Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit <i>moderate</i> OR <i>superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Yes Wetland was undercategorized by this method. A written justification for recategoricization should be provided on Background Information Form	No Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:	Joe Maniaci
Date:	2/23/2021
Affiliation:	GCI
Address:	720 Green Crest Dr., Westerville, OH 43081
Phone Number:	614-895-1400
e-mail address:	jmaniaci@gci2000.com
Name of Wetland:	Wetland K
Vegetation Communit(ies):	Forested, emergent, shrub/scrub
HGM Class(es):	Depressional
See Report.	
Lat/Lon or UTM Coordinate	40 0205 - 92 6590
USGS Quad Name	40.0205, -82.6589 Jersey
County	Licking
Township	Pataskala
Section and Subsection	, atastata
Hydrologic Unit Code	
Tryatologio Offic Odde	05040006
0': \" ':	05040006
Site Visit	Yes
National Wetland Inventory Ma	Yes p Yes
National Wetland Inventory Ma Ohio Wetland Inventory Map	Yes p Yes No
National Wetland Inventory Ma	Yes p Yes

Name: Wetland K					
Wetland Size (acres, hectares)		~2.49			
Sketch (include north arrow, relationship with other surface waters, vegetation zones, etc.					
See Report.					
Comments, Narrative Discussion, Justification of Category Changes					
Final Score: 36.5 Car	ogony:	Mod 2			
i mai ocore, oolo Cal	egory:	IVIUU Z			

Scoring Boundaries Worksheet

INSTRUCTIONS: The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small and isolated from surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Unit if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a mitigation site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or other parts of a single wetland.	Yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	N/A	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes, or rivers, or for dual classifications.	Yes	

Narrative Rating

INSTRUCTIONS: Answer each of the following questions. Questions 1, 2, 3, and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/odnr/dnap/. The remaining questions are designed to be answered primarily from the results of the field visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical and biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Reynoldsburg Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle One	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001 of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	NO Go to Question 2
2	Threatened or Endangered Species . Is the wetland known to contain an individual of, or documented occurrences of federally or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	NO Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland. Go to Question 4	NO Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or non breeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland. Go to Question 5	NO Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundunacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland. Go to Question 6	NO Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) <25%?	YES Wetland is a Category 3 wetland. Go to Question 7	NO Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland. Go to Question 8a	NO Go to Question 8a

#	Question	Circle One
8a	"Old Growth Forest." Is the wetland a forested wetland and the forest	YES (NO)
oa	is characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Wetland is a Category 3 Go to Question 8b wetland. Go to Question 8b
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands . Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES NO Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species can also be present?	YES NO Wetland is a Category 3 Go to Question 9e wetland. Go to Question 10
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings). Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES NO Wetland is a Category 3 Go to Question 11 wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1? Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	YES NO Wetland should be complete evaluated for possible Category 3 status. Go to Question 6

Table 1. Characteristic plant species.

ive/exotic spp. fen specie	bog species	Oak Opening species	wet prairie species
um salicaria phyllum spicatum minor ris arundinacea mites australis nogeton crispus nculus ficaria num frangula a angustifolia a xglauca Tygadenus elegans va Cacalia plantaginea Carex sterilis Carex stricta Deschampsia caespit Eleocharis rostellata Eriophorum viridican Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capilla Salix candida Salix myricoides	cr. glaucus Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus inatum Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrotis stricta Calamagrotis canadensis Quercus palustris	wet prairie species Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthun grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginanum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Forest Ridge			Rater(s): JM	Date:2/23/2021
		٦		
2.0	2.0			
		Metric 1. Wetland Area (size).		
max 6 pts.	Subtotal	Select one size class and assign score.		
		>50 acres (>20.2ha) (6 pts)	-4-)	
		25 to <50 acres (10.1 to <20.2ha) (5 p 10 to <25 acres (4 to <10.1ha) (4 pts)		
		3 to <10 acres (1.2 to <4ha) (3 pts)		
		2 0.3 to <3 acres (0.12 to <1.2ha) (2 pts)	3)	
		0.1 to <0.3 acres (0.04 to <0.12ha) (1		
		<0.1 acres (<0.04ha) (0 pts)	• ,	
6.0	8.0			
	0.0	Metric 2. Upland buffers and s	urrounding land use.	
max 14 pts.	Subtotal	2a. Calculate average buffer width. Select of		uble check.
		WIDE. Buffers average 50m (164ft) of	or more around wetland perimeter (7)	
		MEDIUM. Buffers average 25m to<5		
		4 NARROW. Buffers average 10m to <		
		VERY NARROW. Buffers average <		r. (0)
		2b. Intensity of surrounding land use. Select		- (7)
		VERY LOW. 2 nd growth or older fores LOW. Old field (>10 years), shrublan		;. (<i>1</i>)
		3 MODERATELY HIGH. Residential, for		age new fallow field (3)
		1 HIGH. Urban, industrial, open pasture		
17.0	25.0	, , , , , ,	7 11 37 37	,
17.0	20.0	Metric 3. Hydrology.		
max 30 pts.	Subtotal	3a. Sources of Water. Score all that apply.	3b. Connectivity.	Score all that apply.
·		High pH groundwater (5)		oodplain (1)
		Other groundwater (3)		ream/lake and other human use. (
		1 Precipitation (1)		land/upland (e.g. forest) complex (
		Seasonal/Intermittent surface water (3		rian or upland corridor (1)
		Perennial surface water (lake or stream		ation/saturation. Score 1 or dbl chk
		3c. Maximum water depth. Select only one		ermanently inundated/saturated (4)
		>0.7 (>27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)		nundated/saturated (3) inundated (2)
		1 <0.4m (<15.7in) (1)		saturated in upper 30cm (12in) (1)
		3e. Modifications to natural hydrological regi		
			Check all disturbances observed	
		Recovered (7)	Ditch poir	t source (nonstormwater)
		Recovering (3)		g/grading
		Recent or no recovery (1)		l bed/RR track
				dging
40.5	20.5	L	stormwater input other	IT:
12.5	29.5	Motrie 4 Habitat Alteration and	d Dovolonment	
max 20 pts.	Subtotal	Metric 4. Habitat Alteration and 4a. Substrate disturbance. Score one or do		
111ax 20 pts.	Oubtotai	4 None or none apparent (4)	uble check and average.	
		Recovered (3)		
		Recovering (2)		
		Recent or no recovery (1)		
		4b. Habitat Development. Select only one a	nd assign score.	
		Excellent (7)		
		Very good (6)		
		Good (5)		
		4 Moderately good (4) Fair (3)		
		Poor to fair (2)		
		Poor (1)		
		4c. Habitat alteration. Score one or double of		
			call disturbances observed	
		6 Recovered (6)		nrub/sapling removal
		3 Recovering (3)		erbaceous/aquatic bed removal
00 =		Recent or no recovery (1)		edimentation
29.5		<u> </u>		redging arming
Subtotal this	page	Last revised 1 February 2001 jjm		utrient enrichment

ORAM v. 5.0 Field Form Quantitative Rating

Site: For	rest Rido	је	Rate	r(s): JM	Date:2/23/2021
29.5					
Subtotal first	page				
0.0	29.5	Metric 5. Special Wetlands.			
max 10 pts.	Subtotal	Check all that apply and score as indicate Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetlan Lake Erie coastal/tributary wetlan Lake Plain Sand Prairies (Oak Open Relict Wet Prairies (10) Known occurrence state/federal the Significant migratory songbird/wa	d-unrestrict d-restricted penings) (10 hreatened e ter fowl hab	hydrology (5) endangered species (10) itat or usage (10)	
7.0	36.5	Category 1 Wetland. See Question Metric 6. Plant communities,			graphy.
max 20 pts.	Subtotal	6a. Wetland Vegetation Communities Score all present using 0 to 3 scale.	Vegetat	ion Community Cover S	Scale
		Aquatic Bed	0		0.1ha (0.2471 acres) contiguous area
		2 Emergent 1 Shrub 2 Forest	1	Present and either com	nprises small part of wetland's vegetation ality, or comprises a significant part but is
		Mudflats Open water Other:	2	vegetation and is of mo	nprises significant part of wetland's oderate quality or comprises a small part
			3	Present and comprises vegetation and is of high	s significant part, or more, of wetland's
		6b. horizontal (plan view) interspersion Select only one.	Narrativ	ve Description of Vegeta	ation Community
		High (5) Moderately high (4)	low	Low spp diversity and/o disturbance tolerant na	or predominance of nonnative or attive species
		Moderate (3) Moderately low (2) Low (1) None (0)	mod	nonnative and/or distur present, and species d	nt component of the vegetation, although bance tolerant native spp can be iversity moderate to moderately high, but of rare threatened or endangered spp
		6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for List. Add or deduct points for coverage	high	disturbance tolerant na	ive species, with nonnative spp and/or tive spp absent or virtually absent, and often, but not always, the presence of dangered spp

Extensive >75% cover (-5)

Moderate 25-75% cover (-3)

Sparse 5-25% cover (-1)

Nearly absent <5% cover (0)

1 Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

1	Vegetated hummucks/tussucks
	Coarse woody debris >15cm (6in)
	Standing dead >25cm (10in) dbh
	Amphibian breeding pools

Mudifat and Open Water Class Quality			
0	Absent <0.1ha (0.247 acres)		
1	Low 0.1 to <1ha (0.247 to 2.47 acres)		
2	Moderate 1 to <4ha (2.47 to 9.88 acres)		
3 High 4ha (9.88 acres) or more			

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal
	quality
2	Present in moderate amounts, but not of highest quality or in
	small amounts of highest qualities
3	Present in moderate or greater amounts and of highest qualities

36.5 GRAND TOTAL (max 100 pts)

CATEGORY: Mod 2

ORAM Summary Worksheet

		Circle answer or insert score	
Narrative Rating	Question 1. Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO.	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO.	If yes, evaluate for Category 3: may be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted	YES NO	If yes, Category 3.
	Question 9e. Lake Erie Wetlands – Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
	Question 10. Oak Openings	YES NO	
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3: may be 1 or 2.
Quantitative Rating	Metric 1. Size	2.0	Category or may be 1 or 2
	Metric 2. Buffers and surrounding land use	6.0	
	Metric 3. Hydrology	17.0	
	Metric 4. Habitat	12.5	
	Metric 5. Special Wetland Communities	0.0	
	Metric 6. Plant communities, interspersion, microtopography	7.0	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.state.oh.us/dsw/401/401.html to determine the wetland's category based on its quantitative score	36.5	Category based on score breakpoints: Mod 2

Wetland Categorization Worksheet

Choices	Circle one		
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Yes Wetland is categorized as a Category 3 wetland	No	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM.
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Yes Wetland should be evaluated for possible Category 3 status	No	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to: Narrative Rating Nos. 5	Yes Wetland is categorized as a Category 1 wetland	No	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland ha been under-categorized by the ORAM.
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Yes Wetland is assigned to the appropriate category based on the scoring range.	No	If the score of the wetland is located within the scoring range of a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall within the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Yes Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria.	No	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of the non-rapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC Rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Wetland was under- categorized by this method. A written justification for	Wetland is assigned to category as determined by the ORAM.	A wetland may be under-categorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categoricization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.