LARGE FILING SEPERATOR SHEET

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DESCRIPTION OF DOCUMENT: Application American Municipal Power sedges (FAC-OBL), box elder (FAC+), soft rush (FACW+), white grass (FACW), withered viburnum (FACW), and spotted touch-me-not (FACW). The hydrologic regime of these wetlands ranges from irregularly inundated or saturated (≥5 percent-12.5 percent of the growing season) to seasonally inundated or saturated (>12.5 percent-25 percent of the growing season) (Environmental Laboratory, 1987).

Field investigations identified two wetlands, totaling 0.25 acres, as PEM/PSS. The locations of these wetlands (AN-W1 and W1) are shown on Figures 3A and 3C. These wetlands occur on soils that meet the hydric soil criterion, while also revealing primary and/or secondary hydrology indicators and a dominance of hydrophytic vegetation.

Palustrine Emergent/Forested (PEM/PFO): Wetlands classified as palustrine emergent/forested are characterized by grasslike plants, broad-leaved plants, rushes, and woody vegetation 20 feet tall or taller (Cowardin et al., 1979). These areas are dominated by wetland plants such as reed canary grass (FACW), deer-tongue (FAC+), American sycamore (FACW-), green ash (FACW), silver maple (FACW), sedges (FAC-OBL), spotted joe-pye weed (FAC), sensitive fern (FACW), small-flowered agrimony (FAC), soft rush (FACW+), and woolgrass (FACW+). The hydrologic regime of this wetland ranges from irregularly inundated or saturated (5 percent to 12.5 percent of the growing season) to seasonally inundated or saturated (>12.5 percent to 25 percent of the growing season) (Environmental Laboratory, 1987).

Field investigations identified two wetlands, totaling 0.18 acres, as PEM/PFO. The locations of these wetlands (D3 and D4) are shown on Figure 3A through 3C. These wetlands occur on soils that meet the hydric soil criterion, while also revealing primary and/or secondary hydrology indicators and a dominance of hydrophytic vegetation.

Palustrine Open Water (POW): Wetlands classified as palustrine open water are shallow, open water plant communities that generally have water depths of less than 6.6 feet (2 meters). Submergent, floating and floating-leaved aquatic vegetation including pondweeds, water-lilies, water milfoil, coontail, and duckweeds characterize this wetland type. Size can vary from a one-quarter acre pond, to a long oxbow of a river or shallow bay of a lake. Floating vegetation may or may not be present depending upon the effects of the season, wind, availability of nutrients, and aquatic weed control efforts. The hydrologic regime of these wetlands are generally regularly to permanently inundated (Environmental Laboratory, 1987).

Field investigations identified one wetland, totaling 0.18 acres, as POW. The location of this wetland (WB-1) is shown on Figure 3A through 3C. These wetlands occur on soils that meet the hydric soil criterion, while also revealing primary and/or secondary hydrology indicators and a dominance of hydrophytic vegetation.

Palustrine Open Water/Emergent (POW/PEM): Wetlands identified as palustrine open water/emergent are shallow, mixed emergent/open water plant communities that generally have water depths of less than 6.6 feet (2 meters). Submergent, floating and floating-leaved aquatic vegetation including pondweeds, water-lilies, water milfoil, coontail, and duckweeds along with grasslike plants, true grasses, rushes and broad-leaved plants characterize this wetland type. The dominant vegetation that was observed in these two wetlands located onsite includes Potamogeton spp. (OBL), broadleaf and narrowleaf cattails (OBL), sedges (FAC-OBL), soft rush (FACW+), ricecut grass (OBL), woolgrass (FACW+), purple leaf willowherb (OBL), and white turtlehead (OBL). The hydrologic regime of these wetlands are generally regularly to permanently inundated (Environmental Laboratory, 1987).

Field investigations identified two wetlands, totaling 0.17 acres, as POW/PEM. The location of these wetlands (BM-W4 and D-6) are shown on Figure 3A through 3C. These wetlands occur on soils that meet the hydric soil criterion, while also revealing primary and/or secondary hydrology indicators and a dominance of hydrophytic vegetation.

3.1.5 U.S. Army Corps of Engineers Section 404 Requirements

Section 404 of the Clean Water Act requires authorization from the Secretary of the Army, acting through the ACOE, for the discharge of dredged or fill material into all waters of the United States. As a consequence of direct connection or adjacency to surface drainageways to the Ohio River, all wetlands delineated at the project site are considered non-isolated.

3.2 OEPA ORAM V5.0 WETLAND EVALUATION

The ORAM scores for the wetlands identified within the limits of the project area ranged from a low of 8/100 (Wetland AFS-W1) to a high of 44/100 (Wetlands D-4 and W-1). These wetlands typically formed along surface drainageways, in areas of surface water retention, at the base of slopes, and adjacent to roadways. Copies of the ORAM scoring sheets for each delineated wetland are provided in Appendix B.

Six Category 1 wetlands with emergent, scrub-shrub, and/or forested components were identified at the project site. These wetlands were small in size, ranging from 0.02 to 0.18 acre. These wetlands typically exhibited limited plant community development with a moderate to high percentage of invasive species, poor plant community interspersion, generally recovering or recent or no recovery to natural hydrology, substrate, and habitat, and narrow upland buffers with low to moderately high surrounding land uses.

Fifteen Category 2 wetlands with emergent, scrub-shrub, forested, and/or open water components were identified at the project site. These wetlands ranged in size from 0.01 to 0.33 acre. These Category 2 wetlands generally exhibited moderate to high quality plant communities with few invasives, moderate to good plant community interspersion, low to high intensity surrounding land, and recovered and/or no modification to natural hydrology and habitat.

No Category 3 wetlands were identified at the project site.

3.3 OEPA PRIMARY HEADWATER HABITAT EVALUATION

Sixty-seven primary headwater habitat evaluations (HHEI) were conducted on the streams identified within the limits of the study area. These streams were identified using USGS topographic maps, NAIP aerial photography, *The Soil Survey of Meigs County, Ohio*, and field reconnaissance. The locations of all sixty-seven primary headwater habitat evaluation (HHEI) areas are shown on Figures 3A through 3D. Copies of the HHEI data sheets are provided in Appendix C. Selected color photographs are provided in Appendix D.

The survey identified the following HHEI stream classes: 23 Class I streams, 7 Modified Class I streams, 19 Class II streams, 7 Modified Class II streams, and 11 Class III streams. Note that each HHEI evaluation was conducted on a representative reach of each headwater stream. Some of the first, second, and third order streams at the Site were not evaluated using the HHEI methodology. During the site investigation, it was determined that the character and class of these particular stream segments did not differ significantly from each of their mainstem streams (i.e. the streams to which they drain).

SUMMARY TABLE OF HEADWATER STREAMS AT THE SITE

Stream Identifier	HHEI Score	HHEI Class	Stream Identifier	HHEI Score	HHEI Class
an-s1	42	Class II	bs-9	13	Class I
as-s1	41	Modified Class II	bs-10	54	Class II
as-s2	41	Modified Class II	bs-11	55	Class III
bm-s1	32	Class II	bs-12	43	Class II
bm-s2	11	Class I	bs-13	86	Class III
bm-s3	11	Class I	bs-14	49	Class II
bm-s4	12	Class I	bs-15	40	Class II
bm-s5	21	Class I	bs-16	47	Class II
bm-s6	41	Class II	cs-1	25	Class I
bm-s7	17	Class I	cs-1-2	69	Class III
bm-s8	11	Class I	cs-2	42	Class II
bm-s9	53	Class II	cs-3-1	47	Class II
bm-s10	16	Class I	cs-3-2	58	Class III
bm-s11	23	Class I	cs-4	34	Modified Class II
bm-s12	36	Class II	cs-4-2	77	Class III
bm-s13	81	Class III	cs-5-2	23	Modified Class I
bm-s14	55	Class III	cs-6	21	Class I
bm-s15	23	Class I	ds-1-5	45	Modified Class II
bm-s16	40	Class II	ds-1-11	22	Class I
bm-s17	35	Class II	ds-2-2	40	Class II
bm-s18	24	Class I	ds-2-5	59	Class III
bm-s19	24	Class I	ds-2-10	52	Class III
bm-s20	33	Class II	ds-3a	17	Modified Class I
bm-s21	23	Class I	ds-3b	17	Modified Class I
bs-1	28	Modified Class I	ds-3c	17	Modified Class I
bs-1-2	40	Modified Class II	ds-4	31	Modified Class II
bs-1-3	29	Modified Class I	s-1	27	Class I
bs-2	48	Modified Class II	s-2	68	Class III
bs-2-2	43	Class II	s-3	81	Class III
bs-3	23	Class I	s-4	37	Class II
bs-4	15	Class I	s-5	64	Class II
bs-5	19	Class I	s-6	12	Class I
bs-6	11	Class I	s-7	12	Class I
bs-8	16	Modified Class I			

Class I Headwater Streams – Twenty-three Class I headwater streams were identified during the November and December field investigation with scores ranging from a low of 11 to a high of 27. The substrate composition of these streams was generally limited to sand, silt, clay, leaf pack/woody debris, and muck. The maximum pool depth was less than 5 centimeters and the bank full width generally did not exceed 1.0 meter.

Modified Class I Headwater Streams – Seven Modified Class I headwater streams were identified during the November and December field investigation with scores ranging from a low of 16 to a high of 29. All seven of these streams showed indications of stream channel modifications, such as channelization, culverting, moderate to severe bank erosion, and filling. These modifications resulted in these streams scored a modified Class I designation. Similar to Class I headwater streams, the substrate of these streams was generally sand, silt, muck, leaf pack/woody debris, and clay. The maximum depth on all seven streams was less than 5 centimeters with a bank full width not exceeding 1.5 meters.

Class II Headwater Streams — Nineteen Class II headwater streams were identified during the November and December field investigation with scores ranging from a low of 32 to a high of 64. The substrate composition of these streams was generally dominated by sand, clay, silt, leaf pack/woody debris, and gravel. Cobble, boulder, and boulder slabs were also noted as less dominant substrate types in this Class of stream. With the exception of Streams BM-S9 and S-5, the maximum pool depth was less than 10 centimeters. The bank full width for this group of streams was generally between 1.5 and 3.0 meters.

Modified Class II Headwater Streams – Seven Modified Class II headwater streams were evaluated during the November and December field investigation with scores ranging from a low of 31 to a high of 48. Generally, the most dominant substrate types for these modified streams are sand, sand, silt, and leaf pack/woody debris. Boulder, boulder slab, cobble, and gravel were also noted as less dominant substrate types. The maximum pool depth ranged from a slightly moist channel to a maximum pool depth of 1 inch for Stream DS-1-5. The average bank full width for these streams was generally between 1.0 and 3.0 meters, with the exception of Streams AS-S1 and AS-S2 which had bank full width's greater than 4.0 meters. All seven of these headwater streams showed

indications of stream channel modification (e.g. channelization, culverting, etc.), which in turn resulted in a modified class designation.

Class III Headwater Streams – Eleven Class III headwater streams were evaluated during the November and December field investigation with scores ranging from a low of 52 to a high of 86. The main features of these streams that generally distinguish them from Class I and II streams include a natural channel (i.e. no indication of stream channel modification), generally high percentages of boulder, boulder slab, cobble, and gravel, maximum pool depths ranging from 0 to approximately 52 centimeters, and a bank full width generally between 1.5 and 4 meters.

3.4 THREATENED AND ENDANGERED SPECIES HABITAT SURVEY

The Ohio Department of Natural Resources – Division of Natural Areas and Preserves (ODNR-DNAP) was contacted regarding the potential for occurrence of rare, threatened, and endangered species within the project study area. URS also performed a literature review of available USFWS resources regarding species of concern in the project vicinity.

In a letter response dated May 10, 2004, the ODNR-DNAP reported 10 records of rare or endangered species in the vicinity of the project study area. These ten species include:

Scientific Name	Common Name	State Status
Cicindela marginipennis	Cobblestone Tiger Beetle	Threatened
Heteranthera reniformis	Mud-plantain	Endangered
Hiodon alosoides	Goldeye	Endangered
Macrhybopsis aestivalis	Speckled Chub	Endangered
Obliquaria reflexa	Threehorn Wartyback	Threatened
Obliquaria reflexa	Threehorn Wartyback	Threatened
Opuntia humifusa	Common Prickly Pear	Potentially Threatened
Percina copelandi	Channel Darter	Threatened
Scaphiopus holbrookii	Eastern Spadefoot Toad	Endangered
Spermacoce glabra	Smooth Buttonweed	Potentially Threatened

The USFWS literature review indicated that the proposed project is located within the range of the federally endangered Indiana bat (Myotis sodalis) and three federally endangered species of mussels. These mussel species include the pink mucket pearly mussel (Lampsilis orbiculata), the fanshell mussel (Cyprogenia stegaria), and the sheepnose mussel (Plethobasus cyphyus).

A discussion of each state and federally listed species will be presented in the following sections. A list of animal species identified or likely to occur in the vicinity of the study site is shown in Table 2. A comprehensive list of plant species in the vicinity of the study site is shown in Table 3.

3.4.1 Plants

Three records of plant species of concern were identified in the vicinity of the project study area and include the mud-plantain (*Heteranthera reniformis*), the common prickly pear (*Opuntia humifusa*), and the smooth buttonweed (*Spermacoce glabra*).

Mud-plantain (Heteranthera reniformis): This perennial aquatic herb is known to occur submersed or floating in ponds, ditches or rivers, or creeping along muddy river margins. The potential hazard to this species of concern is generally limited to impacts or disturbances to the aquatic habitat. Note about possible habitat on site. This plant species of concern was not identified during the August field investigation.

Common Prickly Pear (Opuntia humifusa): This hardy cactus with oblong, flattened pads was previously recorded in the southwestern portion of the study area, in the vicinity of the Letart Falls cemetery. This species of concern prefers areas of full sun on well-drained soils, such as sandy fields and hillsides. The primary hazard to this species of concern is overgrowth by woody species as a consequence of succession. Low to moderate quality habitat was observed in the sandy and sandy loam fields and field borders on the western and southwestern portion of the study area. This plant species of concern was not identified during the August field investigation.

Smooth Buttonbush (Spermacoce glabra): This perennial herb is most commonly found on the muddy shores and low banks of the Ohio River, but is also found in swamps and wet woods. Low quality habitat for this species of concern was identified along the right descending bank of the Ohio River. Appropriate habitat for this species of concern does not generally exist on the eastern portion of the study area as a consequence of either, 1) changes in site headwater stream flow conditions as a consequence of weather events or 2) as a result of overshading by second growth and mature woody vegetation throughout much of the central and eastern portion of the study area. This plant was not identified during the August field investigation.

3.4.2 Aquatic species

Habitats for aquatic species of concern including fish, crustaceans, and mussels were not assessed during this survey. ODNR-DNAP reported records of one threatened mussel species and three fish species of concern within the vicinity of the project study area. These species include the Threehorn Wartyback mussel (Obliquaria reflexa), the Channel Darter (Percina copelandi), the Goldeye (Hiodon alosoides), and the Speckled Chub (Macrhybopsis aestivalis). In addition, URS also conducted a literature review of available USFWS resources regarding species of concern in the project vicinity. The USFWS identified the study site to be in the historic range of three state and federally endangered species of mussels. These species include the pink mucket pearly mussel (Lampsilis orbiculata), the fanshell mussel (Cyprogenia stegaria), and the sheepnose mussel (Plethobasus cyphyus).

3.4.3 Amphibians

The Eastern Spadefoot Toad (Scaphiopus holbrooki), the only toad identified on Ohio's endangered species list, was previously recorded by ODNR immediately north of the project study area, as illustrated on Figure 3A. This amphibian typically occurs in brush-covered, forested, and/or cultivated areas that consist of loose sediments such as gravel, sand, and sandy loam. With the exception of emerging from the soil to eat or possibly reproduce, the Eastern Spadefoot generally remains burrowed underground. Potential habitat for this species of concern exists on the project study site.

3.4.4 Reptiles

No reptile species of concern were identified in any agency correspondence. No suitable habitat for reptile species of concern was observed within the project study area.

3.4.5 Birds

No bird species of concern were identified in any agency correspondence. No suitable habitat for bird species of concern was observed within the project study area.

3.4.6 Mammals

Indiana bat (Myotis sodalis): The Indiana bat is considered to be an endangered species by the federal government and the State of Ohio. This species is a possible inhabitant of

Meigs County. The Indiana bat is a migratory species, wintering in a few limestone cave hibernacula principally located in Indiana, Kentucky and Missouri. Summer roosting and foraging areas are typically farther north in the glaciated regions of Indiana, Illinois, and Ohio. Males and gravid females may arrive in northern regions in April and remain until October. The bat typically roosts under the exfoliating (loose) bark of live or dead trees of various rough-barked tree species. The 8- to 10-inch size classes of several species of hickory (*Carya* spp.), oak (*Quercus* spp.), ash (*Fraxinus* spp.), and elm (*Ulmus* spp.) are utilized in live form as roost trees. These tree species and many others may be used when dead, if there are adequately sized patches of loosely adhering bark or open cavities. The structural configuration of forest stands favored for roosting includes; (1) a mixture of favored loose-barked trees with 60 to 80 percent canopy closure and (2) a low density sub-canopy (less than 30 percent between about 6 feet high and the base canopy).

The vegetation throughout much of the wooded portion of the eastern half of the project area consists of mature, second growth tree species. In particular, the wooded portions along Streams BS-13, BS-14, and BS-15 likely provides high quality habitat for the Indiana Bat. This general area contains many oaks (*Quercus* spp.) and elms (*Ulmus* spp.) of an appropriate class size along with exfoliating American sycamore (*Plantanus occidentalis*) and black cherry (*Prunus serotina*) individuals. Additional Indiana bat habitat advantages in this area include snags, numerous tree cavities or hollow portions of tree boles and limbs, a generally open subcanopy, and close proximity to several mapped streams, as illustrated on Figure 3B.

The wooded area in the vicinity of Streams S-4 and S-5 along with the wooded area in the extreme southeast portion of the Site provides moderate to high quality Indiana bat habitat. Similar to the high quality Indiana Bat habitat discussed above, these two areas contain oaks (*Quercus* spp.) of an appropriate class size along with exfoliating black cherry (*Prunus serotina*) and American sycamore (*Plantanus occidentalis*) individuals. Proximity to water in the form of nearby wetland areas, stream channels, and backwater areas and a relative lack of understory growth throughout indicate excellent foraging potential for the Indiana Bat.

The wooded portions along Stream DS-2-10, as shown on Figure 3C, is likely to provide low to moderate quality habitat for the Indiana Bat. This portion of the study area contains many exfoliating hickory (*Carya* spp.) individuals that may be potentially used

for roosting. This area also contains some tree cavities as well as a relatively open subcanopy along the reach of Stream DS-2-10.

Specific Indiana Bat surveys were not performed during the field reconnaissance, as it was not in the scope of this siting study.

This mammal was not identified during the November and December field investigation.

3.4.7 Insects

Cobblestone Tiger Beetle (*Cicindela marginipennis*): ODNR-DNAP reported previous records of this arthropod within a 5-mile radius of the project study area. This rare beetle is typically restricted to cobblestone islands and deltas in large rivers. Suitable habitat for this species of concern was not observed within the immediate project area. This insect was not identified during the November and December field investigation.

4.0 SUMMARY

URS conducted a jurisdictional wetland delineation, stream assessment, and threatened and endangered species survey of an approximately 1,000-acre site, located in the Letart Falls area, Meigs County, Ohio. AMP Ohio is proposing construction of a 1,000 megawatt (MW), coal fired electric generating facility at the Site along with a coal combustion by-products landfill, and a barge dock and unloading facility. Site delineation and assessment work began November 28, 2005 and was completed December 2, 2005.

Twenty-one wetlands, including 5 different Cowardin wetland types were identified within the project study area, including 14 palustrine emergent wetlands, 2 palustrine emergent/scrub-shrub wetlands, 2 palustrine emergent/forested wetlands, 1 palustrine open water wetland, and 2 palustrine open water/emergent wetlands. Identified wetlands were evaluated utilizing ORAM v5.0 qualitative evaluation method for categorizing wetlands. The ORAM scores for the wetlands indicated the following: 5 Category 1 emergent wetlands, 1 Category 1 wetland with emergent and forested components, 9 Category 2 emergent wetlands, 2 Category 2 wetlands with emergent and scrub-shrub components, 1 Category 2 wetland emergent and forested components, 1 Category 2 open water wetland, and 2 Category 2 mixed emergent/open water wetlands. No Category 3 wetlands were identified during the November and December field investigation.

Sixty-seven primary headwater habitat evaluations (HHEI) were conducted on the streams identified within the limits of the study area. The survey identified the following HHEI stream classes: 23 Class I streams, 7 Modified Class I streams, 19 Class II streams, 7 Modified Class II streams, and 11 Class III streams.

ODNR-DNAP reported 10 records of rare or endangered species within 5 miles of the Site. Of these ten species records, ODNR identified records of the Eastern Spadefoot Toad (Scaphiopus holbrookii) and the Common Prickly Pear (Opuntia humifusa) in the immediate project vicinity. The USFWS literature review indicated that the proposed project is located within the range of the federally endangered Indiana bat (Myotis sodalis) and three federally endangered species of mussels. These mussel species include the pink mucket pearly mussel (Lampsilis orbiculata), the fanshell mussel (Cyprogenia stegaria), and the sheepnose mussel (Plethobasus cyphyus). None of theses species of concern were identified during the November and December field investigation. However, potential habitat for the Indiana Bat, Eastern Spadefoot Toad, and several aquatic species of concern were identified during the field investigation.

5.0 REFERENCES

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TABLE 1 ANIMAL SPECIES IDENTIFIED OR LIKELY TO OCCUR IN THE STUDY AREA

Amphibians	Reptiles	Birds	Mammals
American toad	Black rat snake	American crow	Big brown bat
Bullfrog	Broad-headed skink	American kestrel	Coyote
Dusky salamander	Copperhead	American redstart	Deer mouse
Fowler's toad .	Eastern box turtle	American robin	Eastern chipmunk
Gray treefrog	Eastern garter snake	American woodcock	Eastern cottontail rabbit
Green frog	Eastern hognose snake	Baltimore oriole	Eastern gray squirrel
Jefferson salamander	Eastern milk snake	Belted kingfisher	Eastern mole
Longtail salamander	Eastern worm snake	Blue jay	Eastern pipistrel
Marbled salamander	Five-lined skink	Broad-winged hawk	Fox squirrel
Mountain chorus frog	Ground skink	Brown thrasher	Gray fox
Northern leopard frog	Midland painted turtle	Brown-headed cowbird	Hairytail mole
Northern red salamander	Northern black racer	Carolina chickadee	Hoary bat
Northern slimy salamander	Northern brown snake	Carolina wren	House mouse
Northern spring peeper	Northern fence lizard	Common flicker	Least weasel
Northern spring salamander	Northern ring-necked snake	Downy woodpecker	Little brown bat
Pickeral frog	Northern water snake	Eastern bluebird	Long-tailed weasel
Ravine salamander	Rough green snake	Eastern kingbird	Meadow jumping mouse
Redback salamander	Timber rattlesnake	Eastern meadowlark	Meadow vole
Red-spotted newt		European starling	Opossum
Southern tow-lined salamander		Hairy woodpecker	Pine vole
Spotted salamander		House sparrow	Pygmy shrew
Wood frog		Indigo bunting	Raccoon
		Kentucky warbler	Red bat
		Killdeer	Red fox
		Mockingbird	Red squirrel
		Mourning dove	Short-tailed shrew
		Northern cardinal	Silver-haired bat
		Osprey	Southern flying squirrel
		Pileated woodpecker	Striped skunk
		Red-eyed vireo	White-footed mouse
		Red-tailed hawk	White-tailed deer
		Red-winged blackbird	Woodchuck
		Rock dove	
		Ruffed grouse	
		Tufted titmouse	
		Turkey vulture	
		Whip-poor-will	
		White-breasted nuthatch	
		Wild turkey	
		Wood thrush	
		Yellow warbler	
		Yellow-throated vireo	

TABLE 2

WETLAND VEGETATION AND INDIVIDUAL SPECIES WETLAND DESIGNATION FROM AMP-OHIO POWER PLANT SITE MEIGS COUNTY, OHIO

Scientific Name	Common Name	Wetland Status	Upland	Wetland
Acer negundo	Box elder	FAC+	X	X
Acer rubrum	Red maple	FAC	Х	X
Acer saccharinum	Silver maple	FACW	X	X
Achillea millefolium	Yarrow	FACU	Х	
Acorus calamus	Calamus	OBL		x
Agrimonia parviflora	Small-flowered agrimony	FAC	X	X
Agrostis alba (gigantea)	Redtop	FACW	X	X
Ailanthus altissima	Tree of heaven	NI	X	
Alliaria petiolata	Garlie mustard	FACU-	X	i
Allium canadense	Wild onion	FACU	X	
Amaranthus retroflexus	Redroot amaranth	FACU	X	
Ambrosia ariemisiifolia	Common ragweed	FACU	x	
Ambrosia trifida	Giant ragweed	FAC	l x	X
Andropogon virginicus	Broomsedge	FACU	x	
Aristida spp.	Wiregrass	NO	x	X
Artemisia vulgaris	Wormwood	UPL	x	
Asclepias incarnata	Swamp milkweed	OBL		x
Asclepias syriaca	Common milkweed	FACU-	l x	
Aster spp.	Heath aster	NI	X	
Bidens frondosa	Devil's beggartick	FACW	X	x
Boehmeria cylindrica	False nettle	FACW+	x	1 x 1
Brassica rapa	Field mustard	NI	l x	
Calamagrostis canadensis	Bluejoint	FACW+	l \bar{x}	x l
Carex blanda	Eastern woodland sedge	FAC	X	
Carex camosa	Longhair sedge	FACW		l x l
Carex frankeii	Frank's sedge	OBL		l x l
Carex Jurida	Shallow sedge	OBL		. x
Carex spp.	Sedges	FAC-OBL		x
Carex stricta	Upright sedge	OBL	,	\mathbf{x}
Carya cordiformis	Bitternut hickory	FACU+	x	
Carya glabra	Pignut hickory	FACU-	x x	
Carya ovata	Shagbark hickory	FACU-	ı x	\ '
Celtis occidentalis	Hackberry	FACU	x	
Centaurea maculosa	Spotted knapweed	NI	x	
Cephalanthus occidentalis	Buttonbush	OBL	1 1	l x
	Redbud	FACU-	l x	
Cercis canadensis	White turtlehead	OBL	1 ^	l x
Chelone glabra	Lambsquarter	FACU+	l x	^
Chenopodium album	Oxeye daisy	NI	l x	
Chrysanthemum leucanthemum	Chicory	NI	l x	
Cichorium intybus	Canada thistle	FACU	l â	
Cirsium arvense	Rull thistle	FACU-	l x	
Cirsium vulgare		FAC	Î	x
Convolvulus sepium	Hedge bindweed	NI.	X	^
Cornus stolinifera	Flowering dogwood	FACW	x	l x
Cyperus esculentus	Yellow nutsedge	FACU	x	_ A
Dactylis glomerata	Orchardgrass	NI	X	
Daucus carota	Queen Anne's lace	NI NI	X	
Dipsacus sylvestris	Teasel		**-	
Elaeagnus umbellata	Autumn olive	NI ONI	X	x
Eleocharis acicularis	Needle spikerush	OBL	_ <u></u>	A

TABLE 2 - CONTINUED

WETLAND VEGETATION AND INDIVIDUAL SPECIES WETLAND DESIGNATION FROM AMP-OHIO POWER PLANT SITE MEIGS COUNTY, OHIO

Scientific Name	Common Name	Wetland Status	Upland	Wetland
Eleocharis obtusa	Blunt spikerush	OBL		X
Epilobium coloraum	Purple leaf willowherb	OBL		X
Erigeron annuus	Fleabane	FACU	X	
Eupatorium maculatum	Spotted joepyeweed	FACW	X	X
Eupatorium perfoliatum	Common boneset	FACW+	l x	X
Eupatorium purpureum	Sweetscented joepyeweed	FAC	x	l x
Eupatorium sessilifolium	Upland boneset	NO	x	
Fagus grandifolia	American beech	FACU	x	
Festuca arundinacea	Tall fescue	FACU	l x	ļļļ
Festuca pratensis	Meadow ryegrass	FACU	x	
Festuca subverticillata	Nodding fescue	FACU	x	ļ l
Fragaria virginiana	Virginia strawberry	FACU	x	
Fraxinus pennsylvanica	Green ash	FACW	x	x
Galium aparine	Catchweed behstraw	FACU	x	
Geum candadense	White avens	FACU	x	
Glechoma hederacea	Ground ivy	FACU	l x	
Gleditsia triacanthos	Honeylocust	FAC-	X	
Glycine max	Soybean	NI	l x	
Impatiens capensis	Jewelweed	FACW	l x	l x
Juglans nigra	Black walnut	FACU	l $\tilde{\mathbf{x}}$	
Juncus effusus	Soft rush	FACW+	l x	l x
Juncus tenuis	Path rush	FAC-	i x	
Leersia oryzoides	Ricecut grass	OBL	· ·	l x
Leersia virginica	White grass	FACW	l x	l x
Lemna minor	Common duckweed	OBL	1	x
Ligustrum vulgare	Privet	FACU	l x	l i
Ligustrum vuigare Lindera benzoin	Northern spicebush	FACW-	l x	l x
Linaera venzoin Liriodendron tulipifera	Tuliptree	FACU	x	"
Lolium multiflorum	Italian ryegrass	FACU-	l x	i
Lolium perenne	Perennial ryegrass	FACU-	l x	
Lonicera japonica	Japanese honeysuckie	FAC-	l x	ŀ
	Honeysuckle	FAC to FACU	\ x	
Lonicera spp. Ludwigia alternifolia	Seedbox	FACW+	l \hat{x}	l x
Ludwigia aaternyotus Ludwigia palustris	Marsh seedbox	OBL	l "	l 🖫
Lysimachia nummularia	Creeping jenny	OBL		X
Lystmacnia nammusi ia Lythrum salicaria	Purple loosestife	FACW+	l x	X
_	Common mallow	NI.	l 🛣	[
Malva neglecia Medicago sariva	Alfaifa	NO	l $\hat{\mathbf{x}}$	
1 ~	Yellow sweetclover	FACU	x	'
Melilotus officinalis	Spearmint	FACW+	l â	x
Mentha spicata	American white waterlily	OBL	1 ^	l x
Nymphaea odorata		FACU-	x	'
Oenthera biennis	Common evening primrose Sensitive fern	FACW	l x	l x
Onoclea sensibilis		FACW-	l â	l x
Panicum dichotomiflorum	Fall panicgrass	FACW.	1 ^	**
Panicum spp.	Cwritch auses	FAC	1 x	x
Panicum virgatum	Switchgrass	•	x	^
Parthenocissus quinquefolia	Virginia creeper	FACU OBL	^	x
Penthorum sedoides	Ditch stonecrop		l x	l â
Phalaris arundinacea	Reed canary grass	FACW+	<u>^</u>	

TABLE 2 - CONTINUED

WETLAND VEGETATION AND INDIVIDUAL SPECIES WETLAND DESIGNATION FROM AMP-OHIO POWER PLANT SITE MEIGS COUNTY, OHIO

Phleum pratense			Upland	_ Wetland
	Timothy	FACU	X	
Phytolacca americana	Common pokeweed	FACU+	X	
Plantago lanceolata	Common plantain	UPL	X	
Plantago major	Broadleaf plantain	FACU	X	
Platanus occidentalis	Eastern sycamore	FACW-	X	X
Poa pratensis	Kentucky bluegrass	FACU	X	
Polygonum hydropiperoides	Swamp smartweed	OBL	[X
Polygonum pensylvanicum	Pennsylvania smartweed	FACW	X	X
Polygonum persicaria	Spotted ladysthumb	FACW	X	x
Polygonum sagittatum	Arrowleaf tearthumb	OBL		X
Populus deltoides	Cottonwood	FAC	х	х
Potamogeton spp.		OBL		X
Prunus serotina	Black cherry	FACU	X	
Quercus alba	White oak	FACU-	X	
Quercus тасгосагра	Bur oak	FAC-	l x	
Quercus palustris	Pìn cak	FACW	l x	x
Quercus rubra	Northern red oak	FACW-	l \bar{x}	x
Rhus radicans	Poison Ivy	FAC	Î x	x
Robinia psuedoacacia	Black locust	FACW-	x	x l
Rosa carolina	Pasture rose	UPL	X	
Rosa multiflora	Multiflora rose	FACU	x	
Rubus allegheniensis	Allegheny blackberry	FACU-	l x	
Rumex acetosella	Sheep sorrel	UPL	l \hat{x}	
Rumex crispis	Yellow curlydock	FACU	x	x
Rumex obtusifolius	Bitter Dock	FACU-	X x	
Salix nigra	Black willow	FACW+	l $\hat{\mathbf{x}}$	l x
Sambucus canadensis	Elderberry	FACW-	l \hat{x}	x
Scirpus atrovirens	Green bulrush	OBL	"	ı x
Scirpus cyperinus	Woolgrass	FACW+	l x	X
Scirpus validus	Softstem bulrush	OBL	1	x
Setaria glauca	Pearl millet (foxtail)	FAC	l x	x
Setaria spp.	Foxtail	FAC	l x	x
Sisyrinchium angustifolium	Narrowleaf blue-eyed grass	FACW-	l x	x
Smilax rotundifolia	Roundleaf greenbriar	FAC	x x	x
Solidago altissima	Shorthair goldenrod	FACU-	l \ddot{x}	
Solidago canadensis	Canada goldenrod	FACU	l \ddot{x}	
Solidago nitida	Flat-topped goldenrod	FAC	l x	x
Solidago spp.	Goldenrod	FACU	l \tilde{x}	-
Sorghum halepense	Johnsongrass	FACU	l $\hat{\mathbf{x}}$	
Taraxaci, pffocoma;e	Common dandelion	FACU-	l \hat{x}	i
Toxicodendron radicans	Poison ivy	FAC	l x	
Trifolium hybridum	Alsike clover	FACU-	l x	
Trifolium protense	Red clover	FACU-	x x	
Typha angustifolia	Narrow leaf cattail	OBL	"	x
Typha latifolia Typha latifolia	Broad leaf cattail	OBL		x
Ulmus rubra	Slippery elm	FAC	x	x
Vinus ruora Urtica dioica	Stinging nettle	FACU	x	4
Verbascum thapus	Common mullein	NI.	Î	
verouscum inapies Verbesina alternifolia	Wingstem	FAC	l â	x
veroesina auerrigoua Vernonia gigantea '	Giant ironweed	FAC	l â	Î

TABLE 2 - CONTINUED

WETLAND VEGETATION AND INDIVIDUAL SPECIES WETLAND DESIGNATION FROM AMP-OHIO POWER PLANT SITE MEIGS COUNTY, OHIO

Scientific Name	Common Name	Wetland Status	Upland	Wetland
Vicia cracca tenuifolia	Cow vetch	NO	X	
Viola papilionacea	Common blue violet	FAC	\ x	X
Vitis aesuvalis	Summer grape	FACU	X	
Vitis riparia	River grape	FACW	X	x
Vitis labrusca	Fox grape	FACU	X	
Xanthium strumarium	Common cocklebur	FAC	X	X
Zea Mays	Corn	NI	X	

Obl = Occurs in wetlands almost always (>99 percent) under favorable conditions

Facw = Usually occurs in westands (67 - 99 percent) but occasionally found in non-westands

Fac = Equally likely to occur in westands and non-westands (34 - 66 percent)

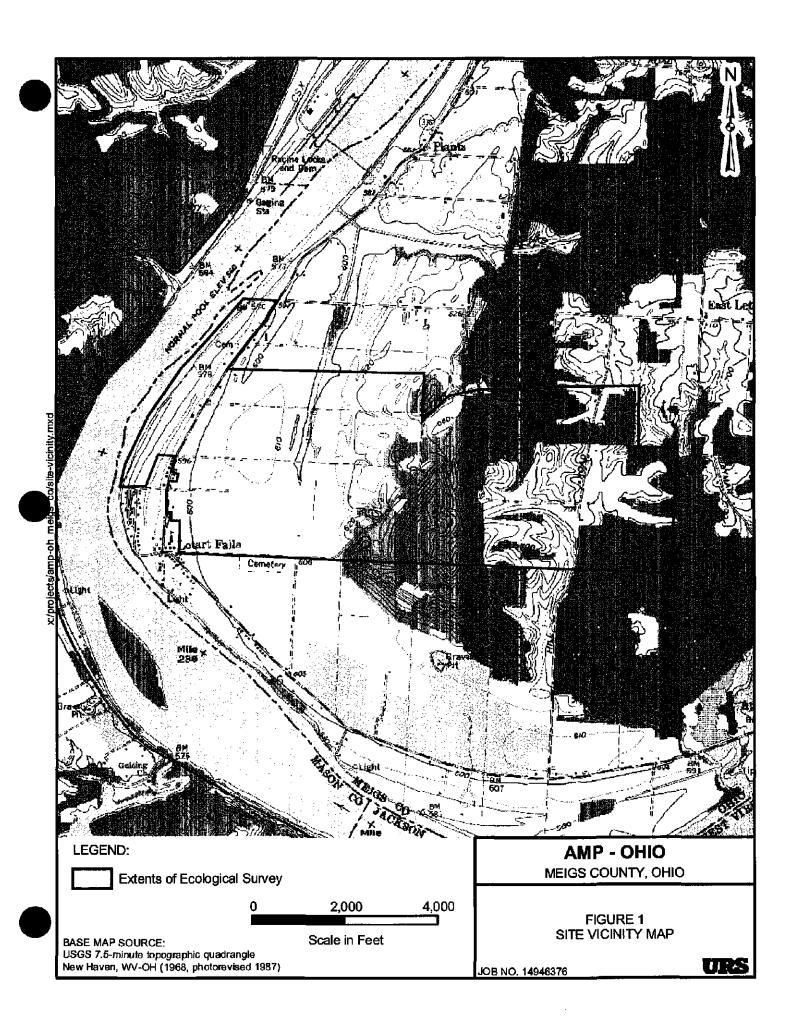
Facu = Usually occurs in non-wetlands (67 - 99 percent) but occasionally found in wetlands

Upl = Occurs in uplands almost always (>99 percent) under favorable conditions

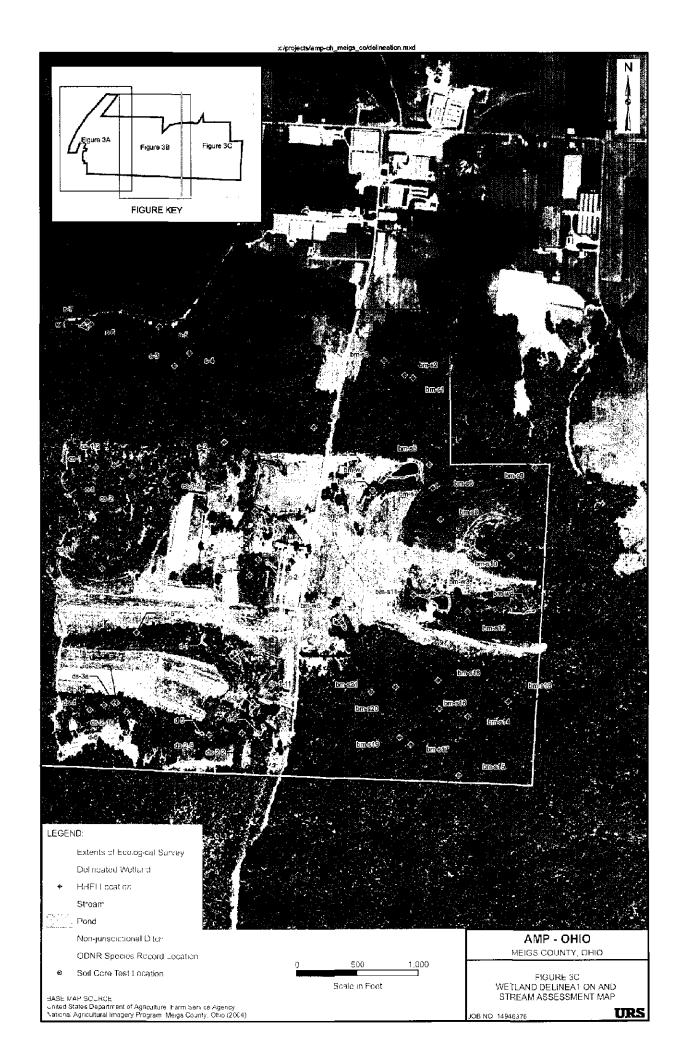
NI = Not indicated (no agreement as to designation)

NO = No listings

National Weilands Inventory, U.S. Fish and Wildlife Service, Biological Report 88(24)
Region 1 listings







MEIGS COUNTY, OHIO FIGURE 4 SITE SOILS MAP AMP - OHIO JOB NO. 14946376 x:/projects/amp-oh meigs co/soils.mxd Scale in Feet 1,200 Extents of Ecological Survey BASE MAP SOURCE: Soil Survey of Meigs County, Ohio Sheets 53 and 58 LEGEND

APPENDIX A

U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION FORMS

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Xetart</u> Te Applicant/Owner: <u>AMF-OH</u> Investigator: <u>Vendaaik</u>			Date: 11/28/05 5 County: Mugs State: Ohio
Do Normal Circumstances Exis Is the site significantly disturbed Is the area a potential Problem (If needed, explain on revers	l (Atypical Situation)? Area?	Yes No Yes No Yes No	Community ID: upland Transect ID: ag-1
VEGETATION			
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1_dichatomilloum	M FACU-	9	
2 Hlycine max	H NI	10	
3 Rumex otuail olius	H FACU-	11	
. V .	. ==		

H NI

upland regitation

Percent of Dominant Species that are OBL, FACW or FAC

HYDROLOGY

Remarks

(excluding FAC-)

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs (political ure Tions) Other No Recorded Data Available	Welland hydrology indicators Primary Indicators: Inundated (windated in dutubled Saturated in Upper 12 Inches Water Marks
Field Observations Depth of Surface Water Depth to Free Water in Pit Depth to Saturated Soil Depth to Saturated Soil	Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neulral Test Other (Exptain in Remarks)
Remarks none observed; disturb one inundated; surroun	red areas with the ruts ding area actively farmed

~ 20%

Map Unit Name (Series and Phase): CKA-Cidemillant loam, 0-2% Drainage Class: well drained slope Field Observations Zeneral Taxonomy (Subgroup): mexic Ultic Napludalle Confirm Mapped Type? (85) No					
Profile Des Depth (inches)		Matrix Color (Munsell Moisl) 10 VR 4/3	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Lindric Call					
Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Aquic Maisture Regime Reducing Conditions Gleyed or Low-Chroma Colors — Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					
Remarks		field c	onfurned	upland	

WETLAND DETERMINATION

	Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No (No (Present))	Is this Sampling Point Within a Wetland?	(Circle)
ı	Hydrid Solls Present? Yes No	is this camping room vitalina veliana:	165 (16)
I	Remarks:		
	upland samp	ling location	
١	,		
ı			

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Letart Falls are a Applicant/Owner: AMP-OH Investigator: Van Schaite / Kooser		Date: _i/28/o≤ County: State:
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No	Community ID: upland Transect ID: Plot ID:
VEGETATION		
Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator
1 Rancism dichotomillown H FACW-	9	
2 alliana patrolata H FACU-	10	
3 Mean mays H NI	11	
a Blyane max H NI	12	
		· · · · · · · ·
5 Rumer obtusifolia A FACU-	13	
5 Rumer obtinifolia H FACU-	13	

HYDROLOGY

Remarks

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs (patintual with and)	Wetland hydrology Indicators: Primary Indicators: Inundated (wundated in dualingly)	
Other	Saturated in Upper 12 Inches	
No Recorded Data Available	Water Marks action	
	Drift Lines	
Field Observations	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required)	
Depth of Surface Water (in)	Oxidized Root Channels in Upper 12"	
Depth to Free Water in Pil	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test	
Depth to Saturated Soil >12" (in)	Other (Explain in Remarks)	
Remarks none absenced; distribed	areas with the rate are	

upland vegetation

~20%

Map Unit Name (Series and Phase): CKA - Codesmill self loam, 0-2% Drainage Class: unit described slope Field Observations general							
Taxonomy	Taxonomy (Subgroup): medic Ultre Idaplied of Confirm Mapped Type? (68) No						
Profile Des Depth	cription	Matrix Color	Mottle Colors	Mottle	Texture, Concretions,		
(inches)	<u>Horizon</u>	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.		
0-12"	_ <u>A</u>	10VR4/3			sandy loam		
<u></u>							

Hydric Soil	Indicators						
	_ Histosol			Concretions			
	_ Histic Epiped				Surfa ce Layer Sandy Soils		
_	_ Sulfidic Odor			Organic Streaking in Sai			
_	_ Aquic Moistu _ Reducing Co			Listed on Local Hydric S Listed on National Hydri			
		w-Chroma Colors		Other (Explain in Remai			
Remarks	Remarks						
	field confirmed upland soil						

WETLAND DETERMINATION

Hydrophylic Vegetation Present? Yes (C Wetland Hydrology Present? Yes Hydric Solls Present? Yes	ircle) (Circle) Is this Sampling Point Within a Wetland? Yes (10)
Remarks	
upland son	pling location

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Ketant Falls are a Applicant/Owner: AMP-OH Investigator: Van Lhait / Koosen		Date: 11/28/05 County: 716198 State: ON	
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: upland Transect ID: ag-3	
VEGETATION			
Dominant Plant Species Stratum Indicator	Dominant Plant Specie	s Stratum Indicator	
1 Xonthum Strumorum H FAC	9		
2 Roa pratences H FACU	10		
3. Plantago major H FACU	11		
4 actomisea milgaria H NI	12		
5 Promision dichotomplorum H FACW- 6 Cyperus esculentus H FACW	13		
6 ypunu secure	15		
8	16		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)	~50		
Remarks upland vege	tation barel	y	
HYDROLOGY			
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs (Author) Other No Recorded Data Available	Wetland hydrology ind Primary Indicators Inundate Saturate Water M Orift Line	ed d in Upper 12 Inches larks	
Field Observations	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required)		
Depth of Surface Water (in) Depth to Free Water in Pit (in)	Oxidized Water-S	Oxidized Root Channels in Upper 12" Water-Stained Leaves	
Depth to Free Water in Pit	Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)		
Depth to Salurated Soil \(\simeq \frac{14'}{}(\text{in.})		xplain in Remarks)	

Map Unit Name (Series and Phase): CKA-Cdermill sult loam, 0-2% Drainage Class: will diamed slope Field Observations generally. Taxonomy (Subgroup): misc utic Hapludate Confirm Mapped Type? (68) No (
Profile Des Depth (inches)	Horizon A	Matrix Color (Munsell Moist) LOYR 4/3	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. Sulty Clay Loam
Hydric Soil Indicators Histosol Histic Epipedon High Organic Content in Surface Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Other (Explain in Remarks)					
Remarks	·	fuld c	orfume	upland	soil

WETLAND DETERMINATION

	Wetland Hydrology Present? Y	es (Circles (O)		(Circle)
I	Hydric Soils Present?	es (No)	ts this Sampling Point Within a Welland?	Yes (No)
	Remarks:	and sa	upling location	

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Applicant/Owner: AMP-OH Investigator: Van Jhaih / Kooden		Oale: 11/38/05 County: Merca State: Ollis
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: upland Transect ID: Plot ID: ag-4

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
1 Cyperus esculentus H FACW	9
2 Poo pratenzia H FACU	10
3 attemes vulgaria H NI	11
4 Xanthum strumarum H FAC	12
5 Romewon dichotomoflorum H FACW-	13
e Plantago major H FACU	14
7	15
8	16
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)	~50%
Remarks	-1-1- 1
upland	regetation barely

HYDROLOGY

Recorded Data (Describe in Remarks)	Welland hydrology Indicators
Stream, Lake, or Tide Gauge Aerial Photographs (potential without)	Primary Indicators: Inundated
Other	Saturated in Upper 12 Inches
No Recorded Data Available	- Water Marks
	Drift Lines
	Sediment Deposits
Field Observations	Drainage Patterns in Wellands
	Secondary Indicators (2 or more required):
Depth of Surface Water (in)	Oxidized Root Channels in Upper 12"
****	Water-Stained Leaves
Depth to Free Water in Pit \(\simeq \frac{14"}{\(\text{(in.)} \)}	Local Soil Survey Data
\ . a !	FAC-Neutral Test
Depth to Saturated Soil 214" (in.)	Other (Explain in Remarks)
Remarks	
upland hyd	la of man
. Macario a roge	o according

ag-4

Map Unit Name (Series and Phase): CKA - ademultant loam, 0-2% Drainage Class: inthe drained place Field Observations general Taxonomy (Subgroup): mexic ultic Hapludalfs Confirm Mapped Type? (Pas) No					
Profile Describenth (inches) 0-7" 7-14"	Horizon B	Matrix Cotor (Munsell Moist) 10484/3 10484/3	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast few/faviot	Texture, Concretions, Structure, etc. sandy loam sandy loam
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Glayed or Low-Chroma Colors Other (Explain in Remarks) Remarks Remarks					

WETLAND DETERMINATION

	Hydrophylic Vegetalion Present? Yes No (Circle) Welland Hydrology Present? Yes No Hydric Soils Present? Yes (No.)	(Circle)
ľ	Hydric Soils Present? Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)
	Remarks: upland son	rpling location
		Approved by HQUSACE 3/92

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Litart Stocks area Applicant/Owner: AMP-OH Investigator: Van Iharh / Kooden	Date: 11/24/05 County: Muse. State: Ohio-
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: upland Transect ID:

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator
1 Xantherin strumanum H FAC	9	
2 Cyperia eaculantus H FACW	10	
3 Panicum dichotomoflown H FACW-	11	
a Ropulus dettardes S FAC	12	
5 Plantago major H FACU	13	
6 Salix mara S FACW+	14	
1 Loluin multilloum H FACU	15	
o Malva neglecta H NI	16	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)	62.5%	
Remarks		
wetland vegetation		

HYDROLOGY

Stream, Lake, or Tide Gauge Aerial Photographs (potential without Other	Primary Indicators: Inundated Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks Drift Lines Sediment Deposits
Field Observations Depth of Surface Water	Drainage Patterns in Welfands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12" Water-Stained Leaves
Depth to Free Water in Pit Depth to Saturated Soil Depth to Saturated Soil	FAC-Neural Test Other (Explain in Remarks)

sandy loam

ns .
nic Content in Surface Layer Sandy Soils
treaking in Sandy Soils Local Hydric Soils List
National Hydric Soils List plain in Remarks)
land soil, soil reflects the adermill
า S ก x

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? Yes	No (Circle)		(Circle)
Hydric Soils Present? Yes	<u>rea</u>	Is this Sampling Point Within a Wetland?	Yes (No)
Remarks: upland sampling location			
			ed by HOUSACE 1/92

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wellands Delineation Manual)

Project/Site: Lotant Fills, Onca Applicant/Owner: AMP-OH Investigator: Van Italy / Koncan	-	Date: 11/28/05 County: Neigh State: Ohio
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No	Community ID : upland Transect ID: Plot ID:

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator	
1 Kanthum strumanin H FAC	9	
2 Panecum dichotomplain H FACUT	10	
3 Pentagornajor M FACU	11	
4 Rollin multiflown H FACU-	12	
5 malva neglecta H NI	13	
6 Cyperus esculintus H FACW	14	
, Populus deltardes S FAC	15	
& Salux migin S FACW+	16	
Percent of Dominant Species that are OBL. FACW or FAC (excluding FAC-)		
Remarks wetland regetation		

HYDROLOGY

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs (potential until and) Other	Welland hydrology Indicators Primary Indicators:InundatedSaturated in Upper 12 Inches
Field Observations Depth of Surface Water O(in) Depth to Free Water in Pit >13" (in.) Depth to Saturated Soil	Water Marks Drift Lines Sediment Deposits Drainage Patterns in Welfands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12* Water-Stained Leaves Local Soit Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks	

Map Unit Name (Series and Phase): Ta A - Taggart art loam, 0-2% Drainage Class: Doorly drained solve Field Observations Taxonomy (Subgroup): Ta A - masic agric Ochragually Confirm Mapped Type? Yes No						
Profile Depth (inches)	scription: Harizon	Matrix Color (Munsell Moist) 10 YR 4/3	Mottle Colors (Munsell Moist)	Motile Abundance/Contrast few/faint	Texture, Concretions, Structure, etc. Sandy Coam	
Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Aquic Maisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)						
Remarks	в	eld confi	wined up	land soil	•	

Hydrophylic Vo Welland Hydro Hydric Soils Pi		Yes No Yes (M		Is this Sampling Point Within a Wetland?	(Circle)
Remarks:	nt	lanc	d som	pling location	

Project/Site: Letart Falls Asca Applicant/Owner: AMP-OH Investigator: 12 Closing / Van Stante/ Kooses	Date: <u>28 Nv. 2005</u> County: <u>17265</u> State: <u>074</u>
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: upland Transect ID: Plot ID: upland-a

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator			
1. Pholoris ar undinacia	1+ FACW	9				
2 Allieria peridaja	It PACH	10				
3. Polygone Laport	4 PACU	11				
4. Rung wispus	H FAC	12				
5. Torepace officionale	14 FACY	13				
B Cherra Distra	It FACU	14				
7 Romex obtusitions	1+ FACU	15				
8		16				
Percent of Dominant Species that are OBL_FACW or FAC (excluding FAC-)						
Remarks upland regetation dominates, localized areas of reed carrary grass						
areas of reed canary grass						

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks Drift Lines
Field Observations	Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water (in)	Secondary Indicators (2 or more required):Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit $\frac{9^{k}}{2}$ (in)	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil	Other (Explain in Remarks)
Remarks Noundence of prima indicators. However, with a papermity to the ob	nd hydrology is assumed as a no River and percentage of the
year the area is underwete	

Map Unil Name (Series and Phase): No - nolin set loam, frequently Drainage Class: well dearies (Series and Phase): No - nolin set loam, frequently Drainage Class: well dearies							
Taxonomy	Taxonomy (Subgroup): Dystic Fluventic Entrollingtz Confirm Mapped Type? Yes No						
Profile Des Depth (inches)	cription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
8-9	$\frac{A}{B}$	1048/12 10484/1 10484/2	57R4/4 54R4/6	Food Fair	Sarly loan Sarly loan Sarly loan		
Hydric Soil Indicators Histosol Concretions High Organic Content in Surface Layer Sandy Soils Suffidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)							
Remarks bandy sould along this River, soils are borderline hydric as one core had a chroma of /1 with motting and the second core had a chroma of /2 with no nottling.							
<u> </u>							

Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No	Hydrophytic Vegetation Present Wetland Hydrology Present?	(res) No		(Circle)
disturbed upland Terrare adjusent To the Ohio River	distin	bedupland	***************************************	To

Project/Site: Lotant Applicant/Owner: AMP- Investigator: 12000en	Date: 1/29/05 County: miga State: Ghio Community ID: upland Transect ID: Plot ID: upland		
Do Normal Circumstances I Is the site significantly distur Is the area a potential Probl (If needed, explain on re-			
VEGETATION			
Dominant Plant Species	Stratum Indicator	Dominant Plant Spe	ecies Stratum Indicator

Dominant Plant Species Stratum Indicator 1 Carex app. H OBL 9 2 Rosa multiplina S FACU 10 3 alluania patrolata H FACU 11 4 compativis captures H FACU 12 5 Duches and Ladrana H FACU 13 6 Alluhoma hadrana H FACU 14 7. 15 8. 16 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC.) Remarks

Recorded Data (Describe in Remarks)	Wetland hydrology indicators		
Stream, Lake, or Tide Gauge	Primary Indicators:		
Aerial Photographs	Inundated		
Other	Saturated in Upper 12 Inches		
No Recorded Data Available	Vvaler Marks		
	Drift Lines		
	Sediment Deposits		
Field Observations	Drainage Patterns in Wetlands		
	Secondary Indicators (2 or more required)		
Depth of Surface Water (in)	✓ Oxidized Root Channels in Upper 12"		
	Water-Stained Leaves		
Depth to Free Water in Pit(in)	Local Soil Survey Data		
1	FAC-Neulral Test		
Depth to Saturated Soil (in)	Other (Explain in Remarks)		
Remarks upland hydr	ology		

Map Unit Name LaD-Rahin Loanny fine sand, increasing (Series and Phase): 12 to 18 % alopes Drainage Class: well diamed Field Observations Taxonomy (Subgroup): mesic alpic Udipsammeta Confirm Mapped Type? Yes (No)						
Profile Desc Depth (Inches) 0-4" 4-12"	Horizon A	Matrix Color (Munselt Moist) 10 Y R 3/2 10 Y R 5/2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast few / dratine	Texture, Concretions, Structure, etc. sulty sand sulty sand	
Hydric Soil Indicators:						
Remarks		field .	confume	d hydric	porl	

Hydrophytic Vegetation Present? Yes (No.) (Circle) Wetland Hydrology Present? Yes (No.)	(Circle)
Hydric Soils Present? Yes No	is this Sampling Point Within a Wetland? Yes (No)
Remarks: upland sampling hydric lat no su beary morning na	location, soils look gud of hydrology ofter ins.

Project/Site: Letart Falls area Applicant/Owner: AMP-OH Investigator: M. Kauffer		Date: 11/28/05 County: Met 01 State: Ohlo
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID : PEM Transect ID: Plot ID: AFS-w1
VEGETATION		
Dominant Plant Species Stratum Indicator 1. Typha sp. H OBL 2. Lengus cyperinus H FACW+ 3. Carex frankeii H OBL 4. Acer saccharinum S FACW 5. Phalana anundurarea H FACW 6. Junius effusio H FACW 7. 8. Percent of Dominant Species that are OBL FACW or FAC (excluding FAC-) Remarks Wettand Negeti	Dominant Plant Species 9	
Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations	Water M Drift Line Sedimen Drainage	d in Upper 12 Inches larks es to Deposits e Patterns in Wetlands
Depth of Surface Water (in) Depth to Free Water in Pit. (in.) Depth to Saturated Soil (in.) Remarks	Oxidized Water-St Local So L FAC-Net Other (E	ors (2 or more required) I Root Channels in Upper 12* Itained Leaves Oil Survey Data outral Test explain in Remarks)

(Series and	Map Unit Name (Series and Phase): No - Nolin set loam, fuguently (Series and Phase): No - Nolin set loam, fuguently (Subgroup): Dystaic Fluventic Entlochests Confirm Mapped Type? Yes (No)				
Profile Des Depth (inches) 0-4 4-16	Horizon A B	Matrix Color (Munsell Moist) LOYR 4/3 10YR 5/1	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. sandy loam sandy loam
Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Aguic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks) Remarks					
	field confirmed hydric soil				

Hydrophylic Vegetation Present? (195 No (Circle) Wetland Hydrology Present? (195 No	(Circle)
Hydric Solls Present? (Fes) No	Is this sampling to the venture of venture to the same
Remarks: 9 flags	
all three wetter	ed criteria satisfied;
therefore this are	ea is wetland

Project/Site: <u>Letant Falls are a</u> Applicant/Owner: <u>AMP-OH</u> Investigator: M. Rauffer	Date: 11/28/05 County: Marga State: Ohio
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Transect ID:

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Si	tratum Indicator			
1 Solidago comadense H FACU 2 Rumer crispus H FACU	9				
2 Rumer Cuspus H FACU	10				
3 Philodephia Plendora H UPL	11				
4. FACU-	12	· · · · · · · · · · · · · · · · · · ·			
4. FACU- 5. Lolium perenne H FACU-	13				
6	14				
7	15				
8	16				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)					
Remarks					
upland vegetation					

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators Primary Indicators: Inundated Saturated in Upper 12 Inches
No Recorded Data Available	Waler Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water. (in.)	Oxidized Root Channels in Upper 12" Water-Stained Leaves
Depth to Free Water in Pit(in.)	Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil(in.)	Other (Explain in Remarks)
Remarks none olve	erved

Map Unit Name (Series and Phase): No - Nolin set lann, frequent Drainage Class: well drained Texonomy (Subgroup): Dystric Eleventic Entrachepts Confirm Mapped Type? Yes No					
Profile Des Depth (inches) O-5" S-16"	Horizon B	Matrix Color (Munsell Moist) 107R5/3 107R4/2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. sandy loam sandy loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors — Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					
Remarks. field confirmed upland soil					

W	ydrophytic Vegetalion Present? etland Hydrology Present? ydric Soils Present?	Yes Yes Yes	(Circle)	Is this Sampling Point Within a Wetland?	(Circle)
R	emarks:	pla	nd san	npling location	

Project/Site: Letant Falle area Applicant/Owner: AMP-OH Investigator: Moser / Van Shaik	Date: 11/28/05 County: Meigh State: Ohid
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID : PEM/PSS Transect ID: - Plot ID: AN-WI

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1. Carex lunda	H OBC	9			
2 Cour stricta	H OBL	10			
3 acer negundo	S FAC+	11			
· Rosa multillara	V/S FACU	12			
5 Juneus effusion	H FACW+	13			
6 Lensia maginica	H FACW	14			
1. Vilremum Cassum	dia S FACW	15			
в		16			
Percent of Dominant Species that are OBL. FACW or FAC (excluding FAC-)					
Remarks					
	wetland vegetation				

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Ipdicators: Inundated Saturated in Upper 12 Inches		
Field Observations Depth of Surface Water 12" (in) Depth to Free Water in Pil. Surface (in) Depth to Saturated Soil Surface(in.)	Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)		
Remarks strong wetton	d hydrology		

Map Unit Name (Series and Phase): La D-Latur Loany fune sand, 1-6% slope La B-eversurely, (Series and Phase): La D-Latur Loany fune sand, Drainage Class: La D-eversurely, La B-mesic after uduseanienta Confirm Mapped Type? Yes No					y well ety well drained	
Profile Des Depth (inches) 0-4" 4-15"	Horizon A	Matrix Color (Munsell Molst) 2.5 y 4/1 5 y 4/1	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast fent/feunt	Texture. Concretions. Structure. etc. Sulty clay Sulty clay	
Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Gorganic Streaking in Sandy Soils Listed on Local Hydric Soils List Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Usted on National Hydric Soils List Other (Explain in Remarks)						
Remarks						

Hydrophytic Vegetation Present? Yes Wetland Hydrology Present? (78) Hydric Soils Present? (78)	No (Circle) No	(Circle) Is this Sampling Point Within a Wetland? (Yes) No
Remarks: ~12 flags		on lying area adjacent am / drainageway

Project/Site: Latart Falls area Applicant/Owner: AMP-OH Investigator: Losser / Van Ahouh		Date: 1/28/05 County: 74/05 State: 0000
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID:
EGETATION	-	
Dominant Plant Species Stratum Indicator Malva neglecta H NI FACU- Costuca pratentia H FACU- Column canadene H FACU- Column canadene H FACU- Column canadene H FACU- Column facina H FACU- Column faci	Dominant Plant Species 9	
PROLOGY Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations Depth of Surface Water Depth to Free Water in Pit Depth to Saturated Soil	Water Ma Drift Line Sedimen Drainage Secondary Indicato Oxidized Water-St	d d in Upper 12 Inches arks es 1 Deposits 2 Patterns in Wellands ors (2 or more required) Root Channels in Upper 12" ained Leaves ill Survey Data

none observed

Remarks

Map Unit Name (Series and Phase): LaD - Lahin Loanny fine sand, Drainage Class: will drained 12-182 repfield Observations Taxonomy (Subgroup): mesic affect. Udepsamments Confirm Mapped Type? (88) No					
Profile Des Depth (Inches) O-5"	Horizon A B	Matrix Color (Munsell Moist) 10 YR 5/4 10 YR 5/8	Mottle Colors (Munsell Molst)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. setty loam setty clay
Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Histosol Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					
field confumed upland soil					

	Vegetation Present? rology Present? Present?	Yes No Yes No Yes (No)	Is this Sampling Po	o int Within a Well and?	(Circle)
Remarks:						
		upla	nd pe	impling	location	
					Approv	ed by HQUSACE 3/92

Project/Site: Letert falls Area Applicant/Owner: AMP 10h10 Investigator: BEM		Date: 17-30-05 County: Iways State: OH ()			
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: FEM Transact ID: PCT Plot ID: SM-W [
/EGETATION					
Dominant Plant Species Stratum Indicator	Dominant Plant Species				
2 Ludwigia atternibliate FACU	10				
carex Spp. He FACW	11				
Leursia onzoides He OBL " 5 annolea Sensiblis He OBL	12				
B	13				
7	15				
88	16				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks: wetland vegetat	tion				
HYDROLOGY		·			
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge	Wetland hydrology Ind Primary Indicators:	:			
Aerial PhotographsOtherNo Recorded Data Available	Water Mater M	ed in Upper 12 Inches Marks es			
Field Observations:	Z_ Drainage Secondary Indicate	nt Deposits e Patterns in Wetlands ors (2 or more required):			
Depth of Surface Water:(in.)	X Oxidized X Water-St	d Root Channels in Upper 12" Stained Leaves			
	Local Sc	oil Survey Data			
Depth to Free Water in Pit: Sunfa (a_(in.) Depth to Saturated Soil:(in.)	FAC-Net	kutral Test Ex plain in Re marks)			

(Series and	Ug D- Upshur Hulpin complex, Map Unit Name (Series and Phase): 15 to 252 slopes Drainage Class: drained Field Observations Taxonomy (Subgroup): mlsic Typic Hapludalfs Confirm Mapped Type? Yes No				
Depth (inches)	(inches) Horizon (Munsell Moist) (Munsell Moist) Abundance/Contrast Structure, etc. (inches) Horizon (Munsell Moist) (Munsell Moist) Abundance/Contrast Structure, etc. (inches) Horizon (Munsell Moist) (Munsell Moist) Abundance/Contrast Structure, etc.				
Hydric Soil Indicators: Histosol					
Remarks: fuld confurmed hydric soil					

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	

Project/Site: Letart falls Area Applicant/Owner: Pmp On o Investigator: BEM		Date: 11-30-05 County: Mend
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Nunfallov Transect ID: UPL Plot ID: UPL-BM-
/EGETATION	Adjacent	
Dominant Plant Species Stratum Indicator 1 Donicera superica the FAC- 2 Paurus Carota the NI 3 POSA multiflora the FACU 4 Rubina alleghaneris HL FACU- 5 Eriaphorum spp. HL NI 6 Cirsium arvense the FACU 7 Tataxacium officinale the FACU 8 Solidago Canadarsis the FACU Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC). Remarks: upland regat	10 11 12 13 14 15 16	landertinum He Fact
HYDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: 14" (in.) Depth to Saturated Soil: 14" (in.)	Water M Drift Line Sedimer Drainage Secondary Indicate Oxidized Water-S Local Sc	s: ted red in Upper 12 Inches Marks

	Map Unit Name (Series and Phase): 15 to 25% slopes Drainage Class: will diamed Fleid Observations Taxonomy (Subgroup): mesic Typic Hapludalfs Confirm Mapped Type? Yes No				
Profile Des Depth (inches) 0-3 3-14	Horizon B B	Matrix Color (Munsell Moist) OVR 4/3	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators: Histosol High Organic Content in Surface Layer Sandy Soils High Organic Streaking in Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Reducing Conditions Uisted on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)					
Remarks:		fuld c	mumo	d upland	soil

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes
Remarks:	upland so	empling location

Project/Site: Letart Falls area Applicant/Owner: Prop Ohio Investigator: BGM	Date: 11-30-00 County: 10010 State: 0H 0
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: PEM Transect ID: WEF Plot ID: BM-W2

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1. larsia Ontroides He OBL	9			
2 brown effusion He FACOU	10			
a Sarpus Cyperinus He FACU a phalaris anindinacea He FACU	11			
a phalaris anindinacea He FACED	12			
5	13	•		
6	14,	·		
7	15	-		
8	16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).				
Remarks: vetland regetation				

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology indicators: Primary Indicators:		
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Deta FAC-Neutral Test Other (Explain in Remarks)		
Remarks: vetland byd	rology		

Map Unit Name Ug E - Upshur - Hulpin Camplux, (Series and Phase): Drainage Class: well disuned Field Observations Taxonomy (Subgroup): Mesic Typic Hapludalft Confirm Mapped Type? Yes No						
Profile Des Depth (inches) O-4	<u>Horizon</u>	Matrix Color (Munsell Moist) 2.57 5/3 2.57 5/2	Mottle Colors (Munsell Moist) 10YR 3/4 10YR 3/4	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil Indicators: HistosolConcretionsHistic EpipedonHigh Organic Content in Surface Layer Sandy SoilsSulfidic OdorOrganic Streaking in Sandy SoilsAquic Moisture RegimeListed on Local Hydric Soils List						
Remarks: fuld confirmed hydric soil						

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	funge around pond

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: Letart Falls area Applicant/Owner: HMP On. 0 Investigator: BEM	Date: 11-30-05 County: YNG & State: 0+0
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: PEM Transect ID: WC+ Plot ID: BM-W3

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum indicator			
15crpus Oyperinno He FACW	9	·			
2 brownefficus He Fran	10				
alvans tennous the FACE	11	-			
· Carex camusa He FARW	12				
5 Typha latibolia He NOIL 6 ELLO COLTUS D'OFUSA HE OBL	13	· ·			
a Firo Carus Diotusante OBL	14				
7	15				
8	16	<u> </u>			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks: wetland vegetation					

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches	
No Recorded Data Available	Water Marks Drift Lines	
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):	
Depth of Surface Water:(in.)	X_Oxidized Root Channels in Upper 12"	
Depth to Free Water in Pit: Sifa (in.)	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test	
Depth to Saturated Soil:(in.)	Other (Explain in Remarks)	
Remarks: wetland hydrol	logo	

BM-W3

(Series and	Map Unit Name Ug D - Upshur-Hulpmcomplex, 15 to 25 2 olopes Ug D - will drained (Series and Phase): Ug E - upshur - Kulpmcomplex, 25 to 50% Drainage Class: Ug E - will drained olopes Field Observations Taxonomy (Subgroup): mesic Typic Hapludalfa Confirm Mapped Type? Yes No						
Profile Des Depth (inches) 3-1(2	B	Matrix Color (Munsell Moist) 1 DYR 4/3 DYR 5/1	Mottle Cotors (Munsell Moist) 10 YR 3/6 DYR 3/10	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
Hydric Soil Indicators: Histosol Concretions High Organic Content in Surface Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)							
Remarks:	Remarks: full confurmed hydric soil						

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks: emergent wetlow	d

roject/Site:	Letart falls Area	Date: 11-30-05	
hpplicant/Owner:	FIMP ONIO	County: Meias	
nvestigator:	BEM_	State: OH J	
			_

Investigator: State: S

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator			
1 Lonicera japonira He FACU	9				
2 Dichanthelium clandestinum He FACT	10				
a Eriopherum spp. He NI	11				
4. Rubus allechaniensis He FACU-	12				
s	13				
6	14				
7	15				
8	16				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	~25%				
Remarks:					
upland regelation					

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs	Wetland hydrology Indicators: Primary Indicators: Inundated	
Other No Recorded Data Available	Saturated in Upper 12 InchesWater Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):	
Field Observations:		
Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.)	Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data	
Depth to Saturated Soil: $\frac{>16''}{}$ (in.)	FAC-Neutral Test Other (Explain in Remarks)	
Romanks: No hydrology criter	ion present	

(Series and	Map Unit Name UgE - Upshur - Hulpur Complex, (Series and Phase): 25 To 50% plopes Taxonomy (Subgroup): masic Typic Hapludalfs Confirm Mapped Type? Yes No						
Profile Des Depth (inches) 2 - 16	Horizon	Matrix Color (Munsell Moist) 10YR 4/2 10YR 4/3	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast — — — — — — — — — — — — — — — — — —	Texture, Concretions, Structure, etc.		
Hydric Soil Indicators: — Histosol — Concretions — Histic Epipedon — High Organic Content in Surface Layer Sandy Soils — Sulfidic Odor — Organic Streaking in Sandy Soils — Aquic Moisture Regime — Listed on Local Hydric Soils List — Reducing Conditions — Listed on National Hydric Soils List — Gleyed or Low-Chroma Colors — Other (Explain in Remarks)							
Remarks:	Remarks: field confurmed upland soil						

Hydrophytic Vegetation Pr Wetland Hydrology Preser Hydric Soils Present?	esent? Yes (No nt? Yes (No Yes (No	(Circle)	Is this Sampling Point Within a Wetland?	(Circle) Yes (No
Remarks:	uplan	d so	mpling location	

Project / Site: PMP ON 6 Applicant / Owner: AMP ON 6 Investigator: BEM	Date: 3 -05						
Do normal circumstances exist on the site? Is the site significantly disturbed (Atypical situation Is the area a potential problem area? (explain on reverse if needed)	Yes X No Pn)? Yes No X Yes No X	Community ID: POW/REW Transect ID: WEF Plot ID: BW-W 4					
VEGETATION Ad	1. 20 Flags						
1. Carex Wida He FArw 2. Carex Stricta He FArw 3. 100 r Sir Arabito He OBL 4. Scirns Caparinos He OBL 6. Ephoboum Cataratum He OBL 7. Typha latifolia He OBL 8. Typha anaustin Latif OBL Percent of Dominant Species that are OBL, FACW	9. 10. 11. 12. 13. 14. 15. 16. or FAC excluding FAC-).						
wetland regelation HYDROLOGY							
Recorded Data (Describe In Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:	Wetland Hydrology Indicators: V. Inundated X. Saturated In Up X. Water Marks Drift Lines Sediment Dep	per 12"					
Depth of Surface Water:	Secondary Indicators: Oxidized Roots Channels in Upper 12" Water-Stained Leaves Local Soll Survey Data X FAC-Neutral Test Other (Explain in Remarks)						
Remarks:	ology						

Map Unit Name Ugt - Upshur - Julpur complex, (Series and Phase): 25 to 503 slopes Drainage Class: vell drained							
Taxonomy (Subgrou	p): mesic Jy	sic Hophyda	 Confirm Mapped	d Type? YesNo			
Taxonomy (Subgroup): Marix Cotors Mottle Colors Mottle Colors (Munsell Moist) Munsell Moist) Texture, Concretions, Structure, etc.							
Hydric Soil Indicators:							
fuld confumed hydric soil							
WETLAND DETERMINATION							
Hydrophytic Vegetation Present? Yes X No Is the Sampling Point Wetland Hydrology Present? Yes X No Within a Wetland? Yes X No Hydric Soils Present? Yes X No Hydric Soils Present?							
Remarks:							

Project / Site: Applicant / Owner: Investigator: Do normal circumstances exist on the site? Is the site significantly disturbed (Atypical situations the area a potential problem area? (explain on reverse if needed)	Yes X No	Date: 12 - 1-05 County: Me 19 [State: 0H] Community ID: OEC-BAW4 Transect ID: UPL Plot ID: OPL-BM-W4					
VEGETATION							
Dominant Plant Species 1. ROSANUH Flora SH FAC- 2. L. DOMERO 16 PONCO SH FAC- 3. FOR SE GRADIFOLIA TR PACU 4. Vechesin Macrocarpa T FAC- 6. 7. 8. Percent of Dominant Species that are OBL, FACW Remarks:	9						
HYDROLOGY Recorded Data (Describe In Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:	Wetland Hydrology Indi Primary Indicators: Inundated Saturated In I Water Marks Drift Lines Sediment De	Upper 12"					
Depth of Surface Water:(in.) Depth to Free Water in Pit:	Secondary Indicato Cyldized Ro Water-Stain Local Soil S FAC-Neutral	rs: ots Channels in Upper 12" ed Leaves urvey Data					
Remarks: NO hydrology Cri-	buion presen-	+					

SOILS

Map Unit Name Ug E- yeahur-Hulpin (Series and Phase): complex, 25 to 50% placeDrainage Class: will drained								
Taxonomy (Subgro	up): <u>mesic T</u>	your Naple	de Confirm Mappe	ed Type? YesNo				
Taxonomy (Subgroup):								
Hydric Soil Indicators: — Histosol — Concretions — Histic Epipedon — High Organic Content in Surface Layer in Sandy Soils — Sulfidic Odor — Organic Streaking in Sandy Soils — Aquic Moisture Regime — Listed On Local Hydric Soils List — Reducing Conditions — Listed on National Hydric Soils List — Gleyed or Low-Chroma Colors — Other (Explain in Remarks)								
Remarks:								
WETLAND DETERMINATION								
Hydrophytic Vegetation Present? Yes No X Is the Sampling Point Wetland Hydrology Present? Yes No X Within a Wetland? Yes No X Hydric Soils Present? Yes No X								
Remarks: upland pampling location								

Project / Site: // ATATIONALLA AND Date: 10 05 Applicant / Owner: AND OH Investigator: 10 05 Investigator: 1						
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Phalicis are alinocia H FACO 9. 2. Dunces offus as H FACO 10. 3. Corear y STIGHTA H OBL 11. 4. Corear Services H FACO 13. 6. Polygon Sagistion H OBL 14. 7. 8.						
Percent of Dominant Species that are OBL, FACW, or FAC excluding FAC-). ~83% Remarks: HYDROLOGY						
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: 1-2 (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Wetland Hydrology Indicators Primary Indicators:					
Remarks: wetland hydrology						

BM-W5

Map Unit Name Ug D-upshur Sulpun (Series and Phase): complex, 5 to 25% plept Drainage Class: utl drained Taxonomy (Subgroup): mexic Typic Hopluds fronfirm Mapped Type? Yes_ No_								
Profile Description: Depth (inches) Horizon D-7 A 2.573/1 Texture, Concretions, Munsell Moist) Mottle Colors (Munsell Moist) Abundance/Contrast Silty low Silty low Clay low								
Hydric Soil Indicators: — Histosol — Concretions — Histic Epipedon — High Organic Content in Surface Layer in Sandy Soils — Sulfidic Odor — Organic Streaking in Sandy Soils — Aquic Moisture Regime — Listed On Local Hydric Soils List — Reducing Conditions — Listed on National Hydric Soils List — Gleyed or Low-Chroma Colors — Other (Explain in Remarks)								
Remarks: full confirmed hydric soil WETLAND DETERMINATION								
Hydrophytic Vegetation Present? Yes No Is the Sampling Point Wetland Hydrology Present? Yes No Within a Wetland? Yes No								
Remarks: PEM								

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: - Letant Falls and Applicant/Owner: AMP - OH Investigator: McClosky / Koosen	Date: 12/1/05 County: Weigh State: Ohif
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: PEM Transect ID: ユッチョ Plot ID: BM-WS

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator						
, CA 6.1	ا جا جا در ۱۱ استور د د د						
1. Leervia virgenica H FACW	9. Ludungia atternifolia H Frant						
2 Ceptralanthus occidentalis S OBC	· · ·						
<u> </u>	10:						
3 Sales magia T FACW+	11						
1. Ludwigia paluotres H OBL	12						
5 acturage. H -	13						
6 Polygonum sagitlatum H OBL	14						
7 Onoclea sensibilis N FACW	15						
8 Carex lunda H OBL	16						
Percent of Dominant Species that are OBL, FACW or FAC							
(excluding FAC-)	~89%						
Remarks:							
wetland vegetation							
<u> </u>							

Recorded Data (Describe in Remarks):	Welland hydrology Indicators:
Stream, Lake, or Tide Gauge	Primary Indicators:
Aerial Photographs	Iriundated
Other	✓ Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks
	Orift Lines
	Sediment Deposits
Field Observations:	Drainage Patterns in Wellands
2 3 4	Secondary Indicators (2 or more required):
Depth of Surface Water: 2-3" (in.)	Oxidized Root Channels in Upper 12"
!	Water-Stained Leaves
Depth to Free Water in Pit:(in.)	/Local Soil Survey Data
<u> </u>	FAC-Neutral Test
Depth to Saturated Soil: (in.)	Other (Explain in Remarks)
Remarks:	. 1
Remarks: without hy	union.
11 williams my	~~~ <i>FS</i>
1	~

Taxonomy (Subgroup): mesic Typic Haplied Confirm Mapped Type? Yes No Profile Description: Depth	Map Unit Name (Series and Phase): 15 to 25% slopes Drainage Class: well drained Field Observations							
Depth (Inches) Horizon (Munsell Moist) (Munsel								
Histosol ConcretionsHistic Epipedon High Organic Content in Surface Layer Sandy Soils Sufficio Odor Organic Streaking in Sandy Soils	Profile Description: Depth Matrix Color Mottle Colors Mottle Texture, Concretions, (inches) Horizon (Munsell Moist) (Munsell Moist) Abundance/Contrast Structure, etc.							
Remarks: Reducing Conditions								

	Hydrophylic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	(E)	No No	(Circle)	Is this Sampling Point Within a Welland?	(Circle)
ı	Hyoric Soils Preserk?	(less)	-No-		is this compling to the venturial eventuria:	140
	Remarks:		•		-	
			•		·	
			-			A to HOUSEAST and

Project / Site: Ktat Jula area Applicant / Owner: AMP-ON Investigator: McClosicy / / Kpose-	Date: / Dec. 05 County: Malar State: Old						
Do normal circumstances exist on the site? Is the site significantly disturbed (Atypical situation)? Is the area a potential problem area? (explain on reverse if needed) Community ID: vol at the site in the site? Yes No Plot ID: VPL-BM-L							
VEGETATION							
Dominant Plant Species Stratum Indicator 1. During its planers: 2. Junear off acces: 3. Dom praticular class: 5	9						
HYDROLOGY							
Recorded Data (Describe In Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:	Wetland Hydrology Indi Primary Indicators: Inundated Saturated in L Water Marks Drift Lines Sediment De	Jpper 12"					
Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.) Secondary Indicators: Oxidized Roots Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)							
Remarks: No evidence of werland by drology 7 Flags							

Map Unit Name Ug D-Upshur-Hulpin complex, (Series and Phase): 15 to 25% plopes Drainage Class: well drained Taxonomy (Subgroup): mesic Typic Haplud Confirm Mapped Type? Yes No				
Profile Description: Depth (Inches) Horizon	Matrix Colors (Munsell Moist) 1048 4/4 1048 5/6	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions,
Hydric Soil Indicators: HistosolConcretionsHistic EpipedonHigh Organic Content in Surface Layer in Sandy SoilsSulfidic OdorOrganic Streaking in Sandy SoilsAquic Moisture RegimeListed On Local Hydric Soils ListReducing ConditionsListed on National Hydric Soils ListGleyed or Low-Chroma ColorsOther (Explain in Remarks)				
Remarks:				
WETLAND DETERMINATION Hydrophytic Vegetation Present? Yes No Is the Sampling Point Wetland Hydrology Present? Yes No Within a Wetland? Yes No Hydric Soils Present? Yes No				
Remarks: upland				

Project/Site: Letart Falls area Applicant/Owner: AMP-OH Investigator: Joy Van Shach/Matt	Lauffer	Date:
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No	Community ID : PEM Transact ID: C-I
VEGETATION		
Dominant Plant Species 1 Rohyman Seggilatur A OBL 2 Xanthium strumulum A FAC 3 Dichan thelium clandestiaum A FAC 4 Junium p Africas 5 Scirpus validur A PACH 6 Colox A A PACH 7 Acro regardo S TAL 8 Malfri and lines Percent of Dominant Species that are OBL FACW or FAC (excluding FAC.) Remarks Wettand regard	12 13 14 15 16 	

Stream, Lake, or Tide Gauge Aerial Photographs Other	Primary Indicators:Inundated Saturated in Upper 12 Inches
No Recorded Data Available	
Field Observations	Orift LinesSediment DepositsDrainage Patterns in Wetlands
Depth of Surface Water (in)	Secondary Indicators (2 or more required):
Depth to Free Water in Pit	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Salurated Soil >14 (in)	Other (Explain in Remarks)

(Series and	Map Unit Name Ug D - Upshur-Hulpern compiler, 15 to 25 % slopes Ug D-well drawed (Series and Phase): Ug E - upshur-Hulpern compiler, 25 to 50% Drainage Class: Ug E - well drawn Stopes Field Observations Taxonomy (Subgroup): mesic Typic Hapludalfs Confirm Mapped Type? Yes No				
Profile Des Depth (inches) 0-1 2-14	Horizon B	Matrix Color (Munsell Moist) JOYR 3/2 107R 4/11	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					
Remarks	シャ	dired this	cospher),	field confirm soi	ned hydric

Hydrophytic Vegetalion Present? (es) No Wetland Hydrology Present? (es) No		(Circle)
Remarks: 9 FlagS	18 Ints-Sampling Point vyurin a vyallana?	-193 -1940

Project/Site: Lotat Falls and		Date: <u>((3の)の</u> County: <u>Mらら</u> s		
Applicant/Owner: AMP-OH Investigator: TAV/MBL	`.	State:		
	Yes No Yes No Yes No	Community ID://w/inv/ Transect ID: Plot ID: U/L-Z-1		
VEGETATION				
Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1. Eregion pholosophicos H UPL 2 Malor andrever H PARIN	9			
2 Makers ambirever H PARIN	10			
3. Dichanthelium clondestinom H PAC	11			
4 Vormium gigantiza I PAC	12			
5 Rosa multiflora S FACU		1		
<u> </u>	13	· · · · · · · · · · · · · · · · · · ·		
6	14	· · · · 		
7	15			
8	16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)	~60%			
Remarks wetland vegetation				
HYDROLOGY				
Recorded Data (Describe in Remarks)	Wetland hydrology India	-alore		
Stream, Lake, or Tide Gauge	Primary Indicators:			
Aerial Photographs Other	Inundated Saturated	in Upper 12 Inches		
No Recorded Data Available	Water Mar Drift Lines	rks		
5-14 05	Sediment I	Deposits		
Field Observations	Secondary Indicators	Patterns in Wetlands s (2 or more required)		
Depth of Surface Water (in)	Water-Sta	Root Channels in Upper 12" ined Leaves		
Depth to Free Water in Pil (6 (in.)		Survey Data		
Depth to Saturated Soil		plain in Remarks)		

Non

ohiend

Remarks

Map Unit Na (Series and Taxonomy (E-Upahun 25 to mesic Ty		. Fig	alnage Class: <u>well drains</u> ald Observations Confirm Mapped Type? Yes No	
Profile Des Depth (inches) 2-16	Horizon A	Matrix Cotor (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contra	Texture, Concretions, Structure, etc. (IAV)	
	Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					
Remarks		fuld	confum	ed uplan	nd poil	

	Hydrophytic Vegetation Present? (Yes No (Circle) Wetland Hydrology Present? Yes No	(Circle)
1	Hydric Soils Present? Yes 16	Is this Sampling Point Within a Welfand? Yes No.
	Remarks:	
	emag brolow	sling location
		Approved by HQUSACE 3/92

Applicant/Owner: AMP-OH Investigator: M. Lan Plex		Date: 1/3005 County: 1/455 State: 04
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes (No Yes (No	Community ID: PEM Transect ID: W. James Plot ID: C-2

	 	<u> </u>		
Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indica	etor
1. Malani arundinaira	H PACW	9.		
2 Carex Lankeii	H OBL	10.		_
2 Junios effusus	H PHCW	11		_
4. Alygona saystatum	7 OBL	12		_
5 Pp tonger	1A PAC	13.		_
e Solidago canadan so	PACU			
l '	7	14		
7. De jue mond	H PAC	15		- :
a Ran multistion	S PACU	16		· · ·
Percent of Dominant Species that (excluding FAC-).	t are OBL, FACW or FAC	6/8=1~75	<i>9</i> 。	
(excluding FAO*).				
Remarks:	1 <u></u>	- .		
we	thand vegetal	wor		
	U			

Recorded Data (Describe in Remarks):	Wetland hydrology indicators:
Stream, Lake, or Tide Gauge	Primary Indicators:
Aerial Photographs	inundated
Other	Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks
	Orth Lines
Field Observations:	Sediment Deposits
	Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water: (in.)	Oxidized Root Channels in Upper 12"
Sopul of Canada Hater,(81.)	Water-Stained Leaves
Depth to Free Water in Pit: (in.)	Local Soil Survey Data
	FAC-Neutral Test
Depth to Saturated Soil:(in.)	Other (Explain in Remarks)
Bomodu.	
Remarks:	• -
wittend fed by	taping
1	

Map Unit N (Series and Taxonomy	ame Phase): (Subgroup): ∠	D-Upohun 15 to 25 mesic Typ	-Helipm c 500 slope ic Haplu	omplex, Draine Field Co	age Class: well drained Observations Infirm Mapped Type? Yes No
Profile Des Depth (inches)	Horizon	Matrix Color (Munsell Moist) Lley 13/104	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. Sindy Silty Loom
-	Histosol Histosol Sulfidic Od Aquic Mois Reducing (Gleyed or I	or ture Regime		Concretions High Organic Content in Organic Streaking in Sa Listed on Local Hydric S Listed on National Hydr Other (Explain in Rema	Soils List ic Soils List
Remarks:		field a	onfumed	hydric	poil

Hydrophytic Vegetation Present? Yes No (Circle Wetland Hydrology Present? Yes No	
Hydric Soils Present?	Is this Sampling Point Within a Wetland? Yes No
Adjourn, 10 Alags	
	Account by UCU 6475 202

Project/Site:futant Falls area Applicant/Owner: _AMP-OH Investigator: _JAU		Date: 12/19/05 County: Meiga State: Ohis
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: upland Transect ID: Plot ID: UPL-C-2
EGETATION		
Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator
dolidago canaderica H FACU	9	
2 Rulus alleghouseness H FACU-	10	
3. Eupatorium maculatum H FACW	11	
Festuca pratemora H FACU-	12	
5	13	
6	14	
7	15	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)	25%	
Remarks upland veg	etation	
HYDROLOGY		
Recorded Data (Describe in Remarks)	Wetland hydrology Indic	ators.
Stream, Lake, or Tide Gauge Aerial Photographs	Primary Indicators:Inundated	
Olher No Recorded Data Available	Saturated in Satur	n Upper 12 Inches
Field Observations		Patterns in Wetlands
Depth of Surface Water(in)	Oxidized R	(2 or more required) not Channels in Upper 12"
Depth to Free Water in Pit		Survey Data
Depth to Saturated Soil 214" (in.)	FAC-Neulr Other (Exp	al Test ilain in Remarks)
Remarks		
none obse	rved	

Map Unit Name Vg P - Upshur - Hulyim Complex, Series and Phase): 15 to 25% olypes Field Observations Field Observations Confirm Mapped Type? Yes No					
Profile Description: Depth (inches) Horizon (Munsell Moist) (Munsell Moist) 6-6" A 10YR 5/3 10YR 5/4					
Hydric Soil Indicators Histosol Concretions High Organic Content in Surface Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Remarks Remarks Add Canford Organic Content in Surface Layer Sandy Soils Listed on National Hydric Soils List Other (Explain in Remarks)					

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present?	Is this Sampling Point Within a Wetland?	(Circle)
Remarks		
upland sany	ding location	

Project/Site: Letout Falla area Applicant/Owner: AMP-OH Investigator: N. Lavett	Date: 1/3/05 County: Mugs State: 0#
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: DEM Transect ID: Uミナ Plot ID: ごろ

VEGETATION

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16	
c ~71%	
tation	
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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks:	hydrology

(Series and	Series and Phase): 25 to 50% Series and Phase): 25 to 50% Series and Phase): Mesic Typic Hophudalfs Confirm Mapped Type? Yes No.					
Profile Des Depth (inches) 3-30	Harizon A B	Matrix Color (Munsell Moist) 107R 16 2.5 7 4/2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. 5,17 5,17	
Hydric Soil Indicators: - Histosol						
erc	oppow a	mount ut a	in herby	z whyw z		

Hydrophytic Vegetation Present? Yes No Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle)	Is this Sampling Point Within a Wetland?	(Circl	e) No
Remarks:				
Atjount, 6 A	09-3		·	
				W 10 10 10 10 10 10 10 10 10 10 10 10 10

roject/Site: Letart Falls area pplicant/Owner: AMP-OH westigator: M. Lawffe		Date: 11/30/05 County: May/ State: 0H
to Normal Circumstances Exist on the site? s the site significantly disturbed (Atypical Situation)? s the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: <u>upland</u> in Transect ID: PL-C-3
EGETATION		
Dichantheturnclandestinum PACT Laniera Japanica Laniera Japanica Loniera Japanica Ruse math Airs Salidase (andensis FACU Remarks:	Dominant Plant Spec 9.	
Process Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	Water Drift L Sedin Secondary Indic Water Local FAC-	oxs: ated ated in Upper 12 inches r Marks

Map Unit N (Series and Taxonomy	l Phase):	E-Upahur 25 to 50 mesic Typ	20 slopes	Drains	age Class: wellow Observations Infirm Mapped Type? Ye	
Profile De Depth (Inches)	scription: Horizon B	Matrix Color (Munsell Moist) [17 R 3 3 [MR 5]3	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Sinucture, etc. 514 / oars 514 / clay	
Hydric Soil Indicators: Histosol Histic Epipedon Sutfictic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)						
Remarks		, field «	confume	d upland a	soil	

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	eling location
·	-

County: Music State: Olus
Community ID: PEM Transect ID: wet Plot ID: C-4

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.)	Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil:(in.)	FAC-Neutral Test Other (Explain in Remarks)
Remarks: strong wetland hydr	iology

Map Unit Name (Series and Phase): 13		-Hilipm (algebra ic Maplic		age Class: LIU drawe J Observations onlim Mapped Type? Yes No	
Profile Description: Depth (Inches) Harizon D-30 A(8)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell_Moist) (-(ry 1 2.5)5	Mottle Abundance/Contrast F//	Texture, Concretions, Structure, etc. Sitty clay	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					
Remarks:	fuld	conferme	d hydric	soil	

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No	(Circle)
Hydric Solls Present? Yes No	Is this Sampling Point Within a Wetland? Yes No
Remarks:	
18 Plass, as, arent	
·	
	Approved by HOUSACE 3/92

Project/Site: Letat Falls area Applicant/Owner: AMP-OH Investigator: M. Lanth	Date: 11/30/05 County: 11/30/05 State: 014
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: upland meadow Transect ID: upland Plot ID: upland

VEGETATION

Dominant Plant Species 1. Frstuca 3p. 2. Solidoso conchusos 3. Rubino a llegensieris 4. Small-Almand agricam 5-Conicara Jananica 6. Rosa Bulli Hora	Stratum Indicator PACU PACU PACU PACU PACU PACU PACU	Dominant Plant Species 9 10 11 12 13 14	Stratum Indicator
Percent of Dominant Species that (excluding FAC-). Remarks:	are OBL, FACW or FAC	79 770	

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks Drift Lines
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: pland hydr	ology

Map Unit Na (Series and Taxonomy	Phase):	gD-Upshur 15 to 25 masic Typi	20 slopes	Drain:	age Class: <u>relidiamed</u> Observations onfirm Mapped Type? Yes No
Profile Des Depth (inches) (9-13-	Horizon A B	Matrix Color (Munsell Moist) OTR 5 3 OTR 4/5	Mottle Colors (Munsell Moist)) 0 1	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. loam, clay loom, clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surfa ce Layer Sandy Soils Corganic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					ndy Soils Boils List ic Soils List
Remarks:		peld	confurm	ed upland	soil

Hydrophytic Vegetation Present? Wetland Hydrology Present?	Yes Yes	3E	(Circle)		(Circle)
Hydric Soils Present?	Yes	N		Is this Sampling Point Within a Wetland?	Yes (No)
Remarks:			→	·	
up	nal	بر ال	gmae	ling location	
					,

Project/Site: 1start Falls area Applicant/Owner: AMP-OH Investigator: IN LANGE	Date: 13 1 105 County: Megs State: 15 1
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID : PEMOS Transect ID: Doll

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Planter orgidation	T PACW-	a Scirpa Validas	H OBL
2. Junior & Ethini	H PAIN+	10. Bidons from do sa	A PACW
3. Cartx Junda	H OOL	11.	
4. Solidayo ni + da	J DAC	, , , , , , , , , , , , , , , , , , ,	
		12,	
5 Solidosu eanadensis	11 PACU	13	
a. Agrimonia parviflora	P FAC	14	
7. Vernonia 9 19 antica	H PAC	15	
8. Eupatorium Meculatum	1 H TACW	16	****
Percent of Dominant Species that (excluding FAC-).	are OBL, FACW or FAC	90%	
Remarks:			
Į.			
] h	etland reget	alien	
L			

Recorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOther	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks
Field Observations:	Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water:(in.)	Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12"
Depth to Free Water in Pit: >20 (in.)	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil: 790 (in.)	Other (Explain in Remarks)
Remarks:	
without hyd	nology

Map Unit Na (Series and Taxonomy		-updun-Hu 15 to 25% nesic Typi	lpur comple 6 slopes x Hapluda	Field (age Class: well drained Observations Infirm Mapped Type? Yes No
Profile Des Depth (inches)	Horizon A B	Matrix Color (Munsell Moist) 1018 4/4 1018 5/2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. SiHy clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Canditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surfa ce Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)					
Remarks:	7	fuld can	firmed.	hydric po	i

Hydrophytic Vegetation Pres Wetland Hydrology Present	sent? (16s) No (Circle) ? Yes No	
Hydric Soils Present?		Is this Sampling Point Within a Wetland? Yes No
Remarks:	adjoient	
9 Flags	<u>J</u>	
		·
	• · · · · · · · · · · · · · · · · · · ·	Wetland Hydrology Present? Sex No Hydric Soils Present? No No

Project/Site: Letart Fells area Applicant/Owner: AMP-OH Investigator: M. Lau Hill	Date: 12 1/105 County: 1707 State:
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: he berown Transect ID: upland Plot ID: Upland

VEGETATION

Dominant Plant Species	Stratum Indicator
9	·
10	
11	
12	
13	
14	
15	
16	
~ 329	
33 /0	
ation'	
	9

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches	
No Recorded Data Available	Water Marks Drift Lines Sediment Deposits	
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:	Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained LeavesLocal Soil Survey DataFAC-Neutral TestOther (Explain in Remarks)	
Remarks: None observed		

		- Upshire - 15 to 25° resic Typic	•	FF1 . 4 . 5 . 4	age Class: cell drained Observations Infirm Mapped Type? Yes (No)
Profile Description Depth (inches) O-10 10 10 10 10 10 10 10 10 10	Horizon A B	Matrix Color (Munsell Moist) 10 YR 4/3 10 YR 5/4	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. 51/7
	Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)				
Remarks:		fuld	confune	d upland a	soil

Hydrophytic Vegetation Present? Yes No (Circle) Wethand Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks:	
upland Ram	pling point
·	

Project/Site: Letart Falls area Applicant/Owner: AMP-OH Investigator: M. Lander		Date: 10/1/05 County: Mag s State: 01
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: PEM Transect ID: uetland Plot ID: D-2

VEGETATION

Dominant Plant Species	Stratum Indicator	Oominant_Plant_Species	Stratum Indicator
1. solidago ni tida	PAC	· Lantery , knowing	+1 PACU
2. Eupatorium haculato		10	•
a Vernonia gigantea	FAC	11	
4. Coren SDP	H FAC-OBL	12	
5. Cyperus esculentus	H FACW	13	· · · · · · · · · · · · · · · · · · ·
6. Juncus effusus	FACW+	14	·
7. Agrimonia parviflora	H FAC	15	
a Scirpus validus	H OBL	16	
Percent of Dominant Species that (excluding FAC-).	are OBL, FACW or FAC	90%	
Remarks:		1	
	wetland	d regetation	

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Indicators:InundatedSaturated in Upper 12 Inches
No Recorded Data Available	Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12" Water-Stained Leaves
Depth to Free Water in Pit: $\frac{\sqrt{8}}{\sqrt{6}}$ (in.)	Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil: 7 (X (in.)	Other (Explain in Remarks)
Remarks:	
wettand h	ydrology

Map Unit N (Series and Taxonomy		D-upahur H 15 to 25% near Typic	•	, j Field (age Class: duamée Observations Antirm Mapped Type? Yes No	-
Profile Des Depth (inches) 6 - 8 8- /4	Horizon B	Matrix Color (Munsell Moist) (07 / 3/3) 07 / 5/2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. / oarn /anary C/ag	
- - - - -	I Indicators: _ Histosol _ Histic Epiped _ Sulfidic Odo _ Aquic Moisto _ Reducing Co _ Gleyed or Lo	r ıre Regime		Concretions High Organic Content in Organic Streaking in Sa Listed on Local Hydric! Listed on National Hydr Other (Explain in Rema	Solis List ic Soils List	
Remarks:		field	confirme	d hydric.	soil	

	Hydrophytic Vegetation Present? Wetland Hydrology Present?	YES	No No	(Circle)		(Circle)
1	Hydric Soils Present?	Yes	No		Is this Sampling Point Within a Wetland?	(Yes) No
	Remarks:					
1						41. 110101010

Project/Site: Kotart Stalla area Applicant/Owner: AMP-OH Investigator: In Links	Date: 13\105 County: May 1 State: 044
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID:

VEGETATION

Dominant Plant Species Stratum I	ndicator	Dominant Plant Species	Stratum	Indicator
1 Robinia pseudoacacia T 1	MCM	9		
	MILL	10		
3. Carr Sp.)+ F	-AC-0BL	11		
4 Fine sp. A F	AIL	12		
a Agrimonia parviflora 17	THE	13		
19 <u>11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>	FACU	14		
7. Solidaju canahana 1 H	paku	15		· ·
a Landon proming 17	FACIL	16		
Percent of Dominant Species that are OBL, F (excluding FAC-).	FACW or FAC	~25%		
Remarks:				
uplan	d vege	tation		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:20" (in.) Depth to Saturated Soil:20" (in.)	Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12° Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks:	hydrology

(Series and	ap Unit Name Vg D - Washur - Kulain complex, eries and Phase): 15 To 25 % alopex Swonomy (Subgroup): mesic Typic Hapludalfs Confirm Mapped Type? Yes No						
Profile Des Depth (Inches) 0-8 \$-14	Hortzon B B	Matrix Color (Munsell Moles) byk 4/3 uyk 4/3	Mottle Colors (Munsell Moist)	Motife Abundance/Contrast	Texture, Concretions, Structure, etc. varr lam clay		
Hydric Soli Indicators: Histosol Concretions High Organic Content in Surface Layer Sandy Soil Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)							
Remarks	:	wf	land so	ul			

Hydrophytic Vegetation Present? Yes (No (Circle) Wetland Hydrology Present? Yes (No (Circle) Hydric Soils Present? Yes (No (Circle))	(Circle)
Remarks:	
upland some	ling location.

Project/Site: Litart Falls area Applicant/Owner: AMP OH Investigator: M. Land		Date: 13/1/10 County: 1/14/10 State: 11/14/10	75
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID Transect ID: • Plot ID:	PEM/PFD
VEGETATION		· · · · · · · · · · · · · · · · · · ·	
Dominant Plant Species Stratum Indicator	Dominant Plant Speci		Indicator
1 Malaris arundomera H PACW	· Agrimania poru	iflora -	71/6
2 Dichanthelium clandostanum H FACT	10		- <u>- </u>
3 Salday Mandoung H RALU	11	•	
* Plantonue occidentalis T FIFEW-	12		
5 CAPE IP. H FAC-OBL	13		
6 Aisa mittellar 5 PACH	14		
7. Expotorium Maculatum H PAC	15		_ :
a Chocleasensibilis H PACN	16		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	~77%		
Remarks: Dorman, Las by Marianis			
HYDROLOGY			
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	<u> </u>	vrs: ated ated in Upper 12 Inch Marks	es
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit: > 1 6 (in.)	Sedin Drain Secondary Indic Oxidia Wate	nent Deposits age Patterns in Wetta cators (2 or more required Root Channels in r-Stalned Leaves	uired);
Depth to Free Water in Pit: > 6 (in.) Depth to Saturated Soil: 7 (in.)	X FAC-	Soil Survey Data Neutral Test (Explain in Remarks	3)
Remarks: without I	rydrology		

Map Unit No (Series and Taxonomy	tap Unit Name 13 D- Upshur-Hulpin complex, 15 to 25% plopes ug D-well drained Series and Phase): Ug E- upshur-Kulpin complex, 25 to 50% Drainage Class: Ug E-well drained Series and Phase): Mesic Typic Napludalfa Confirm Mapped Type? Yes No							
Profile De: Depth (inches)	Horizon K B	Matrix Color (Munsell Moist) (IMF 414 (GMR 5)2	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. U a m Uam Clay			
	Hydric Solf Indicators:							
Remarks	Remarks: field confurmed hydric soil							

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wethand? (Yes No
Remarks: 12 flags, adjoint	

Project/Site: Atant Falls area Applicant/Owner: AMF-OH Investigator: MLante Do Normal Circumstances Exist on the site?	County: Mass State: Ox: Community ID: Malow
is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes Yes Plot ID: PL- D-3
VEGETATION	
Dominant Plant Species Stratum Indicator 1 Festura of atoms of Phru- 2 India announces H Phru 3 Suidago (anadam) H Phru 4 Phru 5 B 7 B Remarks: Adminant by Suidago HYDROLOGY	Dominant Plant Species Stratum Indicator 9
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: 20 '' (in.) Depth to Saturated Soil: 20 ' (in.)	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Adve abserved	

	Nap Unit Name Ug D - Upshur Julpan complex, Series and Phase): 15 to 25% slopes Taxonomy (Subgroup): Mesic Typic Haplindalfs Confirm Mapped Type? Yes No						
Profile Description: Depth (Inches) Horizon (Munsell Moist) (Munsell Moist) O-S A [071-413 June 196 June							
Hydric Soit Indicators:							
Remarks: fuld confurmed hydric soil							

Hydrophytic Vegetation Pro Wetland Hydrology Present Hydric Soils Present?	esent? Yes (No) (Circle) No Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes
Remarks: Mending	s Fort	

Project/Site: Latart Falls Applicant/Owner: AMP-OH Investigator: JAV	Date: County: State:	County: meigs				
Do Normal Circumstances Exist on Is the site significantly disturbed (At is the area a potential Problem Are (If needed, explain on reverse.)	Yes Yes Yes	368	Commun Transec Plot ID:		PEM/PFO willowd D-4	
VEGETATION						
Dominant Plant Species Str	ratum Indicator	<u>Domir</u>	nant Plant Spec	zies S	Iratum I	Indicator
1. Amous effusus	H FACW+	١ .				

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Juneus effusus H FACW+	8	
2 danpus cyperinus H FACWT	10	
3 Plantanus occidentalis T FACW	11	
4. Eupatorum maculatum H FACW	12	
5 Rulus allaghamenois S FACU	13	
6 Dichanthelin dandetinin H FACT	14	<u> </u>
7 Carex App. H FAC-OC	15	
8. Onoclea sensibilia H FACW	16	
Percent of Dominant Species that are OBL_FACW or FAC (excluding FAC-)	87.5%	
Remarks		
wettond ve	getalion	
I		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks		
Field Observations Depth of Surface Water	Drift Lines 8ediment Deposits Drainage Patterns in Wellands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)		
Remarks without by	drology		

Map Unit Name Ug D - upshin-Hilpin complete, 15 To 25% Ug D - will diamed (Series and Phase): Ug E - upshin-Hilpin complete, 25 to Drainage Class: Ug E - will diamed Taxonomy (Subgroup): mesic Typic Hapludalfa Confirm Mapped Type? Yes (No)						
Profile Description: Depth (inches) Horizon O-3" A 3-14" R	Metrix Color (Munsell Moist) 10 YR 6/2 10 YR 6/2	Mottle Colors (Munsell Moist) 7. S Y R S/2 7. S Y R S/8	Mottle Abundance/Contrast many/distince	Texture. Concretions, Structure. etc. Loy loan Lay loan		
Hydric Soil Indicators Histosol Concretions						
	re Regime		High Organic Content in Organic Streaking in Sa Listed on Local Hydric S Listed on National Hydri Other (Explain in Rema	Soils List ic Soils List		
fuld confumed hydric soil - oxidized rhyposphies in A and B horizon						

Hydrophytic Vegetation Present? (Ves.) No (Circle) (Circle) Wetland Hydrology Present? (Ves.) No Is this Sampling Point Within a Wetland? (Ves.) No
Hydric Solls Present? (es) No Is this Sampling Point Within a Welland? (Ves) No
Remarks:
on there of a death was been
all three without critical have been satisfied as this sampling location
satisfies as this sampling location
Account to UOURAGE 200

Project/Site:		Date: 18/1/05 County: Merga State: OAug
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes (No Yes (No Yes (No	Community ID : <u>upland</u> Transect ID: Plot ID: UPL-W-4
VEGETATION		
Dominant Plant Species Stratum Indicator 1 Rulus alleghenumans S FACU- 2 Johnson camadensia H FACU 3 Testuca pratenees H FACU- 4	Dominant Plant Specie 9	
HYDROLOGY Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available		: ed in Upper 12 Inches farks
Field Observations Depth of Surface Water (in) Depth to Free Water in Pit. ————————————————————————————————————	Secondary Indicate Oxidized Water-Si Local Sc	es nf Deposits e Patterns in Wellands ors (2 or more required) d Root Channels in Upper 12* illained Leaves oil Survey Data eutral Test Explain in Remarks)
Remarks mone ob	serned	

Map Unit Name Ug = upshur-Helpin complex, (Series and Phase): 35 To 5070 slepse Taxonomy (Subgroup): mexic Typic Hapludalfs Field Observations Confirm Mapped Type? Yes (No)							
Profile Description: Depth (Inches) Horizon 3-14" B	Matrix Color (Munsell Moist) OYR 1/2 10 YR 5/3	Mottle Colors Mottle (Munsell Moist) Abundance/Contrast Structure, etc. 7,5 VR 5/6 few/faint Sulty lay la	am oovin				
Hydric Soil Indicators: - Histosol							
	fuld	confirmed upland soil					

Hydrophytic Vegetation Present? Wettand Hydrology Present? Hydric Solls Present?	Yes Yes Yes	No (Circle)	(C	Circle)	
Remarks					
	Ч	a brole	ampling location		
			V		

Project/Site: Latart Falls area Applicant/Owner: AMP-OH Investigator: M Lav Par	Date: 131/05 County: NATE State: 04	
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Yes No No No (If needed, explain on reverse.)	Community ID: PEM Transect ID: untlend Plot ID: D-5	
VEGETATION		
Dominant Plant Species Stratum Indicator Dominant Plant Spe	scies Stratum Indicator	

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Malaric arundrance a	A PACW	9	
2 Dichan Helum alandestin	und PAC+	10	
a Junior plyins	McW+	11.	
4. Gpan esmech	H PAIN	12.	
5 CAPX SP	17 FAC-OBL	13.	
e. Agrimonia porviflora	H PAC	14.	
7. London Approin	H PANU	15	
8		16	
Percent of Dominant Species tha	t are OBL, FACW or FAC	~8620	
(excluding FAC-).		. 486 /0	
Remarks: Mostly Palais	,		
	'n		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Cother No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 inches Water Marks		
Flefd Observations: Depth of Surface Water:	Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soll Survey Data FAC-Neutral Test Other (Explain in Remarks)		
Remarks: First 7" salvants, I low that a	dry/ Rapale		

Map Unit Name Series and Phase): 25 to 50 % slopes Taxonomy (Subgroup): mesic Typic Haplidalfa Confirm Mapped Type? Yes No						
(Inches) Horizon (Munsell Moist) (Mun	R 5 / Mottle R 5 / Moist) R 5 / Moist)	Texture, Concretions, Structure, etc. Stry clry loam Clay loam				
Hydric Soil Indicators: — Histosoi — Histic Epipedon — Sulfidic Odor — Aquic Moisture Regime — Reducing Conditions — Gleyed or Low-Chroma Colors	Concretions High Organic Conten Organic Streaking in Listed on Local Hydri Listed on National Hy Other (Explain in Re	ic Soils List ydric Solls List				
Remarks: A layer has many concretify	ord					

Wetland Hydrology Present?	No (Circle No No	(Circle) Is this Sampling Point Within a Wetland? Yes No.
Remarks: Adjacent 7 Hazs		

Project/Site: Litart Julia area Applicant/Owner: AMP-OH Investigator: M. Laft	Date: 121/05 County: 140/5 / State: 0		
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Community ID: Are, 1 Yes No Transect ID: Waland Yes No Plot ID: UPL- D-S		
VEGETATION			
Dominant Plant Species Stratum Indicator 1 Mandry Accordens is H FACU 2 So It days canadens is H FACU 3 RUSA man Koldens 5 PACU 4 Milliam Japanica 5 PACU 6 PACU 6 PACU 8 PACU Remarks:	Dominant Plant Species Stratum Indicator		
HYDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge	Wetland hydrology Indicators: Primary Indicators:		
Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit: \(\(\triangle \) \	inundatedSaturated in Upper 12 InchesWater MarksDrift LinesSediment DepositsDrainage Patterns in Wetlands Secondary Indicators (2 or more required):Oxidized Root Channels in Upper 12"Water-Stained LeavesLocal Soil Survey DataFAC-Neutral TestOther (Explain in Remarks)		
Remarks:			

	tap Unit Name Series and Phase): 25 to 50% slopes Taxonomy (Subgroup): mesic Typic Haplinday, Confirm Mapped Type? Yes No						
Profile Des Depth (inches)		Matrix Color (Munsell Moist) 107833 107843	Mottie Colors (Munsell Moist)	Motile Abundance/Contrast	Texture, Concretions, Structure, etc. (In Joann Clay Jeann		
-	Histosol Histic Epipe Sulfidic Moisi Reducing C Gleyed or L	or ture Regime		Concretions High Organic Content i Organic Streaking in S Listed on Local Hydric Listed on National Hyd Other (Explain in Rem	Soils List Iric Soils List		
Remarks	K -	Jula	d confuir	ned uplan	d soil		

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes	No (Circle)	Is this Sampling Point Within a Wetland?	(Circ	
Remarks:	щ	Jand sa	mpling location		

Project/Sile: Litait Talls area Applicant/Owner: AMFOH Investigator: M. Lauffor	Date: / 1/09 County:
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: POW/FEY Transect ID: without Plot ID: D-6

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant_Plant_Species	Stratum	<u>Indicator</u>	
1. Potamogeton spp. 27 pp argustana 3. TIMW effor	Floating OB- H OB- H PAKW+	9			
4 Salix Algra 5 (0 to p)	S PACW+ H FAC-OBL	11 12 13 14 15			
8		16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks: wettand vegetation					

Recorded Data (Describs in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Wetland hydrology Indicators: Primary Indicators: inundated Saturated in Upper 12 Inches		
No Recorded Data Available	Water Marks Drift Lines		
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):		
Depth of Surface Water:	Oxidized Root Channels in Upper 12" Water-Stained Leaves		
Depth to Free Water in Pit:(in.)	Local Soil Survey Data FAC-Neutral Test		
Depth to Saturated Soil:(in.)	Other (Explain in Remarks)		
Remarks: wetland hydrology			

Map Unit Name VgE- Upshur - Hulpin complex, (Series and Phase):								
Profile Des Depth (inches) 0-2- 2-(0	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
<u> 0</u> -20	<u>B</u>	57412	57 414	_M/=	Julty clay			
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)								
Remarks: field confirmed hydric soil								

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No	(Circle)					
	g Point Within a Wetland? Yes No					
Remarks:						
mapped from owned, centingent wetland fringe around pond						
around pand						

Project/Site: Letant Falls and Applicant/Owner: AMP-0H Investigator: TAV		Date: 12/1/05 County: Marga State: Ofico					
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Ves Vo Yes Vo	Community ID:pland Transect ID:pland Plot ID: uPr D-6					
VEGETATION							
Dominant Plant Species Stratum Indicator 1 allum canadence H FACU 2 Feature frateness H FACU 3	9						
8 Percent of Dominant Species that are OBL. FACW or FAC (excluding FAC-)	14 15 16						
Remarks upland vegetation							
HYDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology Indicators* Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Dritt Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required) Oxidized Root Channels in Upper 12* Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)						
Field Observations Depth of Surface Water (in) Depth to Free Water in Pit $\rightarrow 14''$ (in) Depth to Saturated Soil (in)							
Remarks more obsured							

Map Unit Name (Series and Phase):	E - Upohur 25 to meaic Tyy		a a Field I	age Class: <u>will drained</u> Observations Infirm Mapped Type? Yes No	
Profile Description: Depth (Inches) Horizon O-4" A 4-14" B	Matrix Color (Munsell Moist) 1648/3 1048/3	Mottle Colors (Munsell_Moist)	Mottlie Abundance/Contrast	Texture, Concretions, Structure, etc. Loam sandy Loam	
Hydric Soil Indicators					

Hydrophytic Vegetation Present? Wetland Hydrology Present?	Yes Yes	No (Circle)	(Circle)
Hydric Soils Present? Remarks:	Yes	1	Is this Sampling Point Within a Welland? Yes (16)
	10	l . l .	
	Y	iand s	ampling location

Project/Site: Letat Falls area Applicant/Owner: AMP-OH Investigator: JAV	Date: 11/29/05 County: Muga State: Ship
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID : PEM /PSS Transect ID:

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1 acer negundo S FAC+ 2 Junius effusion H FACW+ 3 Ruhus alleghaniensio S FACU- 4 Caren ppp. H FAC-BBL 5 climpatura capanais H FACU 6	10	Stratum moreator		
8	16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)	~80%			
wetland vegetation				

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge	Wetland hydrology Indicators: Primary Judicators:
Aerial Photographs Other	
No Recorded Data Available	Water Marks Drift Lines
Field Observations	Sediment Deposits Drainage Patterns in Wellands
Depth of Surface Water 2 (in)	Seconday/Indicators (2 or more required) Oxidized Root Channels in Upper 12
Depth to Free Water in Pit surface (in)	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil sufface (in)	Other (Explain in Remarks)

Map Unit Name UgE - Upshur- Hilpur complex, (Series and Phase): 25 to 50 % slopels Taxonomy (Subgroup): mesic Typic Nopledalfs Confirm Mapped Type? Yes No						
Profile Description: Depth (Inches) Horizon 0-3" A 3-16" B	Matrix Color (Munsell Moist) 10 YR 4/2 10 YR 6/1	Mottle Colors (Munsell Moist) 2.5 yr 4/2 2.5 y R3/6	Mottle Abundance/Contrast common/distinct many/promise	Texture. Concretions, Structure. etc. sulty day loam touty day loam		
Hydric Soil Indicators - Histosol - Concretions - Histic Epipedon - High Organic Content in Surface Layer Sandy Soils - Sulfidic Odor - Organic Streaking in Sandy Soils - Aquic Moisture Regime - Listed on Local Hydric Soils List - Reducing Conditions - Listed on National Hydric Soils List - Gleyed or Low-Chroma Colors - Other (Explain in Remarks) Remarks Remarks Add Confunded Hydric Soils List - Other (Explain in Remarks)						

Hydrophylic Vegetation Present? (Tes No (Circle) Wetland Hydrology Present? (Tes No Hydroc Soils Present? (Tes No	(Circle)
Remarks:	Is this Sampling Point-Within a Walland?
	Approved by HQUSACE 3/92

Project/Site: Lotant Fills area Applicant/Owner: AMP-OH Investigator: TAV		Date: 11/24/05 County: Meiga State: 3 Just
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID:
VEGETATION		
Dominant Plant Species Stratum Indicator 1 Carya Lacurio a T FAC 2 Rosa multiplora S FAC U 3 Quercus multiplora T FACU 4	Dominant Plant Species 9 10 11 12 13 14 15	
(excluding FAC-) Remarks upland reget. HYDROLOGY	<u>~33%</u> ation	
Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations Depth of Surface Water Depth to Free Water in Pil Depth to Saturated Soil	Water Mar Drift Lines Sediment I Drainage F Secondary Indicators Oxidized F Water-Stai Local Soil	in Upper 12 Inches ks Deposits Patterns in Wetlands 5 (2 or more required) Root Channels in Upper 12" ined Leaves Survey Data

Mep Unit Name (Series and Phase): 25 To 50 % slapes Drainage Class: uell drained Field Observations Zenerall Taxonomy (Subgroup): me sic Typic Hapludalfa Confirm Mapped Type? (Yes) No						
Profile Describlion: Depth (inches) Horizon 0-5" A 5-14" B	Matrix Color (Munsell Moist) 10 Y R 5/4	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc. sulty loam sulty loam		
Hydric Soil Indicators						

Hydrophylic Vegetation Present? Wetland Hydrology Present?	Yes (Circle) Yes (No.)	In this Compliant Sound Within 12 Modern	(Circle)
Hydric Soils Present?	Yes (No.)	is this Sampling Point Within a Wetland	Tes (No
Remarks:			
لمي	and sompl	ing location	
7	(U	
			round by HOUSEACE 3/02

Project/Site: Letat Falls area Applicant/Owner: PMP Dhib Investigator: BEM	Date: 11-29-05 County: Menta State: Off 0
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: PEM/ Transect ID: W-2

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1. Importans apensis	HC FACE	9			
2. Carch 500	HL FAC-OBL	10	·		
3. Lysimachia nummularia	the EDOW	11			
4. Epilobium coloratum	the OBL	12	·		
5 Solidago conodensis	HU FACU	13			
a Rosa multiflora	SH FACU	14			
7. Acernegundo	5 FAC+	15			
8		16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks:					

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs	Wetland hydrology Indicators: Primary Indicators: Inundated
Other No Recorded Data Available	Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12" Water-Stained Leaves
Depth to Free Water in Pit: Quitage (in.)	Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil: suface (In.)	Other (Explain in Remarks)
Remarks: without hydrol	ogy

Map Unit Name LaD- Lahm loamy fine excessibly (Series and Phase): sand, 12 to 18% slopes Drainage Class: well brained Field Observations Taxonomy (Subgroup): mesic affic udepsamments Confirm Mapped Type? Yes No						
Profile Description: Depth (inches) Horizon (Munsell Moist) (Munsell Moist) O-D A INYR2/2 — — — Sandy Lram 2-12 B 10 YR3// — — — — — — — — — — — — — — — — — —						
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors — Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)						
Remarks: field confirmed hydric soil						

Hydrophytic Vegetation Present? Wetland Hydrology Present?	Yes No (Circle)	(Circle)
Hydric Soils Present?	Yes No	Is this Sampling Point Within a Wetland? (Yes) No
ur	el wetland upling loca	cuteria satisfied at

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site: Letent Falls area Applicant/Owner: Amp Uhio Investigator: BEM	Date:
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: upland free Transact ID: Plot ID: UPL-12-3

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator		
1. Lonice ra japonica	He FACY	9			
2 FOGG Multi Hora		10			
3. Palystichum acrostiche	oides He FACU -	11			
4		12			
5		13			
6		14			
7		15			
8		16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks:					
upland regotation.					

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland hydrology indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soll Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: No hydroic	usy orithan prevent

	Map Unit Name La D- Rakin loanny fine (Series and Phase): sand, 12 to 1820 slopels Drainage Class: well december Taxonomy (Subgroup): mexic affic lidysammenta Confirm Mapped Type? Yes No					
Profile Depth (inches) 0-2 2-14	Horizon G	Matrix Color (Munsell Molst) 10/(2//-3 10/(2//-2	Mottle Colors (Munsell Moist)	Mottie Abundance/Contrast	Texture, Concretions, Structure, etc. sandy loam smdyloam	
Hydric Soil Indicators. — Histosol — Concretions — High Organic Content in Surface Layer Sandy Soils — Sulfidic Odor — Organic Streeking in Sandy Soils — Aquic Moisture Regime — Listed on Local Hydric Soils List — Reducing Conditions — Listed on National Hydric Soils List — Gleyed or Low-Chroma Colors — Other (Explain in Remarks)						
Remarks: fulld confurmed upland soil						

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes (No)
Remarks:	ling location

Project/Site: Letart Falls area Date: 11/29/05 Applicant/Owner: AMP-OH County: 7h Investigator: M. Lauller Kooses State: _ (Yes) **EE** 8 Community ID: POW
Transect ID: ____ Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Yes Is the area a potential Problem Area? Plot ID: Yes (If needed, explain on reverse.)

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator			
1. Juneus effusus H FACW+	9				
1. Juneus effusus H FACW+ 2 acor negundo T FAC+	10				
3	11				
4	12				
5	13				
6	14				
7	15				
8	16				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)	~100%				
Remarks wetland regetation					

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge Aerial Photographs Other Topographic magain	Wetland hydrology Indicators: Primary Indicators:
No Recorded Data Available Field Observations: Depth of Surface Water	Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12" Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Lettland Sydrol - open water area	ogy

Map Unit Name					
Profile Description: Depth (inches) Horizon O-20+ A/B	Matrix Color (Munsell Moist) 7.5 YR 4/2	Mottle Colors (Munsell Moist) 7. 5 YR 4/4	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil Indicators: Histosol Concretions High Organic Content in Surface Layer Sandy Soils					
	ure Regime onditions ow-Chroma Colors	[Organic Streaking in S Listed on Local Hydric Listed on National Hyd Other (Explain in Rem	Soils List ric Soils List arks)	
fuld confurned hydric soil - non red streating					

Hydrophytic Vegetation Present? (e) Wetland Hydrology Present?	No (Circle) No No	Is this Samoling Point Within a Welland?	(Circle)
Remarks: E flags,			
B2 at B3 = 31 B3 = 30,29 B4 = 32		•	

DATA FORM ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Man umi Mama	E-Upahur, 25-50% Misie Ti	sloped	Drain:	age Class: <u>www.drawned</u> Observations Infirm Mapped Type? Yes No		
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist) 7.5 YR 4/3	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Sinucture, etc.		
3-20" B	7. SYR ⁵ /3			<u>clay, cone</u> etrons		
Hudrig Sail Indicators						
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surfa ce Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)						
field confirmed upland soil with concretions						

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes	368	(Circle)	Is this Sampling Point Within a Wetland?	(Circle)
Remarks:			d 00	impling location	

Project/Site: Letant Falls area Applicant/Owner: AMP-OH Investigator: Loosen	County:	Date: 11/29/05 County: Mega State: Chia	
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	s No Transect	ity ID: PEM ID: — VB-2	

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species	Stratum Indicator			
1. Canextunida H OBC	9				
2 climpaturiscapenais H FACW	10				
3 Carex stricta 4 OBL	. 11				
4 Cinna sound. 4 OBL	12				
5 Rolygown perseconia H FACW+	13				
6 Sampus apperenus H FACU+	14				
7	15				
8	16				
Percent of Dominant Species that are OBL FACW or FAC (excluding FAC-)	100%				
Remarks vettand vegitation					

Recorded Data (Describe in Remarks) Stream, Lake, or Tide Gauge	Wetland hydrology Indicators: Primary Indicators:
Aerial Photographs	Inundated
Other	Saturated in Upper 12 Inches
No Recorded Data Available	Water Marks
	Orift Lines
Field Observations	Drainage Patterns in Wetlands
	Secondary Indicators (2 or more required)
Depth of Surface Water (in)	Oxidized Root Channels in Upper 12"
/ I N N N N N N N N N N N N N N N N N N	Water-Stained Leaves
Depth to Free Water in Pit (in.)	Local Soil Survey Data
· · · · · · · · · · · · · · · · · · ·	FAC-Neutral Test
Depth to Saturated Soil(in.)	Other (Explain in Remarks)
Remarks	1
wetland hy	idiology
The court of the c	\sim σ_f

(Series and	Map Unit Name La D - habin loamy fine Rand, (Series and Phase): 12 to 18% Stopes Drainage Class: well drained Field Observations Taxonomy (Subgroup): mesic affic Udiasammenta Confirm Mapped Type? Yes (No)							
Profile Del Depth (Inches)		Matrix Color (Munsell Moist) LOY05/3 LOY04/2	Mottle Colors (Munsell Moist)	Motile Abundance/Contrast	Texture, Concretions, Structure, etc.			
		101K /2	<u> </u>	many/assure				
- - -	Hydric Soil Indicators Histosol Concretions High Organic Content in Surface Layer Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Peducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)							
field confumied bydric soil								

Hydrophytic Welland Hy	c Vegetation Present? (Ves No (Circle) ydrology Present? (Ves No s Present? No	(Circle)
Remarks:	PEM, 11 flags	Is this Sampling Point Within a Welland? (Yes) No
		Approved by HOUSACE 1/03

Project/Site: Letant Falls area Applicant/Owner: AMP-OH Investigator: Konser	Date: 11/21/05 County: Meiga State: O Lio
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: upland Transect ID: Plot ID: UPL-WB-2

VEGETATION

Dominant Plant Species Stratum I	ndicator	Dominant Plant Species	Stratum	Indicator		
1 acer rubrum T		9				
2 acer negundo T:	FAC+	10				
3 Loncera japonica V 1	FAC-	1 1		****		
1 aclesina petiolata H	FAC U-	12				
5 Rosa multiplora S f	FAC U	13		-		
6 Plantonies occidentalis T	FACW-	14				
7 Deum canadense H 1	FACU	15				
8		16				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)						
Remarks						
upland regelation						

It Lines diment Deposits
annage Patterns in Wetlands dicators (2 or more required) idized Root Channels in Upper 12" aler-Stained Leaves cal Soil Survey Data C-Neutral Test her (Explain in Remarks)
)((

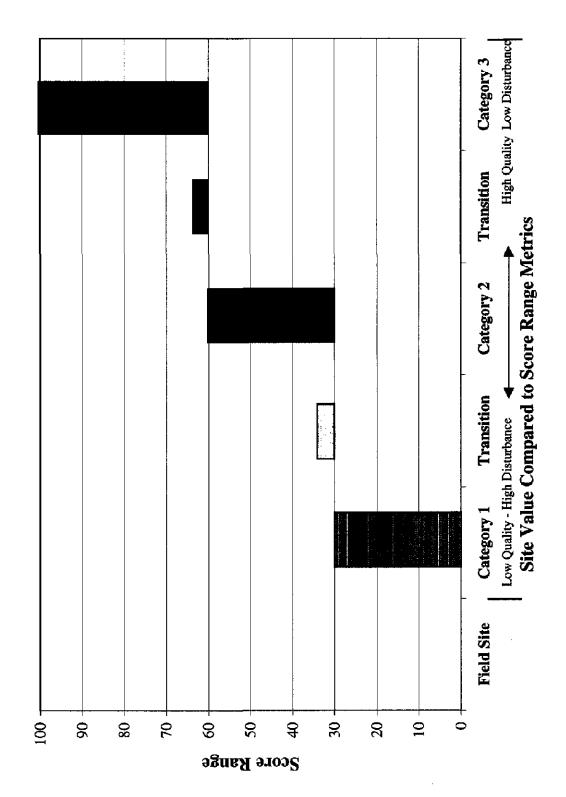
Map Unit Name (Series and Phase): 12 to 18 % slopes Taxonomy (Subgroup): meric affice the paramenta Drainage Class: well diamed Field Observations Confirm Mapped Type? (Yes) No							
Profile Description: Depth (inches) Horizon O-6" A 6-16" B	Matrix Color (Munsell Moist) 10 YR 4/3 10 YR 5/6	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Sinucture, etc. Loany sand Loany sand			
Hydric Soil Indicators Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks) Remarks							
field confirmed upland soil							

Hydrophytic Vegetation Present? Yes (Qircle) Wetland Hydrology Present? Yes (Qircle) Hydric Soils Present?	Is this Sampling Point Within a Welland?	(Circle)								
Remarks:	15 VII 5 Sampling Cont Pittal Direction									
field confurmed upland sampling location										
sampson og ASC										
		wad by NOUGAGE AMA								

APPENDIX B

OHIO EPA OHIO RAPID ASSESSMENT METHOD (ORAM) FOR WETLANDS V5.0 FORMS AND GRAPH

Ohio Rapid Assessment Method



UNAM V. S.U Field Form Qu	Isluranae Marina		 	
Site: AFS-W	\	Rater(s): M. Lauf	fer	Date: 11/28/05
	tric 1. Wetland A tone size class and assign scol >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha 0.3 to <3 acres (0.12 to <1. 0.1 to <0.3 acres (0.04 to <	re. (7.2ha) (5 pts) na) (4 pts)) (3 pts) 2ha) (2pts)		
	<0.1 acres (0.04ha) (0 pts)			
	•	ffers and surroundi	•	r
Ø	WIDE. Buffers average 50 MEDIUM. Buffers average MARROW. Buffers average VERY NARROW. Buffers Intensity of surrounding land use VERY LOW. 2nd growth o LOW. Old field (>10 years MODERATELY HIGH. Re-	Select only one and assign score. Dom (164ff) or more around wetland per 25m to <50m (92 to <164ff) around to 10m to <25m (92 to <164ff) around to 10m to <25m (32ff to <82ff) around average <10m (<32ff) around wetland. Select one or double check and arrorder forest, prairie, savannah, wild), shrubland, young second growth for sidential, fenced pasture, park, consipen pasture, row cropping, mining, co	nimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) verage, life area, etc. (7) vest. (5) ervation tillage, new fall	
8 9 Me	tric 3. Hydrology	'.	•	
mux 30 pts. strbintat 3a. 3	Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (la Maximum water depth. Select o >0,7 (27.6in) (3) 0/4 to 0.7m (15.7 to 27.6in) <0.4m (<15.7in) (1)	sce water (3) ike or stream) (5) nly one and assign score.	Part of wetland/u Part of riparian o Duration inundation/sat Semi- to perman Regularly inunda Seasonally inunda Seasonally satur	ain (1) /lake and other human use (1) /pland (e.g. forest), complex (1) r upland corridor (1) turation. Score one or dbi check. ently hundated/saturated (4) ited/saturated (3)
	None or none apparent (12	2) Check all disturbances observed		
	Recovered (7) Recovering (3) Recent or no recovery (1)	ditch tile dike weir stormwater input	point source (not iffling/grading what bed/RR trad dredging other	, I
3 12 M	tria A. Wahitat Al	Iteration and Dayele	nmant	
mex 20 pis. autitotal 4a	Substrate disturbance. Score of None or more apparent (4) Recovering (2) Recent or no recovery (1) Habitat development. Select on Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor (1)	ly one and assign score.	pment.	•
4 c. i	Habitat alteration. Score one or None or none apparent (9)			· 1
subtotal this page	Recovering (3) Recent or no recovery (1)	mowing grazing	shrub/sapting red	alic bed removal

last revised 1 February 2001 jjm ORAM v. 5.0 Field Form Quantitative Rating

Site:	AFS	- W	Rater	(s):		Date:
	a publicial first page					
0	12	Metr	ic 5. Special Wetlar	nds.	,	
max 10 pts.	eublobi	Check al	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)		ω (·/	
	·		Known occurrence state/lederal the Significant migratory songbird/wate	r fowl habitat or u	sage (10)	
-1	8		Category 1 Watland. See Question			
max 20 pts.		6a. Wet	ic 6. Plant communication Communities.	Vegetation C	ommunity Cover Scale	
		Score all	present using 0 to 3 scale. Aquatic bed	- 0	Absent or comprises <0.1he (0.2) Present and either comprises en	vall part of wetland's
	1		Emergent Shrub	~	vegetation and is of moderate significant part but is of low que	ality
	1	-	Forest Mudflats Open water	2	Present and either comprises sig vegetation and is of moderate part and is of high quality	
		6b. hori	Other zontal (plan view) Interspersion.	. 3	Present and comprises significant vegetation and is of high quality	
		Select o		Normative De	escription of Vegetation Quality	•
			Moderately high(4)	low	Low spp diversity and/or predom	
	0	s E	Moderate (3) Moderately low (2)	mod	disturbance tolerant native spe Native spp are dominant compor	nent of the vegetation,
	معر		LCow (1) None (0)	,	although nonnative and/or distriction also be present, and speci	
		fic. Cov	erage of invasive plants. Refer		moderately high, but generally	
			1 ORAM long form for list. Add		threatened or endangered spp	
			ct points for coverage Extensive >75% cover (-5)	high	A predominance of native specie and/or disturbance tolerant nat	
		.	Moderate 25-75% cover (-3)		absent, and high spp diversity	* *
	٠ ٥	5 [Sparse 5-25% cover (-1)	-	the presence of rare, threatene	ed, or endangered spp
	`	<u> </u>	Nearly absent <5% cover (0) Absent (1)	Mudfist and	Open Water Class Quality	
		6d, Mic	ratepography.	0	Absent <0.1ha (0.247 acres)	- -
		Score a	Il present using 0 to 3 scale.	1	Low 0.1 to <1hs (0.247 to 2.47	-
		\neg \vdash	Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to	_
		Ø	Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	3	High 4ha (9.88 acres) or more	•
		' '	Amphibian breeding pools	Microtopogr	raphy Cover Scale	
			- ·	0	Absent	
				1	Present very small amounts or if of marginal quality	more common
				2	Present in moderate amounts, b quality or in small amounts of	
	-			3	Present in moderate or greater a	
8	GRAI	ND TO	TAL (max 100 pts)	<u> </u>	and of highest quality	

Refer to the most recent CRAM Score Calbridgen Report for the according breakpoints between wetland categories at the following address: http://www.epe.state.oh.us/daw/401/401.html
last revised 1 February 2001 jim

cotegory 1

UKAM V. 5.0 Held Form	Connutative Hating			
Site: AN-W		Rater(s): Van Shad	Konser	Date: 11/28/05
	letric 1. Wetland	- · · · · · · · · · · · · · · · · · · ·		, , ,
maix 6 pts. subtobal Se	>50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to < 10 to <25 acres (4 to <10. 3 to <10 acres (1.2 to <4h 9.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pts	s) 20.2ha) (5 pts) 1ha) (4 pts) a) (3 pts) 1.2ha) (2pts) <0.12ha) (1 pt)		
4 5 N	letric 2. Upland b	uffers and surround	ling land use.	•
	N. Calculate average buffer width. WIDE. Buffers average 5 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers Intensity of surrounding lend us WERY LOW. 2nd growth LOW. Old field (>10 year MODERATELY HIGH. Re	Select only one and assign score. Om (164ft) or more around wetland pe 25m to <50m (82 to <184ft) arounge 10m to <25m (32ft to <82ft) arounge 10m to <25m (32ft to <82ft) around welk e. Select one or double check and or older forest, prairie, savannah, with shubland, young second growth esidential, fenced pasture, park, conopen pasture, row cropping, mining,	Do not double check, perimeter (7) d watland perimeter (4) and watland perimeter (1) and perimeter (0) average, lidife area, etc. (7) forest (5) servation tillage, new fall)
12 17 N	letric 3. Hydrolog	у.	•	
recc 30 pts. subtotal 3a	a. Sources of Water. Score all the High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent sur. Perennial surface water (i.e., Maximum water depth. Select >0.7 (27.6in) (3) (4.4 to 0.7m (15.7 to 27.6in) (4) <0.4m (<15.7in) (1)	at apply. at apply. blace water (3) (adj stann) blake or stream) (5) only one and assign score. on) (2)	Part of wettend/i Part of riperian of Duration inundation/sa Semi- to perman Regularly inunda Seasonally inun Seasonally setu	ain (1) //ake and other human use (1) //ake and other human use (1) //pland (e.g. forest), complex (1) // rupland comidor (1) // turation, Score one or dbl check // tentily inundated/saturated (4) // sted/saturated (3)
3	None or none apparent (1	ditch tile		ck
14 31	Metric 4. Habitat A	Alteration and Devel	opment.	——————————————————————————————————————
3	b. Habital development. Select of Excellent (7) Very good (6) Good (5)	4) nuturing nity one and assign score.		
	None or none apparent (*) Recovered (6)	9) Check eli disturbances observi mowing	shrut/sapling re	
3 subtotal this page	Recovering (3) Recent or no recovery (1	grazing		atic bed removal

last revised 1 February 2001 jim

ORAM v. 5.0 Field Form Quantitative Rating

Site:	AN-WI Rater(s	s):	Date:
	31 subtotal first page		
0	Metric 5. Special Wetland	ds.	
mex 10 pts.	Eubloud Check all that apply and score as indicated. Bog (10)		
	Fen (10) Old growth forest (10)		•
	Mature forested wetland (5) Lake Erie coastal/tributery wetland-un		· ·
	Lake Erie coastal/tributary wetland-re Lake Plain Sand Prairies (Oak Openio		ogy (3)
	Relict Wet Preiries (10) Known occurrence state/federal threa Significant migratory songbird/water f		
	Category 1 Wetland. See Question 1		
7		• -	erspersion, microtopography.
max 20 pts.	subtotal 6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.	Vegetation (Community Cover Scale Absent or comprises <0.1ha (0.2471 acres) conliguous area
	O Aquatic bed	1	Present and either comprises small part of wetland's
	2 Emergent		vegetation and is of moderate quality, or comprises a
	Shrub		significant part but is of low quality Present and either comprises significant part of welland's
	4 Houdials .	4	vegetation and is of moderate quality or comprises a small
	Open water		part and is of high quality
	O Other	3	Present and comprises significant part, or more, of wetland's
	6b. horizontal (plan view) interspersion.		vegetation and is of high quality
	Select only one.		•
	High (5)		escription of Vegetation Quality
	Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or
	Moderate (3)	mod	disturbance tolerant native species Native spp are dominant component of the vegetation,
	Moderately low (2) Low (1)	mod	although nonnative and/or disturbance tolerant native spp
	None (0)		can also be present, and species diversity moderate to
	6c. Coverage of invasive plants. Refer		moderately high, but generally w/o presence of rare
	to Table 1 ORAM long form for list. Add		threatened or endangered spp
	or deduct points for coverage	high	A predominance of native species, with nonnative spp
	Extensive >75% cover (-5)	-	and/or disturbence tolerant native spp absent or virtually
	Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always,
	Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered spp
	Nearly absent <5% cover (0)		
	Absent (1)		Open Water Class Quality
	6d. Microtopography.	<u> </u>	Absent <0.1ha (0.247 acres)
	Score all present using 0 to 3 scale. Solution Vegetated hummucks/fussucks	1	Low 0.1 to <1hs (0.247 to 2.47 Moderate 1 to <4hs (2.47 to
		3	High 4ha (9.88 acres) or more
	Coarse woody debns > 15cm (5in) Standing dead > 25cm (10in) dbh		Trigit 4nd (0.00 BOISS) or more
	Amphibian breeding pools	Microtopoo	raphy Cover Scale
	The arrivage and and the same	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 quality
		3	Present in moderate or greater amounts
20			and of highest quality
130	GRAND TOTAL (max 100 pts)		

Refer to the most recent CRAN Score Calibration Report for the scoring breakpoints between wetlend categories at the following Address: http://www.epa.state.oh.us/dsw/401401.html last revised 1 February 2001 jjm

Category 2

ORAM v. 5.0 Field Form Quar	tilative Rating			·	•
Site: BM-WI	ن	Rater(s):	BEM	Date: //-	30-05
	ic 1. Wetland A ne size class and assign aco >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha 0.3 to <3 acres (0.12 to <1. 0.1 to <0.3 acres (0.04 to <	ore.) 20.2ha) (5 pts) ha) (4 pts) a) (3 pts) .2ha) (2pts)	f	Idjacent	
max (4 pts. subtotel 2a, Calc	<0.1 acres (0.04ha) (0 pis) ic 2. Upland bu ulate average buffer width. WIDE. Buffers average NARROW. Buffers average NARROW. Buffers average VERY NARROW. Buffers sity of surrounding land use VERY LOW. 2nd growth o LOW. Old field (>10 years) MODERATELY HIGH. Re HIGH. Urban, industriel, op	iffers and surr Select only one and assign in (1641) or intere around: 25m to <50m (82 to <164 e 10m to <25m (321 to <164 average <10m (<321) arounds of colder forest, prairie, sava), shrubtand, young seconsidential, fenced pasture, p	n score. De not double wetland perimeter (7) fi) around wetland perimeter and wetland perimeter seck and average. which is a rea, etc a growth forest. (5) wark, conservation tillag	e check. imeter (4) stimeter (1) (0) i. (7) ge, now fallow field. (3)	¥.
mac 30 pln. published 30. Solid	Ic 3. Hydrology ces of Waler. Score all that High pH groundwater (3) Other groundwater (3) Precipitation (1) Seasonat/Intermittent surfar Perennial surface water (tal mum water depth, Select on 1>0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) 0.4m (<15.7in) (1) fications to natural hydrologic None or none apparent (12)	apply. ca water (3) te or stream) (5) ty one and assign score. (2) c regims. Score one or do	100 yes Betwee Part of	Score all that apply, par floodplain (1) on stream/take and other hund welland/upland (e.g. forest). Inparian or upland conidor (1 addition/satisfallon, Score one to permanently inundated/saturated (3) maily inundated (2) naily saturated in upper 30cm (e.	complex (1) } or dbl check. turated (4)
	Recovered (7) Recovering (3) Recent or no recovery (1) IC 4. Habitat Alterate disturbance. Score one None or none apparent (4) Recovered (3)	ditch like dike weir stormwater input	road be dredge other.	od/RR track	
(8) 3 EX	Recovering (2) Recent or no recovery (1) let development. Select only Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) at alteration. Score one or de	ouble check and average.			
3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	None or none apparent (9) Recovered (8) Recovering (3) Recent or no recovery (1)	Check all disturbances of mowing grazing clearcutting selective cutting woody debris remotoxic pollutants	shrub/s herbace sedime dredgin farming	g	

Site:	BM-	<u> </u>		Rater(s): B	M	Date: 11/30/05
				.1		
	26	l		•		•
		J	•	•	. • -	
1	subtotal first p	ige Y				
·	26	Mad	in E. Special M	lationde	•	
\mathcal{Q}		2	ric 5. Special W			
anax 10 ple.	. sublobit	Check a	if that apply and score as inc Bog (10)	ilcated.		•
		.	Fen (10)	•	•	•
		<u> </u>	Old growth forest (10)	ا ماند		•
	0	\ Œ	Mature forested wetland (5			
	O) =	Lake Erie coastal/tributery			•
	<u> </u>	_	Lake Erie coastal/tributary Lake Plain Sand Prairies (colodia (2)	•
		-	Relict Wet Prairies (10)	Ser obesition (10)	• 1	
	•		Known occurrence state/fo	derei threatened or en	dangered species (10)	
			Significant migratory song			÷.
		. L	Calegory 1 Welland. See	Question 1 Qualitation	Rating (-10)	•
1	27	55-44	is 6 Dissé som	يا خمالاست	townsenion mions	tanagranhi
	والمستنسية				terspersion, micro	copograpny.
mus 20 pts,	subletel		tiand Vegetation Communitie I present using 0 to 3 scale.	a. Vegetatio	Absent or comprises <0.1ha (0	2471 acres) configurate area
			Aquatic bed	- 1 .	Present and aither comprises	
	•	- 1	Emergent		vagetation and is of moderat	
		17.	Shrub	<u> </u>	significant part but is of low o	
		1 ==	Forest Mudfiels	···· . 2	Present and either comprises:	a chargal of combuses a swall religious best of Acherica
					part and is of high quality	a domary or amphibliogs a street
			Other	3	Present and comprises signific	
		6b. hert Select or	tontal (plan view) Interspersi	on. <u>2</u>	vegetation and is of high que	My
		2816CL (1)	THigh (5)	Namative i	Description of Vegetation Quality	
~			Moderately high(4)	law	Low spp diversity and/or predo	
- 61		0 <u> </u>	Moderate (3)		disturbance tolerant native sp	
G.	رال	<u>".</u>	Moderalely low (2)	mod	Native spp are dominant compo aithough nonnative and/or dis	
	_	X	Law (1) None (0)	ALTERNATION OF	can also be present, and ape	
			grage of invasive plants. Ref	er ·	moderately high, but generally	
			1 ORAM long form for list. A		threatened or endangered sp	
		or deduc	l points for coverage [Extensive >75% cover (-5)	high	A predominance of native speci and/or disturbance tolerant na	
		}	Moderate 25-75% cover (-3)	.	absent, and high spp diversity	
	^		Sparse 5-25% cover (-1)	, 	the presence of rare, threaten	
	1					
	(Nearly absent <5% cover (0))		
	(Absent (1)	Mudflat an	d Open Water Class Quality	
	~ · (₀	6d. Micr	Absent (1) dopography.	Mudflat an	Absent <0.1he (0.247 acres)	arrive)
	- (6d. Micro	Absent (1) propagation of the dependent using 0 to 3 scale.	Mudflat and 0	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47)	
	_	6d. Micr Score all	Absent (1) dopography.	Mudflat and 0 1 2	Absent <0.1he (0.247 acres)	
	~··(6d. Micr Score all	Absent (1) propagate of the second control o	Mudifiat am	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47 to 9.4 Moderate 1 to <4hs (2.47 to 9.4 High 4hs (9.88 acres) or more	
	_	6d. Micr Score all	Absent (1) propagately, present using 0 to 3 scale, Vegetaled hummucks/tussu Coarse woody debris >15cr	Mudifiat and 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47 to 4.47 to 4.47 to 4.47 to 9.47 to 4.48 to 4.47 to 9.48 to 4.47 to 9.48 to 4.48 to	
	_	6d. Micr Score all	Absent (1) propagate of the second control o	Mudifiat and 0 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47 to 4.47 to 4.47 to 9.47 to 4.48 to 4.47 to 9.48 to 4.47 to 9.48 to 4.48 to	38 acres)
	_	6d. Micr Score all	Absent (1) propagate of the second control o	Mudifiat and 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47 to 2.47 to 4.45 to 4.47 to 9.47 to	38 acres)
	_	6d. Micr Score all	Absent (1) propagate the control of	Mudifiat and 0 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47 to 2.47 to 4.45 to	sacres)
	_	6d. Micr Score all	Absent (1) propagate the control of	Mudifiat am 0 1 1 1 1 1 1 1 1 1 1 1 1	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47 to 2.47 to 4.45 to 4.47 to 9.47 to	(more common
	_	6d. Micr Score all	Absent (1) propagate the control of	Mudifiat am 0 1 1 1 1 1 1 1 1 1 1 1 1	Absent <0.1hs (0.247 acres) Low 0.1 to <1hs (0.247 to 2.47 to 2.47 to 4.45 to	some common

Refer to the most recent ORAM Score Calibration Report for the according breekpoints between well and categories at the following address: http://www.epa.state.ch.us/dsw/401/401.html
last revised 1 February 2001]]m

category 1

_	ORAM v. 5.	0 Field Form	Quantila	ulive Raling				·		·
	Site:	MY	NP	Ohio		Rater(s):	BEV	N.	Date:	11-30-05
	2 max 8 pts.		elect one		ssign acc ha) (6 pts 10.1 to <	\rea (size ve.) 20.2ha) (5 pts) ·).	Adjace	nt	
	ि	2	300	to <10 acres (1. 3 to <3 acres (0. 1 to <0.3 acres 1.1 acres (0.04h	2 to <4h: 1,12 to <1 (0,04 to • (0,05 to)	a) (3 pts) .2ha) (2pts) :0.12ha) (1 pt)	**	45		. <i>ñ</i> ,
	rosm 14 pts.	subtotal 28	Calcule W M N N Intensity W M M N N M M M M M M M M M M M M M M M	te average buffer NDE. Buffers av EDIUM. Buffer ARROW. Buffe ERY NARROW. y of surrounding ERY LOW. 2nd DW. Old field C ODERATELY H	er width, rerage 50 a everage is average . Buffers land use growth o 10 years IGH. Re	Select only one s im (164ff) or irion 25m to <50m (8 e 10m to <25m average <10m (. Selections, pic , shrubland, you sidential, tenced	nd assign score, a around welland; a to <164ft) around (32ft to <82ft) around (32ft) around (32ft) around wellad ouble check and hire, savannah, wing second growth	d wetland perimeter (4 ind wetland perimeter ind perimeter (0) average,) (9	
	18 Page 19 Pag	30 2	Soutces His	m water depth.),7 (27,6in) (3) 4 to 0,7m (15,7 (),4m (<15,7in) (1	re all that ater (5) r (3) tient surfa water (lal Salect or to 27.6in)	apply. Co water (3) (6) or stream) (5) ly one and assign (2)	. <u>0</u> 3d.	Part of wetland Part of riperlan Duration inundations Semi- to perma Regularly frunc Seasonally inun Seasonally sain	plain (1) n/laice and other I l/upland (e.g. fore or upland comido afuliation, Score amently inundated! fated/esturated (3	st), complex (1) r (1) one or dol check. Isaturated (4))
1		5	₹ Re	nne or none app scovered (7) scovering (3) scent or no reco	•••	Check all districts ditch title dike weir stormweit	rbances observed er input	point source (no filling/grading toad bed/RR in dredging other_	•	
	9.						nd Develo	pment.		
	max 20 pts.	3	Re Re Re Habilat (one or none appa acovered (3) acovering (2) acont or no recov	arent (4)	or double check one and assign:	•	· ·	·.	
	(9)	3 4c.	Go Ma Fa Po Po Habitat	ood (5) oderately good (4 ir (3) oor to fair (2) or (1) alteration. Score	one or d	ouble check and				- 4
)	suito	3 3 1 tal this page	Re	ne or none appa covered (6) covering (3) cent or no recov		mowing grazing clearculting selective	outting bris removal	shrub/sapling re	atic bed removal	

ORAM v. 5.0 Field Form Quantitative Rating	· · · · · · · · · · · · · · · · · · ·	
Site: BM-W2	Rater(s):	Date:
		·
₹/		
and the state of t	•	•
subtotal Sest page		
○ 3/ Metric 5. Special W	letlands.	• ,•
max 10 pti. suitetet Check all that apply and score as ind	•	
Bog (10)		.,
Fen (10)		•
Old growth forest (10)		•
Mature forested welland (5	o) wetland-unrestricted hydrology (10)	
Lake Erie coasial/tributary	wattand-restricted hydrology (5)	
Lake Plain Sand Prairies (·À
Reflet Wet Prairies (10)	ideral timeatened or endangered spe	-1 (47)
	bird/water fowl habitat or usaga (10)	one (I.d).
Calegory 1 Wetland. See	Question 1 Qualitation Rating (-10)	***
11 20	. *	
☐ ☐ ☐ ☐ Metric 6. Plant com	nmunities, intersper	sion, microtopography.
max 20 pts. subtotal 6a. Wattand Vegetation Communitie		
Score all present using 0 to 3 scale.	0 Absent or	comprises <0.1hs (0.2471 acres) configurus area
Aquatic bed		nd elither comprises small part of welland's on and is of moderate quality, or comprises a
Shrub	significa	rit part but is of low quality
Forest	Present a	nd elliper comprises significant part of welland's
Muditate Open water		on and in of moderate quality or comprises a small in of high quality
Other		nd comprises significant part, or more, of welland's
6b. horizontal (plan view) Intersperak		on and hi of high quality
Select only one.		
High (5) Moderately high(4)	Narrative Description of Low spe d	venity and/or predominence of nonnalive or
Moderate (3)	disturba	nce tolerant native species
Moderately low (2)		are dominant component of the vegetation,
Low (1) None (0)		nonnative end/or disturbance tolerant native spp be present, and species diversity moderate to
Gc. Coverage of invasive plants. Ref		by high, but generally w/o presence of rare
to Table 1 ORAM long form for list. A		ed or endangered spp
or deduct points for coverage Extensive >75% cover (-5)		nance of native species, with nonnative spp sturbance tolerant native spp absent or virtually
Moderate 25-75% cover (-3)		and high spp diversity and often, but not always,
- X Sparse 5-25% cover (-1)	<u> </u>	ince of rare, threatened, or endangered app
Nearly absent <5% cover (0		
Absent (1) 6d. Microtopography.	Mudflat and Open Water Q Absent <0	r Class Quality .the (0.247 acres)
Score ell present using 0 to 3 scale.		<1ha (0.247 to 2.47 acres)
Vegetated hummucks/lussu		1 to <4ha (2.47 to 9.88 acres)
Coarse woody debris >15cm		1.88 acres) or more
2 Standing dead >25cm (10in	•	• and
Amphibian breeding pools	Microtopography Cover 0 Absent	2 C 8 MB
**		y small amounts or if more common
	of margin	al quality
		noderate amounts, ಹಿವೆ ಗವು ಪ highest
		in small amounts of highest quality
		noderate or greater amounts hest quality
GRAND TOTAL (max 100 nte)	and of the	Labor Angula

Rater to the most recent ORAM Score Calibration Report for the scoring breakpoints between welland categories at the following address: http://www.epa.state.oh.us/dow/40/1491.html
last revised 1 February 2001 jim



_	ORAM v. 5.0	ield Form	Quantitative Rating				
	Site:	- An	ne Ohio:	Rater(s):	BEM	Date: \	-30-05
	2 2 max 8 pts. s.		ect one size class and as	a) (6 pts)	Ad BM·	jacent -W3	
		(2)	10 to <25 acres (4.3 to <10 acres (1.3	12 to <1.2ha) (2pts) 0.04 to <0.12ha) (1 pt)			· *
	9 1	M	etric 2. Uplar	d buffers and	surrounding la	nd use.	
	max 64 pis, su	4	WIDE. Buffers av MEDRIM. Buffers NARROW. Buffers NARROW. Buffers VERY NARROW. Intensity of surrounding VERY LOW. 2nd VERY LOW. 2nd NODERATELY H	r width. Select only one and erage 50m (164ft) or more a average 25m to <50m (82 lis average 10m to <25m (33 Buffers average <10m (<33 land use. Selections or do growth or older forest, prain 10 years), shrubland, young GH. Residential, fençad pa istrial, open pastura, row critical.	sround welland perimeter (7 to <164fl) around welland po 2ft to <82fl) around welland albie check and ayerage. e, savannah, wildlife area, s second growth forest. (5) sture, park, conservation til) eximater (4) perimeter (1) er (0) etc. (7) ege, new fallow field. (3)	
	15 2	C M	etric 3. Hydro	logy.	•		
,	max 30 phs. 300	total 3a.	Sources of Water, Scor	ter (5)	□ 100	ly. Score all that apply. year floodplain (1)	•
		1.	Other groundwater Precipitation (1) Second Printer	(3) ini surface water (3)	Part	reën alreem/lake and other h of writiand/upland (e.g. forest of riparian or upland comidor	i), complex (1)
	(15)	30. 2	Perennial surface (Maximum water depth, 1907 (27,6in) (3) 0.4 to 0.7m (15.7 to <0.4m (<15.7in) (1	vater (lake.or stream) (5) Select only one and assign a o 27.5in) (2)	Sd. Ourafion in Core, Scient Reg. Seat	undation/saturation. Score o i- to permanionity inundatedis uterly inundated saturated (3) sonally inundated (2) sonally saturated in upper 30:	ne or dbi check. sturated (4)
		7		rent (12) Check all disturb	point point point part	source (nonstonewater) /grading bed/for track sing Sorrandmi area at one time	Mined
	7 3	3 M	etric 4. Habita	at Alteration an	d Developmen	at one time.	-
	man 20 pie. sub			icore one or double check a	•		
		3	Recovered (3) Recovering (2)			5 °	
		4b.		ery (1 <u>)</u> Hect only one and assign sc	ore.		
	(3)		Excellent (7) Very good (6) Good (5)		e.	•	
		Z	Moderately good (4)			
		 	Poor to fair (2)				
	•	4C.	Habitat afteration. Score None or none appa	one or double check and average (9) Check all disturbs			7
		2	Recovered (6) X Recovering (3) X Recent or no recovering	mowing grazing	shrub herbs	/sapling removal ceous/aquatic bed removal tentation	
	7	3		selective cu woody debri	tling dreds s removal farmi	ing	
	sublotal	this page		toxic pollutar	ing [] Hortie	in Circirhor	1

ORAM v. 5.0 Field	Form Quantitative Rating		
Site: BN	I-W3	Rater(s):	Date:
33 sublated first	Metric 5. Special V		
mair 10° pts. subtotal	Lake Erie coastal/iributan Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state/ Significant migratory sons	(5) y welland-uhrestricted hydrology (10) y welland-restricted hydrology (5)	
6 39	1	nmunities, interspersion, n	nicrotopography.
max 20 pis. wubiotal	Sa. Welland Vegetation Communities Score all present using 0 to 3 scale. Aquatic bed Emergent Shrub Forest Muditats Open water Open water Charles (plen view) Interspers Select only one. High (5) Moderately high(4) Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plants. Reto Table 1 ORAM long form for list. or deduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-1) Sparse 5-25% cover (-1)	O Absent or comprises 1 Present and either por vegetation and is of significant part but is 2 Present and either cor vegetation and is of ingh or part and is of high or part and is of high or part and comprise ion. Narrative Description of Vegetation and is of ingh or capetation and is of ingh or low Low spp diversity and/or disturbence tolerant; mod Native spp are domina although nonnative a can also be present, and thigh A predominance of nati and/or disturbence to and/or disturbence to and/or disturbence to and/or disturbence to the presence of rare, the presence of rare,	c0. 1ha (0.2471 acres) contiguous area reprises small part of wetland's recollected quality, or comprises a cot low quality, or comprises a small mality or comprises a small mality. I characteristic country or comprises a small mality. I characteristic country or more, of wetland's high quality. I characteristic of normative or native species and component of the vegetation, and/or disturbance tolerant native species diversity moderate to generally w/o presence of rare
	Nearly absent <6% cover (Absent (1)) 6d. Microtopography. Score all present using 0 to 3 scale. Vegetaled hummucks/tus: Coarse woody debris >156 Standing dead >25cm (10) Amphibian breeding pools VD TOTAL (max 100 pts)	Mudifiat and Open Water Class Qua 0 Absent <0.1ha (0.247) 1 Low 0.1 to <1ha (0.247) 1 Low 0.1 to <1ha (0.247) 2 Moderate 1 to <4ha (2.247) 3 High 4ha (9.88 acres) of the control of	acres) 60 2.47 acres) .47 to 9.88 acres) or more nunts or if more common nounts, but not of highest ounts of highest quality greater amounts

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wellend categories at the following address: http://www.apa.state.oh.us/dsw/401/401.html
last revised 1 February 2001 jjm

Category 2

ORAM v. 5.0 Fleid For	m Quantitative Rating	·			·
Site:	3.M-W4.11	Rater(s):	Bem	Date: 2	1-05
	Metric 1. Wetland A ielect one size class and easign sco >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4h 0.1 to <0.3 acres (0.04 to < 0.1 acres (0.04ha) (0 pts)	re. } 20.2ha} (5 pis} ha} (4 pis} a) (3 pis) .2ha) (2pis) 6.12ha) (1 pi)	Ad you	aent 20 W4	Mags
max 14 pts. subtotal 2	NARROW, Buffers average VERY NARROW, Buffers to VERY NARROW, Buffers to Intensity of surrounding land use VERY LOW. 2nd growth to VLOW. Old field (>10 years MODERATELY HIGH. Rev	Select only one and a lim (184ft) or more are 25m to <50m (82 to e 10m to <25m (32ft average <10m (<32ft collection) or double to close forest; prairie, a shrubband, young a sidential, fenced past	issign score. Do not double bund welland perimeter (7) <164fl) around welland perin to <82fl) around welland per isound welland perimeter (1 isound welland perimeter (1 isound mediand area, etc. savannah, welding area, etc. econd growth forest. (5)	check. neter (4) finater (1) (7) (7) s, new fallow field. (3)	
max 30 pts. subjeted 3(Actric 3. Hydrology B. Sources of Water. Score all that High phi groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittant surfater Perennial surface water (lail Maximum water depth. Select on >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) <0.4m (<15.7in) (1) Modifications to natural hydrological None or none apparent (12) Recovered (7) Recovered (3) Recent or no recovery (1)	apply. converter (3) converter (5) dy one and assign so (2)	Top yet Betwee Part of Part of Part of Seni-ta Regular Season or double check and average point so filling/gr	HIRCE (Aonstonnwater) eding dring track on	, complex (1) I) a or dbl chack. turated (4)
13 5	Metric 4. Habitat Alf a. Substrate disturbance. Score one None or none apparent (4) Recovering (2) Recent or no recovery (1) Recent or no recovery (1) Habitat development. Select only Excellent (7) Very good (5) Good (5) Moderalely good (4) Fair (3) Poor to fair (2) Poor (1) Habitat alteration. Score one or described in the select one or	stormwater in teration and a or double check and or double check and or double check and one and assign score	Development.	ewerdan	
Supported this place	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Check all disturban mowing grazing clearcutling selective cutti woody debris toxic pollutant	ces observed shrub/se herbace sedimen dredging removal farming		

		om Quar	titative Reling			
Site:	BM	1- W4	<u> </u>	Rater(s):	BEM	Date: 12 - 1-6
		 1	,	+		<u> </u>
	スつ					-
_	V Y	<u>.</u>			•	•
·	ubloial first p	7			•	
\cap	217	Metr	ic 5. Special V	Vetlands.		•
mir 10'bli.			i that apply and score as in			
سطف نفس	-555,015	VV	Bog (10)			_
			Fen (10)	t- #	,	
		<u> </u>	Old growth forest (10) Mature forested wetland (es.	- M *	•
	$\overline{}$	100	Lake Erie coestel/tributar		sted hydrology (10)	
	(0)		Lake Erie coastal/tributary	/ wetland-restricte	d hydrology (5)	•
			Lake Plain Sand Prairies	(Claix Openings) (1	10)	
	•	⊢	Relict Wet Prairies (10)	nderei threatenad	or endangered species (10)	
		-	Significant migratory sons			
			Category 1 Welland. See	Question 1 Qual	Saling (-10)	
,	110	I		.+. + *** *******		
Q	143				, interspersion, micr	otopograpny.
max 20 pts.	subbisi		and Vegetation Communiti present using 0 to 3 scale.	es. <u>Veg</u>	station Community Cover Scale	(0.2474 acres) acres
		Scole ar	Aguatic bed		1 Present and either comprise	(0.2471 acres) configuous ares
	•	.1.	Emergent		vegetation and is of moder	ate quelity, or compilses a
		g 🗔	Shrub	´ <u></u>	significant part but is of lov	
		<u> </u>	Forest Muditats	e 6		s'significant part of welland's the quality or comprises a small
	Ya.	1	Open water		part and is of high quality	
			Other	_		ficant part, or more, of wetlands
	• •	Select on	untal (plan view) Interspers	ion	vegetation and to of high or	Jamy
			High (5)	<u>Narra</u>	ilivs Description of Vegetation Qual	
			Moderately high(4)		low app diversity and/or pred	
	1		Moderate (3) Moderately low (2)		disturbance tolerant native nod Native spp are dominant com	
		X	Low (1)	•• و مرت بدر .	although annually andler.	disturbance tolerant native app
6			None (0)		can also be present, and sp	
•			rage of invasive plants. Re ORAM long form for list. A		moderately high, but general threatened or endangered s	
-			points for coverage		igh A predominance of native spe	
			Extensive >75% cover (-5)			native spp absent or virtually
		╮┟╌┤	Moderate 25-75% cover (4 Sparse 5-25% cover (-1)	3) -	absent, and high app divers the presence of rare, threat	ity and often, but not always,
	1	$O[\mathbf{x}]$	Nearly absent <5% cover (0)	(His proserve in in a, triper	suder or associationed about
			Absent (1)	Mudft	at and Open Water Class Quality	
			topography.		0 Absent <0.1ha (0.247 acres)	
			present using 0 to 3 scale. Vegetaled hummucks/tuss		1 Low 0.1 to <1ha (0.247 to 2.4 2 Moderate 1 to <4ha (2.47 to 2	
		121	Coarse woody debris >150		3 High 4ha (9.85 acres) or more	
	9	10	Standing dead >25cm (10i			· · · · · · · · · · · · · · · · · · ·
	Ø		Amphibian breeding pools		topography Cover Scale	
			•		Absent Greent varuemati amounts o	- × mara man
	-			•	 Present very small amounts of marginal quality 	I II TRUE COTIMION
					2 Present in moderate amounts	ວັນເຂົາເຊັ of highest
					quality or in small amounts	of highest quality
-	1				Present in moderate or greate	ramounts
ШО	A	n ~~-	41 Incres 466 ()		and of highest quality	
43	UKAN	וטו ע	AL (max 100 pts)			

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between welland categories at the following address: http://www.epa.stale.ch.ua/dsm/401/481.html
last revised 1 February 2001 jim

category 2

ORAM v. 5.0 Field	Form Quantitative Rating			
Site: We	5 (BM-W5)	Rater(s): Kossir	/ No closly	Date: Der: 05
	1			
1 (Metric 1. Wetland	Area (size).	•	
enex 6 pis. subtotal	Select one size class and assign so		• ,	•
	>50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to	<20,2ha) (5 pls)		
•	10 to <25 acres (4 to <10 3 to <10 acres (1.2 to <4)		•	,
	0.3 to <3 acres (0.12 to <	:1.2ha) (2pts)	•	
	0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pb		•	
7 7			dina landa	
max 14 obs. subjects	Metric 2. Upland b 2a. Calculate average buffer width.			•
max 14 pts. subtotal	WIDE, Buffers average 5	50m (164ff) or more around wet	and perimeter (7)	
	U NARROW. Buffers evers	ge 25m to <50m (82 to <164R) a age 10m to <25m (32R to <82R	l around wetland perimeter (1)
	VERY NARROW, Buffer 2b, Intensity of surrounding land us	s average <10m (<32fl) around	welland perimeter (0)	•
	VERY LOW. 2nd prowth	or older forest, prairie, savanna	h, wildlife area, etc. (7)	•
•	2 MODERATELY HIGH. R	rs), shrubland, young second gr asideritial, fenced pasture, park	, conservation tiliage, new fal	low field. (3)
	HIGH, Urban, Industrial,	open pasture, row cropping, mi	ning, construction. (1)	
17 20	Metric 3. Hydrolog	у.		
max 30 pts. subjets!	3a. Sources of Water. Score all the	=	3b. Connectivity. Score at	
Y.	High pH groundwater (5) Other groundwater (3)	A. I.	Between stream	teke and other human use (1)
	Precipitation (1) Seasonal/Intermittent surf	face water (3)	Part of wetlandlu	pland (e.g. forest), complex (1) t tipland contdor (1)
	Perennial surface water (i 3c. Madmura water depth, Select of	ake or stream) (5)	3d. Duration inundation/sat	Utalion. Score one or dbl check untly inundated/saturated (4)
•,		•	Regularly inunda Seasonally inunda	led/saturated (3)
•	0.4 to 0.7m (15.7 to 27.6) 		Seasonally salus	ated in upper 30cm (12in) (1)
	3e. Modifications to natural hydrolo None or none apparent (1			
-	72 Recovered (7)	ditch tile	point source (nor	istorrrwater)
	Recovering (3) Recent or no recovery (1)	dike ·	road bed/RR trac	k i
		weir stormwater input	other / :- :-	
	•	(-111 12 		
10 30	Metric 4. Habitat A		-	
max 20 pts. subloted	4a. Substrate disturbance. Score of None or none apparent (4)			
	L/ Recovered (3)		, 1	
	Recovering (2) Recent or no recovery (1)		r iak €	
	4b. Habitat development. Select on Excellent (7)	ity one and assign score.		
	Very good (6) Good (6)	•		
	Moderately good (A)			
6	Fair (3) Poor to tair (2)			
	Poor (1)			
•	4c. Habitat alteration. Score one or None or none apparent (9)		erved	
-	Recovered (6)	mowing	shrub/sapling rem	
6	Recent or no recovery (1)	grazing clearcuiting	herbaceous/aqual Sedimentation	ic bed removal
		selective cutting	dredging farming	
30		woody debris removal toxic pollutants	nutrient enrichme	nt.
sublotal this sa		1—— <i>ILM</i> A		T T

Site: BM	- h	15	•	Rater(s):		Date:
site. Or	<u>` </u>	<u>'</u>		Materia).		Date.
F	~			.*.*		
30			·	,		•
1	ائس					
subtotal firs	page					
00	١.	# £!	- F Cunciall	AI_4I	· ·	•
00			ic 5. Special V	•	•	
x 10 jvis. subleta	Ch		that apply and score as in	ndicated.		
			Bog (10)	•	•	
			Fen (10)	. 1 .	•	
			Old growth forest (10) ** Mature forested wettand	few Services		.
	0	L	Lake Erie coestal/tributer		i hvdrala <i>ov (10</i> 6	
			Lake Erie cossial/iributar			
			Lake Plain Seind Prairies			•
			React Wet Prairies (10)			
			Known occurrence state/			-
			Significant migratory som			•
			Category 1 Walland. Ser	a Chestion 1 Quality	de-Rating (-10)	• • •
\sim	٦.,		a A Blandain	. ⁷ ,		
8 38					nterspersion, mic	rotopograpny.
20 pts. subtols			nd Vegetation Communit		lon Community Cover Scale 🔛	
	Sc		present using 0 to 3 scale	. 0		a (0.2471 acres) configuous are
*			Aquatic bad	Ţ	Present and either compris	
•	3		Ernergent Skrub		significant part but is of lo	rate quality, or complises a
•	_		Forest	2		s significant part of wetland's
	•	السناء	Mulfiats			rous quality or comprises a sm:
¥1		السنا	Open water		part and is of high quality	
•	•		Other	3		ificant part, or more, of wetland
			intal (plain view) Interspers	sion.	vegetation and is of high o	ua li ý
	Sei	ect only				
•			High (5) Moderately high(4)	Narrauv low	 Description of Vegetation Qua Low spp diversity and/or pre 	
			Moderate (3)	N.	disturbance tolerant native	
			Moderately low (2)	, mod		
	€.		Law (1)	,		disturbance tolerant native spp
			None (0)	, <u>, , , , , , , , , , , , , , , , , , </u>	can also be present, and s	pecies diversity moderate to
			age of Invasive plants. Re		moderately high, but gener	
			ORAM long form for list.		threatened or endangered	
-2	ore		coints for coverage Extension w75% cover (.5)	high a		
			Extensive >75% cover (-5) Moderate 25-75% cover (-			i native app absent or virtually sity and often, but not always,
			Sparse 5-25% cover (-1)	· ·	the presence of rare, finea	
	1		Nearly absent <5% cover	(0)	**	- Constitution of Spirit
	•		Absent (1)		and Open Water Class Quality	
	6d.	Microf	opography.	0	Absent <0.1ha (0.247 acres	
	Scc		resent using 0 to 3 scale.		Low 0.1 to <1hs (0.247 to 2.4	
			Vegetated trummucks/tus:		Moderate 1 to 4ha (2.47 to	
	3		Coarse woody debris >150		High 4ha (9.88 acres) or mor	8
	\sim		Standing dead >25cm (10	•		,
		L 1/	Amphibian breeding pools		ography Cover Scale	
				- 0	Absent	
			·		Present very small amounts	or a more common
			·	. 1		
			•		of marginal quality	
				2	of marginal quality Present in moderate amounts	s, but not of highest
	•		·	2	of marginal quality Present in moderate amounts quality or in small amounts	s, but not of highest of highest quality
			·		of marginal quality Present in moderate amounts	s, but not of highest of highest quality

Refer to the most recent CRAM Score Calibration Report for the scoring breakpoints between well-and calegories at the following address: http://www.epa.state.oh.us/dsu/401/401.html
last revised 1 February 2001 jim

Catigory 2

Site: C Am? Rater(s): MBL Date:	130102
Metric 1. Wetland Area (size). 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) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	
8 8 Metric 2. Upland buffers and surrounding land use.	
28. Calculate average buffer width. Select only one and assign score. Do not double check. WIDE. Buffers average 50m (154ft) or more around wetland perimeter (7) MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4) NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1) VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0) 2b. Intensity of sumounding land use. Select one or double check and average. VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7) LOW. Old field (>10 years), shrubtand, young second growth forest. (5) MODERATELY HIGH. Residential, fenced peature, park, conservation tillage, new fallow field. (3) HIGH. Urban, industrial, open pasture, row cropping, mining, construction, (1)	
16 18 Metric 3. Hydrology.	
### 30 pt. subset 3a. Sources of Water. Score all that apply. #### High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perenntal surface water (lake or stream) (5) 3c. Maximum water depth. Select only one and assign score. Semi- to permanently inundated saturated	rest), complex (1) lor (1) e one or dbl check. id/saturated (4) (3)
None or none apparent (12) Check all disturbances observed Recovered (7) ditch point source (nonstormwater)	
Recovering (3) Recent or no recovery (1) Stormwater input Itile Ifiling/grading froad bed/RR track dredging other	_
7 25 Metric 4. Habitat Alteration and Development.	
max 20 pts. subjoul 4a. Substrate disturbance. Score one or double check and average.	
None or none apparent (4) Recovered (3) Recovering (2) Recover or no recovery (1) 4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6)	
Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average.	•
None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	vai

last revised 1 February 2001 jim ORAM v. 5.0 Field Form Quantitative Rating

Site:	C-1 ·	Rater(): MBL	Date: 11/30/03
0		ric 5. Special Wetland	ds.	
max 10 pts.	subtotal Check (all that apply and acore as Indicated. Bog (10)		
	Ø	Fen (10) Old growth forest (10) Meture forested wetland (5) Lake Erie coastal/iributary wetland-u Lake Erie coastal/iributary wetland-re Lake Plain Send Prairies (Oak Openi Relict Wet Prairies (10) Known occurrence state/lederal thres	stricted hydrolo ngs) (10)	9gy (5)
		Significant migratory songbird/water to Category 1 Wattand. See Question 1		
-1	24 Met			erspersion, microtopography.
rnex 20 pt	subtotal 68. Wi	stland Vegetation Communities.	Vegetation C	ommunity Cover Scale
	Score	all present using 0 to 3 scale. Aquatic bed	- 0	Absent or comprises <0.1he (0.2471 acres) configuous area Present and either comprises small part of wetland's
•		Emergent		vegetation and is of moderate quality, or comprises a
	.1 1-	Shrub Forest	2	significant part but is of low quality Present and either comprises significant part of wattand's
	' ' -	Mudiats .	•	vegetation and is of moderate quality or comprises a small
	<u> </u>	Open water		part and is of high quality
	_ <u>_</u> [Other	3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
		orizontal (plan view) Interspersion. only one.	-	Aedergrand as to be stidit drawing
	Г	High (5)	Narrative De	escription of Vegetation Quality
		Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or
	1 1	Moderate (3)	mod	disturbance tolerant native species Native spp are dominant component of the vegetation,
	, k	Moderately low (2)	11100	although nonnative and/or disturbance tolerant native spo
	ť	None (0)		can also be present, and species diversity moderate to
		overage of Invasive plants. Refer		moderately high, but generally w/o presence of rare
		ile 1 ORAM long form for list. Add	high	threatened or endangered spp A predominance of native species, with nonnative spp
	Gr Get	Textensive >75% cover (-5)		and/or disturbance tolerant native spp absent or virtually
		Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always,
	− ₹ [Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered spp
	→	Nearly absent <5% cover (0) Absent (1)	Mudflat and	Open Water Class Quality
	6d. N	licrolopography.	C	Absent <0.1ha (0.247 acres)
	Score	all present using 0 to 3 scale.	1	Low 0.1 to <1hs (0.247 to 2.47
		Vegetaled hummucks/lussucks	2	Moderate 1 to <4ha (2.47 to High 4ha (9.88 acres) or more
	() }	Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh		TRAIT MIS (3.00 SCIES) OF INCIE
	Ŭ	Amphibian breeding pools	Microtopog	raphy Cover Scale
	•		0	Absent
			1	Present very small amounts or if more common
			2	of marginal quality Present in moderate amounts, but not of highest
			•	quality or in small amounts of highest quality
			3	Present in moderate or greater amounts
			·	and of highest quality
124	+ IGRAND T	OTAL (max 100 pts)		,

Rater to the most recent ORAM Score Calbration Report for the scoring breakpoints between wetland categories at the following address: http://www.epe.state.oh.us/dsw/401M01.htm/ iast revised 1 February 2001 jjm

category 1

	ORAM v. 5.0 Field Form Quantitative Rating						
•	Site: C-3	λ	Rater(s): MBL/JAV	Date: 11/30	105		
)	O O O	Metric 1. Wetland : Select one size class and assign so					
		>50 scres (>20.2ha) (6 p 25 to <50 scres (10.1 to 10 to <25 scres (4 to <10 3 to <10 scres (1.2 to <4 0.3 to <3 scres (0.12 to < 0.1 to <0.3 scres (0.04 to <<0.1 scres (0.04ha) (0 pi	ts) <20.2ha) (5 pts) I.1ha) (4 pts) ha) (3 pts) :1.2ha) (2pts) > <0.12ha) (1 pt)	;			
	5 5 mex 14 pts. eublota	2a. Calculate average buffer width WIDE. Buffers average MEDIUM. Buffers avera NARROW. Buffers avera VERY NARROW. Buffers 2b. Intensity of surrounding land u VERY LOW. 2nd growth LOW. Old field (>10 yea V MODERATELY HIGH. F	Uffers and surrounding. Select only one and assign score. Do not select only one and assign score. Do not select only one around wetland pering 25m to <50m (82 to <164ft) around we age 10m to <25m (32ft to <82ft) around welland pose. Select one or doubte check and aver it or older forest, prairie, savannah, wildlife ins), shrubland, young second growth forest estidential, fenced pasture, park, conserv. open pasture, row cropping, mining, consider that the selection of the sele	ot double check. neter (7) tland perimeter (4) valiand perimeter (1) valiand perimeter (1) valiand perimeter (0) age. serea, etc. (7) st. (5) alion tillage, new fallow field. (3)			
	17 22 max 30 pts. sub124	3a. Sources of Water. Score all the high pH groundwater (3) Precipitation (1) Seasonal/Intermittent surface water 3c. Maximum water depth. Selectory (15.7 to 27.6 to 0.7m (15.7 to 27.6 to 0.4m (<15.7 in) (1) 3e. Modifications to natural hydromatics (15.7 in) (1)	nat apply. and ap	princetivity. Score all that apply. 100 year floodplain (1) Between stream/lake and other huma Part of welland/opiand (e.g. forest), of part of riperian of optend comidor (1) ratiph inundation/saturation. Score one: Semi- to permanently inundated/saturated (3) Seasonally inundated/saturated (3) Seasonally saturated in upper 30cm and average. point source (nonstormwater) filling/grading (application of the communication of t	complex (1) or dist check. rated (4)		
	max 20 pts. subjoin	4a. Substrate disturbance. Score None or none apparent Recovered (3) Recovering (2) Recent or no recovery (4b. Habitat development. Select Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2)	(4)	ment.			
	3.0 Subtribution	Poor (1) 4c. Habital alteration. Score one None or none apparent Recovered (6) Recovering (3) Recent or no recovery ((9) Check all disturbances observed mowing grazing	shrub/sapling removal herbaceous/aquatic bed removal sedimentation dredging farming nutrient enrichment			

last revised 1 February 2001 jjm ORAM v. 5.0 Field Form Quantitative Rating

Site:	Ca	Rate	er(s):	Date:
	33 Subtatel first peop			
0	33	Metric 5. Special Wetia	ands.	
mex 10 pis.		Check all that apply and score as indicated		·
	Ø	Sog (10) Fen (10) Old growth forest (10) Old growth forest (10) Makers forested wetland (5) Lake Erie coastal/tributary wetlan Lake Erie coastal/tributary wetlan Lake Plain Sand Prairies (Oak O Relict Wet Prairies (10) Known occurrence state/federal Significant migratory songbird/with Category 1 Wetland. See Quest	nd-unrestricted hydrolo nd-restricted hydrolo penings) (10) threatened or endan aler fowl habitat or u	gy (5) ngered species (10) sage (10)
	30			;
14	37			erspersion, microtopography.
mex 20 pts		6a. Welland Vegetation Communities. Score all present using 0 to 3 scale.	Vegetation C	Absent or comprises <0.1hs (0.2471 acres) contiguous area
		Aquatic bed	1	Present and either comprises small part of welland's
		Emergent Shrub		vegetation and is of moderate quality, or comprises a significant part but is of low quality
	. 0	Forest	2	Present and alther comprises significant part of waltand's
		O Mudflats .		vegetation and is of moderate quality or comprises a small
		6 Open water Other	3	part and is of high quality Present and comprises significant part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality
		Select only one.		
		High (5) Moderately high(4)	Narrative De	Scription of Vegetation Quality Low spp diversity and/or predominance of nonnative or
		Moderate (3)		disturbance tolerant native species
		Moderately low (2)	mod	Native spp are dominant component of the vegetation,
		1 Low (1) None (0)		although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to
		6c. Coverage of invasive plants. Refer		moderately high, but generally w/o presence of rare
		to Table 1 ORAM long form for list. Add		threatened or endangered spp
		or deduct points for coverage Extensive >75% cover (-5)	high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually
		Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always,
		Sparse 5-25% cover (-1)	•	the presence of rare, threatened, or endangered spp
		Nearly absent <5% cover (0) Absent (1)	bee tellbulk	Open Water Class Quality
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47
	,	Vegetated hummucks/tussucks		Moderate 1 to <4ha (2.47 to High 4ha (9.88 acres) or more
		Coarse woody debris > 15cm (6 O Standing dead > 25cm (10in) dt		(Tight 4ta (5.00 scres) of more
	•	Amphibian breeding pools		raphy Cover Scale
			D	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 quality
			3	Present in moderate or greater amounts
3=	7 GRA	ND TOTAL (max 100 pts)	·	and of highest quality

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html
last revised 1 February 2001 jjm

Category 2

3	Site:	C-:	3		Rater(s): MRC		Date: 4 30 0.5
	0	0	Met	ric 1. Wetland	Area (size).		
	hax 6 pts.	subtotal		ne size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2h 10 to <25 acres (4 to <10.1ha) (3 3 to <10 acres (1.2 to <4ha) (3 0.3 to <3 acres (0.12 to <1.2ha) 0.1 to <0.3 acres (0.04 to <0.12 <0.1 acres (0.04ha) (0 pts)	(4 pts) pts) (2pts)		
ſ	3	3	Met	ric 2. Upland bu	uffers and surro	unding land us	se.
F	THEM 14 pts.	sublotal	2a. Calc	Culate average buffer width. Sele WiDE. Buffers average 50m (1 MEDIUM. Buffers average 25m NARROW. Buffers average 10 VERY NARROW. Buffers average histy of surrounding land use. So VERY LOW. 2nd growth or old ±COW. Old field (>10 years), shi MODERATELY HIGH. Resider	ct only one and assign score. Do 64ft) or more around wetland per o to <50m (82 to <164ft) around we no <25m (82ft to <82ft) around age <10m (<32ft) around wetland elect one or double check and aver forest, praine, savannah, wildlinubland, young second growth for utial, fenced pasture, park, conserpasture, row cropping, mining, consesture, row cropping, mining, con	not double check. Imeter (7) retland perimeter (4) wetland perimeter (1) perimeter (0) erage. fe area, etc. (7) rest. (5) rvation tillage, new fallow field.	
	11	14		ric 3. Hydrology		Connectivity Goesa all that a	nmh.
	max 30 pts.	subtotal	3c. May	rces of Water. Score all that app High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface w Perennial surface water (lake or imum water depth. Select only o >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <0.4m (<15.7in) (1)	rater (3) r stream) (5) ne and assign score.	Connectivity. Score all that a 100 year floodplain (1) Between stream/lake and Part of wetland/upland (e Part of riparian or upland Duration inundation/saturation Semi- to permanently inu Regularly inundated/satu Seasonally inundated (2) Seasonally saturated in in	d other human use (1) e.g. forest), complex (1) l corridor (1) n. Score one or dol check. undated/saturated (4) urated (3)
			3 2		gime. Score one or double check Check all disturbances observed ditch tile dike weir stormwater input	point source (nonstormw filling/grading road bed/RR track dredging other	ater)
	らい	26.5	Met	ric 4. Habitat Al	teration and De	velopment.	
•	mao: 20 pts.	subtotat	4a. Sub	Strate disturbance. Score one or None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) Ifat development. Select only one Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) Ifat alteration. Score one or dout	double check and average.	•	
)	4. 26.5	5 2	_	Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	shrub/sapling removal herbaceous/aquatic bed sedimentation dredging farming nutrient enrichment	removal

GRAND TOTAL(max 100 pts)

Coarse woody debris >15cm (6in)

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

Refer to the most recent ORAM Score Calibration Report for the scoring, but categories at the following address: http://www.epa.state.ch.us/dsw/401/401.html Category 2

3

2

3

Microtopography Cover Scale

High 4ha (9.88 acres) or more

of marginal quality

and of highest quality

Present very small amounts or if more common

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

Present in moderate or greater amounts

Site:	C-4	Rater(s): M. Lan Afor	Date: n/36 0 ラ
	Metric 1. Wetla	and Area (size).	^ .
max 6 pts.	subtotal Select one size class and assig >50 acres (>20.2ha)	n score. 6 pts) to <20.2ha) (5 pts) <10.1ha) (4 pts) <4ha) (3 pts) to <1.2ha) (2pts) 4 to <0.12ha) (1 pt)	C-4
	Metric 2. Upla	nd buffers and surround	ng land use.
так 14 рт.	subload 2a. Calculate average buffer with the wind of	idth. Select only one and assign score. Do not double 50m (184ft) or more around wetland perimeter (7) erage 25m to <50m (82 to <164ft) around wetland perage 25m to <50m (82 to <164ft) around wetland perage 10m to <25m (32ft to <82ft) around wetland perimeter duse. Select one or double check and average, with or older forest, prairie, savannah, wildlike area, eyears), shrubland, young second growth forest. (5) if. Residential, fenced pasture, park, conservation tild riel, open pasture, ow cropping mining, construction	ple check. perimeter (4) perimeter (1) pr (0) stc. (7) age, new fallow field. (3)
11	Metric 3. Hydi		
max 30 pts.	3c. Maximum water depth. So >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to <0.4m (<15.7in) (1)	t surface water (3) ter (lake or stream) (5) lect only one and assign score.	ctivity. Score all that apply. 10 year floodplain (1) 10 year floodplain (1) 11 of wetland/upland (e.g. forest), complex (1) 11 of riparian or upland corridor (1) 12 in inundation/saturation. Score one or dbl check. 13 cami- to permanently inundated/saturated (4) 15 egularly inundated/saturated (3) 16 easonally inundated (2) 17 easonally saturated in upper 30cm (12in) (1)
	None or none appar Recovered (7) Recovering (3) Recent or no recove	check all disturbances observed Check all disturbances observed ditch tile dike weir	oint source (nonstormwater) ing/grading ad bed/RR track edging her
7	26 Metric 4. Habi	tat Alteration and Develo	opment.
max 20 pts.	subtotal 4a. Substrate disturbance. Since the None or none appear Recovered (3) Recovering (2) Recent or no recovered development. Se Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)	ore one or double check and average. ent (4) ry (1) ect only one and assign score.	· ·
•	4c. Habital alteration. Score None or none appart Recovered (6) Recovering (3) Recent or no recovered (6) Recovering (3)	mowing states and states are states and states are stat	hrub/sapling removal erbaceous/aquatic bed removal edimentation redging arming utrient enrichment

te:	<u>C-4</u>			Rater(s): M. L.	aufter	Date: 11/30/03
	Subtotal this pay				•	
T\	30	1	tria E. Cassial V	Votlondo		
10 pts.	subtotal		etric 5. Special V			
	VVV]	Bog (10)	~		
			Fen (10)			
		ļ	Old growth forest (10)			
		ŀ	Mature forested wetland (5) Lake Erie coastal/tributary wet	tood monatouted business.	. 1401	
		ŀ	Lake Erie coastal/tributary wel		• •	
		t	Lake Plain Sand Prairies (Oak		•	
		Ī	Relict Wet Praires (10)			
			Known occurrence state/feder			
		- 1	Significant migratory songbird		• •	
		7 ¹	Category 1 Wetland. See Qua	stron i Quantauve raung (-10)	
)	33	İΜε	etric 6. Plant cor	nmunities, in	terspersion, m	icrotopography.
20 pts.	Subtolei		Vetland Vegetation Communities.	Vegetation Commu	•	
			e all present using 0 to 3 scale.	. 0		na (0.2471 acres) contiguous area
			Aquatic bed	1	Present and either compris	ses small part of wetland's
		Ī	Emergent			lerate quality, or comprises a
			Shrub Forest	2	significant part but is of i	
	Į		Mudflats	2		ses significant part of wetland's lerate quality or comprises a small
			Open water		part and is of high quality	
			Other	3	Present and comprises sig	milicant part, or more, of wetlands
			norizontal (plan view) interspersion.	· 	vegetation and is of high	quality
		Sele	ct only one.		CH Anth Co-allifa-	•
		l	High (5) Moderately high(4)	Narranve Description	on of Vegetation Quality	redominance of nonnative or
			Moderate (3)	24	disturbance tolerant nati	
		1	Moderately low (2)	mod		omponent of the vegetation,
			 			
			Low (1)			or disturbance tolerant native spp
		0.	None (0)		can also be present, and	d species diversity moderate to
			None (0) Coverage of invasive plants. Refer		can also be present, and moderately high, but ger	d species diversity moderate to nerallyw/o presence of rare
		to Ta	None (0)		can also be present, and moderately high, but ger threatened or endangers	d species diversity moderate to nerallyw/o presence of rare
		to Ta	None (0) Coverage of invasive plants. Referable 1 ORAM long form for list. Add	1 <u></u>	can also be present, and moderately high, but ger threatened or endangers A predominance of native	d species diversity moderate to nerallyw/o presence of rare ed spp
		to Ta or de	None (0) Coverage of invasive plants. Referable 1 ORAM long form for list. Additional coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3)	1 <u></u>	can also be present, and moderately high, but ger threatened or endangers A predominance of native and/or disturbence tolers absent, and high spp div	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually rersity and often, but not always,
		to Ta	None (0) Coverage of invasive plants. Referable 1 ORAM long form for list. Addeduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)	1 <u></u>	can also be present, and moderately high, but ger threatened or endangers A predominance of native and/or disturbence tolers absent, and high spp div	d species diversity moderate to nerallywio presence of rare ed spp species, with nonnative spp ant native spp absent or virtually
	,	to Ta or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)	high	can also be present, and moderately high, but ger threatened or endangered A predominance of native and/or disturbance tolers absent, and high spp divided the presence of rare, threateness and the presence of rare, threateness and the presence of the pre	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually rersity and often, but not always,
	,	to Ta or de	None (0) Coverage of invasive plants. Referable 1 ORAM long form for list. Addeduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)	high	can also be present, and moderately high, but ger threatened or endangers A predominance of native and/or disturbence tolers absent, and high spp div	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually regreity and often, but not always, reatened, or endangered spp
	,	to Ta or de or de	None (0) Coverage of invasive plants. Referable 1 ORAM long form for list. Additional points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1)	high Mudflat and Open	can also be present, and moderately high, but ger threatened or endangered A predominance of native and/or disturbance tolers absent, and high spp divided the presence of rare, threateness Quality	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually registy and often, but not always, reatened, or endangered spp
	,	to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. e all present using 0 to 3 scale. Vagetated hummucks/tussuck	Mudflat and Open to to the second sec	can also be present, and moderately high, but ger threatened or endangered A predominance of native and/or disturbance tolers absent, and high spp divided the presence of rare, threatened and the presence of the control of the cont	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually resity and often, but not always, reatened, or endangered spp (es) 2.47 acres) to 9.88 acres)
	,	to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. The all present using 0 to 3 scale. Vegetated hummucks/tussuoic. Coarse woody debris >15cm	Mudflat and Open 0 t ks 2 (6in) 3	can also be present, and moderately high, but ger threatened or endangered A predominance of native and/or disturbance tolerabsent, and high spp divided the presence of rare, threater Class Quality Absent <0.1ha (0.247 acr	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually resity and often, but not always, reatened, or endangered spp (es) 2.47 acres) to 9.88 acres)
	,	to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. e all present using 0 to 3 scale. Vegetated hummucks/tussuci Coarse woody debris >15cm Standing dead >25cm (10in) 4	Mudflat and Open to	can also be present, and moderately high, but ger threatened or endangers. A predominance of native and/or disturbance tolers absent, and high spp divided the presence of rare, threatened with the presence of the control of the con	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually resity and often, but not always, reatened, or endangered spp (es) 2.47 acres) to 9.88 acres)
		to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. The all present using 0 to 3 scale. Vegetated hummucks/tussuoic. Coarse woody debris >15cm	Mudflat and Open 0 t ks 2 (6in) 3	can also be present, and moderately high, but ger threatened or endangers. A predominance of native and/or disturbance tolers absent, and high spp divided the presence of rare, threatened with the presence of the control of the con	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually resity and often, but not always, reatened, or endangered spp (es) 2.47 acres) to 9.88 acres)
		to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. e all present using 0 to 3 scale. Vegetated hummucks/tussuci Coarse woody debris >15cm Standing dead >25cm (10in) 4	Mudflat and Open 1 0 1 ks 2 (6in) 3 dbh	can also be present, and moderately high, but ger threatened or endangers. A predominance of native and/or disturbance tolern absent, and high spp divided the presence of rare, threatened with the presence of the control of the con	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually versity and often, but not always, reatened, or endangered spp es) 2.47 acres) 10 9.88 acres)
		to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. e all present using 0 to 3 scale. Vegetated hummucks/tussuci Coarse woody debris >15cm Standing dead >25cm (10in) 4	Mudflat and Open 1 0 t ks 2 (6in) 3 dbh Microtopography C	can also be present, and moderately high, but ger threatened or endangers. A predominance of native and/or disturbence tolern absent, and high spp divide presence of rare, threatened with the presence of rare, threatened with the presence of the control of the	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp and native spp absent or virtually rersity and often, but not always, eatened, or endangered spp ess) 2.47 acres) to 9.88 acres) nore
		to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. e all present using 0 to 3 scale. Vegetated hummucks/tussuci Coarse woody debris >15cm Standing dead >25cm (10in) 4	Mudflat and Open 1 0 1 ks 2 (6in) 3 dbh Microtopography C	can also be present, and moderately high, but ger threatened or endangers. A predominance of native and/or disturbence tolern absent, and high spp divided the presence of rare, threatened to the presence of rare, threatened to the presence of the control of the	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp ant native spp absent or virtually resity and often, but not always, reatened, or endangered spp 2.47 acres) to 9.88 acres) nore ats or if more common
		to Ta or de or de	None (0) Coverage of invasive plants. Refer able 1 ORAM long form for list. Add aduct points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) Microtopography. e all present using 0 to 3 scale. Vegetated hummucks/tussuci Coarse woody debris >15cm Standing dead >25cm (10in) 4	Mudflat and Open 1 0 t ks 2 (6in) 3 dbh Microtopography C	can also be present, and moderately high, but ger threatened or endangers. A predominance of native and/or disturbence tolern absent, and high spp divide presence of rare, threatened with the presence of rare, threatened with the presence of the control of the	d species diversity moderate to nerallyw/o presence of rare ed spp species, with nonnative spp species, with nonnative spp ant native spp absent or virtually rersity and often, but not always, eatened, or endangered spp 2.47 acres) to 9.88 acres) nore unts, but not of highest not of highest quality

GRAND TOTAL(max 100 pts)

Site:		D-	- 1	Rater(s):	MAL		Date:	18/1/05
	1	Met	ric 1. Wetland A	\rea (sìz	e).			
cax 6 pts.	sublotai	Select o	one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) 10 to <25 acres (4 to <10.1ha) (-3 to <10 acres (1.2 to <4ha) (3 pt) 0.3 to <3 acres (0.12 to <1.2ha) 0.1 to <0.3 acres (0.04 to <0.12to <0.12 o <0.12 acres (0.04 to <0.12to <	4 pts) ots) (2pts)				
9	_[0_	Met	tric 2. Upland bu	uffers ar	ıd surrot	ınding land u	se.	
max 14 pts.	Astondus	2a. Cel	lculate average buffer width. Select WIDE. Buffers average 50m (14 MEDIUM. Buffers average 25m NARROW. Buffers average 10m VERY NARROW. Buffers average 10m VERY LOW. 2nd growth or old LOW. Old field (>10 years), shi MODERATELY HIGH. Resider HIGH. Urban, industrial, open g	ct only one and a 64ft) or more aro to <50m (82 to to to <25m (32ft age <10m (<32ft) elect one or douber forest, prairie, rubland, young autilal, fenced past	issign score. Do n und welland perim <164ft) around wel to <82ft) around w around welland p ale check and aven savannah, wildlife econd growth fores ure, park, conserva	ot double check. eter (7) cland perimeter (4) retland perimeter (1) erimeter (0) age. area, etc. (7) st. (5) ation tillage, new fallow field.		
13	43		tric 3. Hydrolog	•				
max 30 pts.	subtolai	4 3c. 1	Durces of Water. Score all that app High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/intermittent surface water (lake of aximum water depth. Select only of 20.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <0.4m (<15.7in) (1) odifications to natural hydrologic re	vater (3) vr stream) (5) one and assign so	3d. core. Q.,	Connectivity. Score all that a 160 year floodplain (1) Between stream/lake at Part of wettand/upland Part of riparian or uplan Duration inundation/saturation Semi- to permanently in Regularly inundated/sa Seasonally inundated (in Seasonally saturated in and average.	nd other hum (e.g. forest), id comdor (1 on. Score on nundated/sat turated (3)	complex (1)) ne or dbl check. turated (4)
		5	None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	Check all disturt ditch tile dike weir stormwater	eances observed	point source (nonstorm filling/grading road bed/RR track dredging other	water)	
10.5	33.5] Mei	tric 4. Habitat A	Iteration	and Dev	velopment.		
max 20 pts.	subtotal	4a. St. 4b. 4b.	ubstrate disturbance. Score one of None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) abitat development. Select only or Excellent (7) Very good (6) Good (5) Mederately good (4) Fair (3) Poor to fair (2) Poor (1) abitat alteration. Score one or dou	r double check a	nd average. Dre.			
	4	.5	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Check all disturt mowing grazing clearcutting selective c	-	\$hrub/sapting removal herbaceous/aquatic be sedimentation dredging	d removal	
	33.) 			woody deb toxic pollut	oris removal ants	farming nutrient enrichment		

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subtotal this page

):	D+1	R	ater(s): MBL	Date: 12/1/05
	33.5		•	
	11.7			
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	335 M	intrin E. Conneil INI	Mondo	
)	1A	etric 5. Special We		
) pts.	subtotal CIV	eck all that apply and score as indicated. Bog (10)		
		Fen (10)		
		Old growth forest (10)		
		Malure forested wetland (5)		
	d	Lake Erie coastal/tributary wetlan	d-unrestricted hydrology	(10)
		Lake Erie coastal/tributary wetlan		}
		Lake Plain Sand Prairies (Oak Op	enings) (10)	
		Relict Wet Praires (10)	h	d (40°)
		Known occurrence state/federal t Significant migratory songbird/wa	_	• • •
		Category 1 Wetland. See Questi	_	· ·
	- 01		•	•
	1345 N	letric 6. Plant com	munities. in	terspersion, microtopography
O pis.	subtotal 68	Wetland Vegetation Communities.	Vegetation Commu	nity Cover Scale
	Sc	or <u>e all present using</u> 0 to 3 scale.	- 0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
		Aquatic bed	1	Present and either comprises small part of wetland's
	_	Emergent		vegetation and is of moderate quality, or comprises a
		Shrub		significant part but is of low quality
	<u>~</u>	Forest Mudflats	2	Present and either comprises significant part of watland's vegetation and is of moderate quality or comprises a small
		Open water		part and is of high quality
		Other	3	Present and comprises significant part, or more, of wetland's
	61	. horizontal (plan view) Interspersion.		vegetation and is of high quality
	Se	ele <u>ct on</u> ly one.		
		High (5)		on of Vegetation Quality
	\sim	Moderately high(4) Moderate (3)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
	λ	Moderately low (2)	mod	Native spp are dominant component of the vegetation,
	0.	Low (1)		although nonnative and/or disturbance tolerant native spp
		None (0)		can also be present, and species diversity moderate to
		. Coverage of invasive plants. Refer		moderately high, but generallyw/o presence of rare
		Table 1 ORAM long form for list. Add		threatened or endangered spp
	or	deduct points for coverage	high	A predominance of native species, with nonnative spp
		Extensive >75% cover (-5) Moderate 25-75% cover (-3)		and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always.
	(T)	Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered spp
	y y	Nearly absent <5% cover (0)		ind produce a rate, arresteriou, or circulage, or opp
	•	Absent (1)	Mudilat and Open \	Nater Class Quality
		i. Microtopography.	0	Absent <0.1ha (0.247 acres)
	S	core all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
	_	Vegetated hummucks/tussucks Coarse woody debris >15cm (6ii	<u>2</u> 1) 3	Moderate 1 to <4ha (2.47 to 9.88 acres) High 4ha (9.88 acres) or more
	\mathcal{L}	Standing dead >25cm (10in) dibi		मिश्रा पार (३.०० देववर) ज गावर
	0	Amphibian breeding pools	Microtopography C	Cover Scale
			C	Absent
			1	Present very small amounts or if more common
				of marginal quality
			2	Present in moderate amounts, but not of highest
				. GUSHIY OF IN SINSH SMANNIS AT MARAKÉ AUSLIN
			2	quality or in small amounts of highest quality
			3	Present in moderate or greater amounts and of highest quality

_____wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

Site:	D-2	Rater(s): M. Lander	Date: 191.105
max 6 pts.	subtotal Select one size class and >50 acres (>20 25 to <50 acres 10 to <25 acres 3 to <10 acres (> 0.3 to <3 acres (> 0.	1.2 to <4ha) (3 pts) (0.12 to <1.2ha) (2pts) s (0.04 to <0.12ha) (1 pt)	Wet 10-2 12 Plags, atjourn
max 14 pts.	subtotal 2a. Calculate average bu WIDE. Buffers. MEDIUM. Buffer NARROW. Buffers VERY NARROW. 2b. Intensity of surroundit VERY LOW. 2c. LOW. Old field MODERATELY	pland buffers and surrous ffer width. Select only one and assign score. Do not average 50m (184ft) or more around wettand perimet ars average 25m to <50m (82 to <164ft) around wetta fers average 10m to <25m (32ft to <82ft) around wet average 10m (<32ft) around wettand per mg land use. Select one or double check and averag nd growth or older forest, prairie, savarmah, wildlife ar (>10 years), shrubland, young second growth forest. HIGH. Residential, fenced pasture, park, conservati ndustrial, open pasture, row cropping, mining, constr	double check. ler (7) Ind perimeter (4) Iland perimeter (1) Imeter (0) Je. Jea, etc. (7) (5) Jon tillage, new fallow field. (3)
1 3 pts.	Perennial surfa 3c. Maximum water dept >0.7 (27.6kn) (3 0.4 to 0.7m (15 <0.4m (<15.7in	core all that apply. Awater (5) alter (3) Initiant surface water (3) Initiant surfa	ponnectivity. Score all that apply. 100 year floodplain (1) Between stream/lake and other human use (1) Part of wetland/upland (e.g. forest), complex (1) Part of riparian or upland comidor (1) unation inundation/saturation. Score one or dbl check. Semi- to permanently inundated/saturated (4) Regularly inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1) id average. point source (nonstormwater) filling/grading road bed/RR track dredging other
Max 20 pts.	subtotal 4a. Substrate disturbance None or none at Recovered (3) Recovering (2) Recant or no re 4b. Habitat development Excellent (7) Very good (6) Good (5) Moderately good Fair (3) Poor to fair (2) Poor (1)	abitat Alteration and Development (4) secovery (1) a. Select only one and assign score. add (4) core one or double check and average. apparent (9) Check all disturbances observed mowing grazing	

te:	D-2			Rater(s): M L	auffer_	Date: 12/1/05
<u> </u>	34 sublotal this page	1				
<u>) </u>	34	Me	etric 5. Special	Wetlands.		
x 10 pls.	subtotal	Chec	Lake Erie coastal/tributary to Lake Plain Sand Prairies (Carent Relict Wet Praires (10) Known occurrence state/fe	i) wettend-unrestricted hydrolog wettend-restricted hydrology (ed species (10)	
		1	Category 1 Wetland. See	Question 1 Qualitative Rating	(-10)	
_	38	M	etric 6. Plant co	ommunities, ir	nterspersion, mic	rotopography.
x 20 pts.	subtotal		Wetland Vegetation Communitie			
		Scor	e all present using 0 to 3 scale.	<u> Q</u>	Absent or comprises <0.1ha (0.	
			Aquatic bed Emergent	1	Present and either comprises s vegetation and is of moderate	
	~		Emergent Shrub		significant part but is of low qu	
	$\left(\cdot \right)$		Forest	2	Present and either comprises s	والمراقب وال
	~	-	Mudflats	•	vegetation and is of moderate	•
			Open water		part and is of high quality	don't a combined a arran
			Other	3	Present and comprises significa	ant part, or more, of wetland's
		6b.	horizontal (plan view) Interspers	ion.	vegetation and is of high qual	• •
		Sele	ct only one.		,	
			High (5)		ion of Vegetation Quality	
			Moderately high(4)	łow	Low spp diversity and/or predox	
	(Moderate (3) Moderately low (2)		disturbance tolerant native sp Native spp are dominant comp	******
	•		Low (1)	mod	although nonnative and/or dis	
			None (0)		can also be present, and spe	
		6c.	Coverage of invasive plants. Re	ofor	moderately high, but general	•
			able 1 ORAM long form for list.		threatened or endangered sp	,
			educt points for coverage	high	A predominance of native spec	
			Extensive >75% cover (-5)		and/or disturbance tolerant na	• • • • • • • • • • • • • • • • • • • •
	_	~^	Moderate 25-75% cover (-		absent, and high spp diversit	and often, but not always,
	\mathcal{A}	\triangle	Sparse 5-25% cover (-1)		the presence of rare, threater	ned, or endangered spp
			Nearly absent <5% cover	(0)		
			Absent (1)	Mudilat and Open	Water Class Quality	
			Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Sco	re all present using 0 to 3 scale.		Low 0.1 to <1ha (0.247 to 2.47	
		,	Vegetated hummucks/tuss		Moderate 1 to <4ha (2.47 to 9.	88 acres)
			Coarse woody debris >156		High 4ha (9.88 acres) or more	***************************************
	1		Ctanding door a Of any (40)			
	1		Standing dead >25cm (10	•	Course Scole	
	1		Standing dead >25cm (10 Amphibian breeding pools	Microtopography		·-
	ļ			Microtopography 0	Absent	ž more common
	1			Microtopography	Absent Present very small amounts or	if more common
	1			Microtopography 0 1	Absent Present very small amounts or of marginal quality	
	1			Microtopography 0	Absent Present very small amounts or	but not of highest
	1			Microtopography 0 1	Absent Present very small amounts or of marginal quality Present in moderate amounts,	but not of highest highest quality

ろり GRAND TOTAL(max 100 pts)

Subtotal this page

ite:	<u> P-3</u>	3 R a	iter(s): M. L	auffer Date: 12/1/0
ax 10 pts.	25 photal this page 35 subtotal	Metric 5. Special We 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 Oper Reikct Wet Praires (10) Known occurrence state/federal thi	-unrestricted hydrology (5) -restricted hydrology (5) enings) (10) reatened or endangered	species (10)
		Significant migratory songbird/water Category 1 Wetland. See Question	• •	
(27	Metric 6. Plant comn	nunities, int	erspersion, microtopograph
ax 20 pts.	sublotal	6a. Wetland Vegetation Communities.	Vegetation Commun	ity Cover Scale
		Score all present using 0 to 3 scale. Aquatic bed I Emergent	1	Absent or comprises <0.1ha (0.2471 acres) contiguous an Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a
	\mathcal{Z}	Shrub Forest Mudflats	2	significant part but is of low quality Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a sm
		Open water Other 6b. horizontal (plan view) interspersion.	3	part and is of high quality Present and comprises significant part, or more, of wetlen vegetation and is of high quality
		Select only one.		
	\sim	High (5) Moderately high(4) Moderate (3)	low	n of Vegetation Quality Low spp diversity and/or predominance of nonnetive or disturbance tolerant native species
	d	None (0) 6c. Coverage of invasive plants. Refer	mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native sp can also be present, and species diversity moderate to moderately high, but generallyw/o presence of rare
		to Table 1 ORAM long form for list. Add or deduct points for coverage	high	threatened or endangered spp A predominance of native species, with nonnative spp
	- 3	Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)	,	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
	ر	Nearly absent <5% cover (0)		
		Absent (1) 6d. Microtopography.	Mudflat and Open V	Absent <0.1ha (0.247 acres)
		Score all present using 0 to 3 scale.	11	Low 0.1 to <1ha (0.247 to 2.47 acres)
		Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)
		Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	3	High 4ha (9.88 acres) or more
		Amphibian breeding pools	Microtopography Co	
			1	Absent 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 quality
	-		3	Present in moderate or greater amounts and of highest quality

GRAND TOTAL (max 100 pts)

ORAM v. 5.0 Field Form C	TOBURDAN KBUNG		<u> </u>	
Site: D-4		Rater(s): JA ∨		Date: 12/1/05
	etric 1. Wetland A out one size class and assign sco >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha 0.3 to <3 acres (0.12 to <1.1	re. 0.2ha) (5 pts) ha) (4 pts)) (3 pta) 2ha) (2pts)	<i>;</i>	
max 14 pls. subtotal 28.	Calcurate average buffer width. WIDE. Buffers average 50 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers Intensity of surrounding land use VERY LOW. 2nd growth o LOW. Old field (>10 years MODERATELY HIGH. Re-	O.12ha) (1 pt) Iffers and surroundi Select only one and assign score. D In (154ff) or more around wetland pe 25m to <50m (82 to <164ff) around is 10m to <25m (32ft to <82ff) around sverage <10m (<32ft) around wetland is select one or double check and a r older forest, prairie, savannah, wild i, shrubland, young second growth fe sidenlial, fenced pasture, park, cons pen pasture, row cropping, mining, o	oo not double check, erimater (7) wetland perimeter (4) ad welland perimeter (1) ad perimeter (0) verage, life area, etc. (7) orest. (5) ervation tillage, new fath	
max 30 pts. subtotal 3a.	Sources of Water. Score ell that High pH groundwater (5) Precipitation (1) Seasonal/intermittent surfater Perennial surface water (la Maximum water depth. Select of 50.7 (27.6in) (3) (0.4 to 0.7m (15.7 to 27.6in) (1)	t apply. 3b. 3ce water (3) ke or stream) (5) 3d. 3d. 3d. 3d. 3d. 3d. 3d. 3d	Connectivity. Score all 100 year floodpta Between stream/ Part of wetland/u Part of riparian or Duration inundation/sat Semi- to perman Régularly inunda Seasonally inunda Seasonally saturack and average.	sin (1) Take and other human use (1) pland (e.g. forest), complex (1) r upland comidor (1) uration. Score one or dbl check. ently inundated/saturated (4) tacd/saturated (3) lated (2) aled in upper 30cm (12in) (1) instormwater)
max 20 pts. subtotal 4a. 3 4b.	Substrate disturbance. Score of None or mone apparent (4) Recovering (2) Recent or no recovery (1) Habitat development. Select on Excellent (7) Very good (6) Good (5) Mode: ately good (4) Fair (3) Poor to fair (2) Poor (1) Habitat alteration. Score one or Recovered (6) Recovered (6) Recovering (3) Recent or no recovery (1)	double check and average. Check all disturbances observed grazing	d shrub/sapling rer	alic bed removal

Site:	D-4	R	ater(s):	JAV	/	Date: 12/1/05
· · · · · · · · · · · · · · · · · · ·	3.4	·				
•	38 ubtolad first pa					•
0	3 8	Metric 5. Special We				
mex 10 pts.	lalative	Check all that apply and score as indicated Bog (10)	uled.			
		Fen (10)				
		Old growth forest (10)				
		Mature forested wetland (5) Lake Erie coastal/tributary wa	illand-unrecki	icted hyd	rology (10)	
	K	Lake Erie coastal/tributary W	dand-restrict	ed hydrol		
	P	Lake Plain Sand Prairies (Oa	k Openings) (10)		
	-	Relict Wet Prairies (10) Known occurrence state/fede	ret threatened	i or enda	ngered species (10)	
		Significant inigratory songbin	d/water fowl h	abitat or	usage (10)	
	 	Category 1 Wetland, See Ot	testion 1 Que	Ita tive R	ating (-10)	•
6	44	Metric 6. Plant com		•	<u> </u>	pography.
max 20 pts.	mubiotal	6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.	<u>Veg</u>	etation (Community Cover Scale Absent or comprises <0.tha (0.2)	(71 acres) continuous area
		Aquatic bed		1	Present and either comprises em	all pert of wetland's
		a Emergent			vegetation and is of moderate of significant part but is of low gus	
	.5	Shrub Forest (adula la -	\ <u> </u>	2	Present and alther comprises sig	
		Forest (only a fact says	laneous)	_	vegetation and is of moderate	
		O Open water		3	part and is of high quality Present and comprises significan	t part or mars of wattends
		6b. horizontal (plan view) interspersion	n.	3	vegetation and is of high quality	
		Select only one.	-	· · · · · · · · · · · · · · · · · · ·		
		High (5) Moderately high(4)	Na	rsative D	escription of Vegetation Quality Low spp diversity and/or predom	nance of connective or
		Moderate (3)		ION	disturbance tolerant native spe	
		Moderately low (2)		mod	Native spp are dominant compor	•
		Low (1) None (0)			although nonnative and/or distr can also be present, and speci-	• • • • • • • • • • • • • • • • • • • •
		6c. Coverage of invasive plants. Refe	ır		moderately high, but generally	
		to Table 1 ORAM long form for list. At	ld		threatened or endangered spp	
		or deduct points for coverage Extensive >75% cover (-5)		high	A predominance of native specie and/or disturbance tolerant nat	
		Moderate 25-75% cover (-3)			absent, and high spp diversity	
		Sparse 5-25% cover (-1)			the presence of rare, threatens	d, or endangered spp
		Nearly absent <5% cover (0 Absent (1)		idflat ani	d Open Water Class Quality	
		6d. Microlopography.		0	Absent <0.1ha (0.247 acres)	• -
		Score all present using 0 to 3 scale.		1	Low 0.1 to <1ha (0.247 to 2.47	- -
		Vegetated hummucks/tussu Coarse woody debris > 15cn		3	Moderate 1 to <4ha (2.47 to High 4ha (9.88 acres) or more	-
	C	O Standing dead >25cm (10in				
		Amphibian breeding pools	Mi		graphy Cover Scale	
				1	Absent Present very small amounts or if	more common
					of marginal quality	
				2	Present in moderate amounts, b	——————————————————————————————————————
				3	quality or in small amounts of I Present in moderate or greater a	
F .	7			,	and of highest quality	
44	GRA	ND TOTAL (max 100 pts)	-			

Refer to the most recent CRAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epu.state.ch.us/dew/401/401.html
last revised 1 February 2001 jim

category 2

Site:	D-3	5	Rater(s): M. Lmd		Date: 10/11/11
0	OM	etric 1. Wetland	Area (size).	WH 13-5.	
tax 6 pts.	subsotal Sele	ct one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2l 10 to <25 acres (4 to <10.1ha) 3 to <10 acres (1.2 to <4ha) (3 0.3 to <3 acres (0.12 to <1.2ha 0.1 to <0.3 acres (0.04 to <0.1) <0.1 acres (0.04ha) (0 pts)	(4 pts) pts) a) (2pts)	Wo	
10	10 M	etric 2. Upland b	uffers and surr	ounding land u	se.
max 14 pts.	subjectal 2a.	Calculate average buffer width. Sel WIDE. Buffers average 50m (MEDIUM. Buffers average 25 NARROW. Buffers average 1: VERY NARROW. Buffers average 1: VERY LOW. 2nd growth or oil 1.OW. Old field (>10 years), si MODERATELY HIGH. Reside	ect only one and assign score. 164ft) or more around wetland print to <50m (82 to <164ft) around 0m to <25m (32ft to <82ft) around to <25m (32ft) around wetlated one or double check and der forest, prairie, savannah, with hubland, young second growth artifat, fenced pasture, park, con	Do not double check. perimeter (7) d wetland perimeter (4) and wetland perimeter (1) and perimeter (0) average. Idiife area, etc. (7) forest. (5) servation tillage, new fallow field.	•
15	3.5 M	etric 3. Hydrolog	pasture, row cropping, mining,	construction. (1)	
max 30 pts.	subsolal 3a.	Sources of Water. Score all that ap High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface Perennial surface water (lake Maximum water depth. Select only >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2 <0.4m (<15.7in) (1) Modifications to natural hydrologic r None or none apparent (12) Recovered (7) Recovering (3)	water (3) or stream) (5) one and assign score.) regime. Score one or double ch	Part of wetland/uptand Part of riparian or uplar 3d. Duration inundation/saturation Semi- to permanently in Regularly inundated/sa Seasonally inundated (Seasonally saturated in eck and average. point source (nonstorm	nd other human use (1) (e.g. forest), complex (1) nd corridor (1) on. Score one or dbl check, nundated/saturated (4) (lurated (3) 2) n upper 30cm (12in) (1)
10	37 M	Recent or no recovery (1)	dike weir stomwater input	road bed/RR track dredging other	
max 20 pts.	subtotal 4a.	etric 4. Habitat A Substrate disturbance. Score one of None or none apperent (4) Recovered (3) Recovering (2) Recent or no recovery (1) Habitat development. Select only of Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2)	or double check and average,	evelopment.	
	4c .	Poor (1) Habitat alteration. Score one or do	uble check and average.		
	Subtotal this page	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Check all disturbances observed moving grazing clearcutting selective cutting woody debris removal toxic pollutants	shrub/sapling removal herbaceous/aquatic be sedimentation dredging farming nutrient enrichment	d removel

ite:	0-5	Ra	ter(s): M La	wffr Date: 12/1/6.
	27			
	>			
	subjectal this page			
ν	37			
U_	[] [] W	etric 5. Special Wet	lands.	
t 10 pts.	subtotat Ch	ock all that apply and score as indicated.		,
		Bog (10)		
		Fen (10)		
		Old growth forest (10)		
		Mature forested wetland (5) Lake Erie coastal/tributary wetland-	unrestricted bydrology	(40)
	ó	Lake Erie coastal/tributary wetland-		• •
	φ	Lake Plain Sand Prairies (Oak Oper		•
	·	Relict Wet Praires (10)		
		Known occurrence state/federal three	•	• • •
		Significant migratory songbird/water		
		Category 1 Wetland. See Question	1 Qualitative Rating (-10)
~	1271	otrio 6 Diant sami	unitica in	taranarajan miaratanaguert.
<u>~</u> _			-	terspersion, microtopography
x 20 pts.		Wetland Vegetation Communities.	Vegetation Commu	
-	50	ore all present using 0 to 3 scale. Aquatic bed	<u> </u>	Absent or comprises <0.1ha (0.2471 acres) contiguous are Present and either comprises small part of weilland's
		Emergent	•	vegetation and is of moderate quality, or comprises a
		Shrub		significant part but is of low quality
	(Forest	2	Present and either comprises significant part of wetland's
	J	Mudflats		vegetation and is of moderate quality or comprises a sma
		Open water		part and is of high quality
		Other	3	Present and comprises significant part, or more, of wetland
		horizontal (plan view) Interspersion.		vegetation and is of high quality
	56	lect only one. High (5)	Nametha December	an of the setation Oscilla
		Moderately high(4)	low	on of Vegetation Quality Low spp diversity and/or predominance of nonnative or
		Moderate (3)	W#	disturbance tolerant native species
	(Moderately low (2)	mod	Native spp are dominant component of the vegetation,
	•	Low (1)		although nonnative and/or disturbance tolerant native spi
		None (0)		can also be present, and species diversity moderate to
		Coverage of invasive plants. Refer		moderately high, but generallyw/o presence of rare
		Table 1 ORAM long form for list. Add		threatened or endangered spp
	or	deduct points for coverage Extensive >75% cover (-5)	high	A predominance of native species, with nonnative spp
		Moderate 25-75% cover (-3)		and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always.
	- 2	Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered spp
	5	Nearly absent <5% cover (0)		
		Absent (1)	Mudflat and Open \	Nater Class Quality
		. Microtopography.	0	Absent <0.1ha (0.247 acres)
	۰.	ore all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
	30	Vegetated hummucks/tussucks	2	Moderate 1 to <4hs (2.47 to 9.88 acres)
	,			(High 4ha (9.88 acres) or more
	50	Coarse woody debris >15cm (6in)	3	
	(Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh		
		Coarse woody debris >15cm (6in)	Microtopography (over Scale
	(Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh		
	(Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	Microtopography C	Cover Scale Absent

GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.apa.aiata.olb.ua/dsw/401/401.html

3

Present in moderate or greater amounts

and of highest quality

Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Check all disturbances observed Recovered (6) mowing shrub/sapling removal Recovering (3) herbaceous/aquatic bed removal grazing Recent or no recovery (1) sedimentation clearcutting selective cutting dredging woody debris removal farming toxic pollutants nutrient enrichment subtotal this page

ite:	0-6	Ra	ter(s): M	Lauffer	Date: 12/1/05
	38				
		l i i i i i i i i i i i i i i i i i i i			
31	ubtolef this page				
$ \bigcirc $	18	Madria E. Charial 1864	landa		
	0	Metric 5. Special Wet	ganos.		
10 pts.	subtotal	Check all that apply and score as indicated.			
		Bog (10)			
		Fen (10) Old growth forest (10)			
		Mature forested wetland (5)			
	d	Lake Erie coastal/tributary wetland-	unrestricted hydrolog	/ (10)	
	של	Lake Erie coastal/tributary wetland-		• •	
	,	Lake Plain Sand Prairies (Oak Oper	nings) (10)		
		Relict Wet Praires (10)			
		Known occurrence state/federal thr	_		
		Significant migratory songbird/wate	-	• •	
		Category 1 Wetland. See Question	1 Qualitative Rating	(-10)	
1	スコ	Motric 6 Plant comp	sunitiae ir	torenoreion mi	crotonography
	120	1	•	•	crotopograpity
x 20 pls.	sublotal	6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.	Vegetation Commo		(0.2471 acres) contiguous area
		Aquatic bed	<u> 0</u>	Present and either comprise	
		Emergent	•	· ·	rate quality, or comprises a
	_	Shrub		significant part but is of lov	•
	4	Forest	2	Present and either comprise	s sign ifi cant part of wetland's
	1	Mudflats		vegetation and is of mode	rate quality or comprises a sma
		Open water		part and is of high quality	<u> </u>
		Other	3	1 -	ificant part, or more, of wetland
		6b. horizontal (plan view) Interspersion.		vegetation and is of high o	uality
		Select only one. High (5)	Narrathya Dacavint	on of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or pre	dominance of nonnative or
		Moderate (3)		disturbance tolerant native	
	. \	Moderately low (2)	mod	Native spp are dominant co	mponent of the vegetation,
	,	Low (1)		aithough nonnative and/or	disturbance tolerant native spp
		None (0)		•	species diversity moderate to
		6c. Coverage of invasive plants. Refer		moderately high, but gene	
		to Table 1 ORAM long form for list. Add or deduct points for coverage	hinh	threatened or endangered A predominance of native s	
		Extensive >75% cover (-5)	high	1 .	pecies, with nominative spp at native spp absent or virtually
		Moderate 25-75% cover (-3)		1	resity and often, but not always,
	·	Sparse 5-25% cover (-1)		• • • • • • • • • • • • • • • • • • • •	stened, or endangered app
	-	Nearly absent <6% cover (0)			
		Absent (1)	Mudflat and Open	Water Class Quality	<u> </u>
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2	
	^	! Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to	
	J.	Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	<u></u>	High 4ha (9.88 acres) or mo	118
		Amphibian breeding pools	Microtopography	Cover Scale	
			0	Absent	
			1	Present very small amounts	or if more common
				of marginal quality	
			2	Present in moderate amoun	•
				quality or in small amount	
			3	Present in moderate or grea	ner amounts
			•	and of highest quality	

GRAND TOTAL(max 100 pts)

250 series (20.2 co.27ms) (5 pts) 250 co.27ms) (6 pts) 10 to <25 series (10 to 10.1ms) (4 pts) 3 to <10 series (10 to 10.1ms) (4 pts) 3 to <10 series (10 to 10.1ms) (4 pts) 3 to <10 series (10 to 10.1ms) (4 pts) 3 to <10 series (10.1ms) (4 pts) 3 to <10 series (10.1ms) (4 pts) 4.3 to <3 series (10.1	Site: W-1		Rater(s): TAV	Date: 11/29/05
Select one size class and sasting score. Solid creen (2-02.7%) (5 pts) Solid creen (2-02.7%	. 1 1	Matric 1 Watlan	t Area (cive)	
250 eares (20.20%) (5 pts) 250 eares (10.10 co.20%) (5 pts) 250 eares (10.10 co.20%) (20.20%) (5 pts) 250 eares (10.10 eares (12.00 eares (1	max 6 pts. subtotal			
10 to -25 scores (a to -10.1ta) (a jbs) 3 to 10 scores (0.0 to 10 scores (10.0 to 10.0 scores (10.0 scores (10.0 to 10.0 scores (10.0 scores (10.		>50 acres (>20.2ha) (6 pls)	•
Control of Service (Country Control of Service) (20 of 12/18) (1 pt) Control of Service (Country) (20 of 18/18) (20 of 18/18		10 to <25 acres (4 to	<10.1ha) (4 pts)	;
Metric 2. Upland buffers and surrounding land use. 2a. Calculate average buffer width. Select only one and estign acces. Do not double check. WiDEL Enforces average buffer width. Select only one and estign acces. Do not double check. WiDEL Enforces average buffer width. Select only one and estign acces. Do not double check. WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 3 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 3 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 3 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 3 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 3 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 3 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 3 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) avound welland perimeter (?) WIDELY (MARRAY). Buffers average 2 from (<25) average 3 from (<25) average 2 from (<25) average 3 fro		0.3 to <3 scres (0.12)	o <1.2ha) (2p(s)	
2. Calculate everage buffer width. Select only one and assign score. Do not double check. College		0.1 to <0.3 acres (0.04 0.1 acres (0.04ha) (0	t to <0.12ha) (1 ρt)) pts}	
Wellow, Buffers average 50m (164f) or more seround welland perimeter (7)	9 10	Metric 2. Upland	buffers and surrounding I	and use.
MEDIUM. Buffers average 25m to <5m (82 to <18th) around welland petimeter (8) Cody and Arrow (25m (381 to <25m) around welland petimeter (9) VERY NARROW. Buffers average <10m (<23th) around welland petimeter (1) VERY LOW. 2nd growth or slote forest, praise, savarnah, widdle area, etc. (7) V.O. (16 feel 6) to years), shindard, young second growth forest (5) MODERAFELY HGH. Residental, fenced pesture, perk, conservation tillage, new fallow field. (3) J.O. (10 feel 6) to years), shindard, young second growth forest (5) MODERAFELY HGH. Residental, fenced pesture, perk, conservation tillage, new fallow field. (3) J.O. (10 feel 6) to year foreigned from the second field of the first of	mex 14 pts. eubtotal	THE DISTANCE OF THE PARTY OF TH	un 80m /4C46), as annou acres of sentinged and and another	. PT.
20. integally of surrounding land use. Salect one or double check and average. Very LOW, 20t field (*) 10 years), shoulded, young second growth forest. (5) NODERATELY HIGH. Residential, fenced pesture, park, conservation allege, new fallow field. (3) (MEDIUM. Bullers avi	erage 25m to <50m (82 to <184h) around welland	perimeter (4) Cadjacent road only have
VERY LOW. 2nd growth or older forest, prelies, savameth, wildlife stres, etc. (f)		VERY NARROW. Butters at	Kers average <10m (<32t) around welland perin	no perimeter (1)
ACOW., Old field P-10 years), shobland, young second growth lorest (8) Metric 3. Hydrology. Metric 3. Hydrology. Sa. Sources of Water. Score all that apply. High phy groundwater (8) Other groundwater (9) Percephagin (1) Seasonal/fulermittent surface water (3)(Ady., Advance). Percephagin (1) Seasonal/fulermittent surface water (3)(Ady., Advance). Perrental surface water (lake or stream) (5) 3c. Maximum water depth. Select only one and assign score. Port (7; Fish) (2) Other groundwater (8) Percephagin (1) Seasonally laundated (2) Recovering (3) Recovering (4) Recovering (4) Recovering (5) Recovering (6) Recovering (6) Recovering (7) Recovering (8) Recovering (8) Recovering (8) Recovering (8) Recovering (8) Recovering (8) Reco				a, etc. (7)
Metric 3. Hydrology. ***Bobble** ***Bobble** ***Big High High Litchen, industrial, open pasture, row cropping, mining, construction. (1) ***Metric 3. Hydrology.** ***Basic Little Procepting of the processor of Water. Score all that apply. Figh Pri groundwater (9)	_	LOW, Old field (>10	rears), shrubland, young second growth forest, (5	i)
3a. Sources of Water. Score all that apply. High pit groundwater (5) Defer groundwater (5) Defer groundwater (5) Percipitation (1) Personial surface water (3) (ial, open pasture, row cropping, mining, construc	lion. (1)
3a. Sources of Weller. Score all that apply. High pH groundwater (5) Check and surface water (3) (16 26	Metric 3. Hydrole	Dgγ.	
Deter groupdwater (3) Precipitation (1) Percepitation (2) Percepitation (3) Percental surface water (a) (a.j. All John (2) Part of spatial or upland combor (1) Part of spatial combor (1) Part of spatial combor (2) Part of spatial combor (1) Part of wetlandupland combor (1) Part of wetlandupland combor (1) Part of wetlandupland (2) Part of spatial combor (2) Part of wetlandupland combor (1) Part of wetlandupland (2) Part of spatial combor (2) Part of spatial combor (2) Part of spatial combor (2) Part of wetlandupland combor (2) Part of spatial combor (2) Part of wetlandupland combor (1) Part of wetlandupland combor (2) Part of spatial combor (2) Part of wetlanduplandu	max 30 pts. subtotal	3a. Sources of Water. Score a	Il that apply	
Perceptation (1) Perceptation (1) Percental surface water (3)(adj. Annother) Percental surface water (lake or stream) (5) 3d. Duration inundation/saturation. Score one or dot check and average. **Part of implain or upland combious (1) Percental surface water (lake or stream) (5) 3d. Duration inundation/saturation. Score one or dot check and average. **Part of implaint or upland combious (1) Percental surface water (lake or stream) (5) 3d. Duration inundation/saturation (1) Percental or incompany (1))`	Setween stream/lake and other human use (1)
Perennal surface water (lake or stream) (5) 3c. Maximum water depth. Select only one and assign score. >0.7 (27.6h) (3) 0.4 to 0.7 (27.6h) (1) 3e. Modifications to natural hydrotogic regime. Score one or double check and average. Alone or none apparent (12) Recovered (7) Recovered (7) Recovered (7) Recovered (7) Recovered (8) Recovered (9) Recovered (9) Recovered (10) Recovered (10		Precipitation (1)		Part of wetland/upland (e.g. forest), complex (1)
2-0.7 (27.6h) (3) 9.4 to 0.7m (15.7 to 27.6in) (2) 9.4 to 0.7m (15.7 to 27.6in) (1) 9.4 to 0.7m (15.7 to 27.6in) (2) 9.4 to 0.7m (15.7 to 27.6in) (2) 9.4 to 0.7m (15.7 to 27.6in) (2) 9.4 to 0.7m (15.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 17.7in) (1) 9.4 to 0.7m (15.7 to 0.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7 to 0.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7 to 0.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7 to 0		Perennial surface wa	ter (lake or stream) (5) 3d. Duratio	n inundation/saturation. Score one or dbl check.
Seasonally saturated in upper 30cm (12in) (1)			· Marini	
Mone or none apparent (12) Recovering (3) Record for none apparent (12) Recovering (3) Recovering (3) Record for none apparent (13) Recovering (3) Recovering (2) Recovering (3) Recovering (2) Recovering (3) Recovering (4) Recovering (5) Recovering (6) Recovering (6) Recovering (6) Recovering (6) Recovering (6) Recovering (6) Recovering (7) Recovering (7) Recovering (8) Recoverin			- · · · · · · · · · · · · · · · · · · ·	
Recovering (3) Recard or no recovery (1) Recovering (3) Recovering (2) Recovering (2) Recovering (2) Recovering (3) Poor to fair (2) Poor (1) 4c. Habital alteration. Score one or double check and average. Recovering (3) Poor to fair (2) Poor (1) Ac. Habital alteration. Score one or double check and average. Recovering (3) Recovering (4) Recovering (4) Recovering (5) Recovering (6) Recovering (7) Recovering (8) Recoveri		3e. Modifications to natural hyd	drologic regime. Scare one or double check and	Bverage.
Recent or no recovery (1) Recent or no recovery (1) As Substrate disturbance. Score one or double check and average. Recovering (2) Recent or no recovery (1) Ab. Habitat development. Select only one and assign score. Excellent (7) Very good (5) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habital atteration. Score one or double check and average. None or none apparent (9) Recovering (3) Recovering (4) Recovering (4) Recovering (5) Recovering (6) Recovering (6) Recovering (7) Recovering (8) Recovering (8) Recovering (9) Recovering (1) R		Recovered (7)	· · · · · · · · · · · · · · · · · · ·	point source (nonstornwater)
Weir Stormwater input In		. The Covering (2)		
Metric 4. Habitat Alteration and Development. 4a. Substrate disturbance. Score one or double check and average. Plane or none apparent (4) Recovering (2) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign score. Excellent (7) Very good (5) Mode: select only one and assign score. Excellent (7) Very good (5) Mode: select only one and assign score. Excellent (7) Very good (5) Mode: select only one and assign score. Excellent (7) Very good (6) Rocor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovering (3) Recovering (4) Recovering (*****	weir	
# Substrate disturbance. Score one or double check and average. Hone or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign score. Excellent (7) Very good (5) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recovering (4) Recovering (5) Recovering (6) Recovering (6) Recovering (6) Recovering (7) Recovering		7	2 SOUTHWATER MIDDLE	Julie March
Recovered (3) Recovering (2) Recent or no recovery (1)	12 38	Metric 4. Habita	t Alteration and Developm	ent.
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) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovered (6) Recovered (7) Recovered (8) Recovered (9) Rec	max 20 pts. subtota			
Recent or no recovery (1) 4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovered (8) Recovered (8) Recovering (3) Recent or no recovery (1) Recovering (3) Recent or no recovery (1) Recovering (3) Recovering (4)		Recovered (3)	(4)	
Excellent (7) Very good (6) Good (5) Mode:ately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habital alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Recent or no recovery (1) selective cutting sedimentation dredging larming nutrient enrichment loxic pollutants nutrient enrichment			y (1)	
Very good (6) Good (5) Mode: stely good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habilat alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Recent or no recovery (1) Build this page Check all disturbances observed mowing grazing herbaceous/aquatic bed removal selective outling woody debris removal loxic pollutants movituent along adjocent			ect only one and assign score.	
Mode:sately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habital alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Recent or no recovery (1) Bublistal this page Check all disturbances observed mowing grazing herbaceous/aquatic bed removal selective cutting woody debris removal loxic pollutants movituent along adjacent		Very 9000 (6)		v =-
Poor to fair (2) Poor (1) 4c. Habital alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Selective cutting woody debris removal loxic pollutants Check all disturbances observed Shrub/sapling removal herbaceous/aquatic bed removal sedimentation dredging woody debris removal larming nutrient enrichment		Moderately good (4)		
4c. Habital alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Buildight his page Check all disturbances observed mowing grazing herbaceous/aquatic bed removal seldimentation dredging woody debris removal loxic pollutants mutrient enrichment				
None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Build this page None or none apparent (9)			one or double check and average.	•
Recovered (6) Recovering (3) Recent or no recovery (1) Selective cutting selective cutting woody debris removal loxic pollutants inspage Comparison of the content of t			ent (9) Check all disturbances observed	
Recent or no recovery (1) Clearcutting sedimentation dredging woody debris removal loxic pollutants nutrient enrichment Subject of the page of the p		/ Recovered (6)	mowing	shrub/sapling removal
woody debris removal lamming nutrient enrichment loxic pollutants nutrient enrichment		Recent or no recove	ry (1) clearcutting	sedimentation
subjected this page > mountained along adjoined	ع ه		woody debris removal	farming I
mountment along adjacent	subsetal shi	S Dage	loxic pollutants	nutrient enrichment
last revised 1 February 2001 jim			t) may	ntenance along adjacent

last revised 1 February 2001 jjm ORAM v. 5.0 Field Form Quantitative Rating

Site:	W⊢I	Rater(s): JA√	Date: 11/24/05
	38 ************************************	etric 5. Special Wetland eck all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-un Lake Plain Sand Prairies (Oak Openin Relict Wet Prairies (10) Known occurrence state/federal thres Significant migratory songbird/water fe	IS. restricted hydrologs) (10)	rotogy (10) ogy (5) ingered species (10)
		Category 1 Wetland. See Question 1		
	44	latria 6 - Diant assumumi	liaa int	; oronomian miovetenosvent;
6		(181116 O. Plätti Cottimum) . Welland Vegelalion Communities.	-	erspersion, microtopography.
arax 20 p		ore all present using 0 to 3 scale,	Aederanou	Absent or comprises <0.1ha (0.2471 scres) contiguous area
		Aquatic bed	1	Present and either comprises small part of welland's
·	,	2 Emergent		vegetation and is of moderate quality, or comprises a
		Shrub		significant part but is of low quality
	· 3	O Forest O MudRats	2	Present and either comprises significant part of welland's vegetation and is of moderate quality or comprises a small
		O Mudilats . Open water		part and is of high quality
		Other	3	Present and comprises significant part, or more, of wetland's
	6 b	. horizontal (plan view) Interspersion.		vegetation and is of high quality
	Se	elect anly one.		
		High (5)	Narrative D	scription of Vegetation Quality Low spp diversity and/or predominance of nonnative or
		Moderately high(4) Moderate (3)	W.W	disturbance tolerant native species
	2	Moderately low (2)	mod	Native spp are dominant component of the vegetation,
	<i>→</i>	Low (1)		atthough nonnative and/or disturbance tolerant native spp
		None (0)		can also be present, and species diversity moderate to
		Coverage of Invasive plants. Refer		moderately high, but generally who presence of rare threatened or endangered app
		Table 1 ORAM long form for list. Add deduct points for coverage	high	A predominance of native species, with nonnative spp
	•	Extensive >75% cover (-5)		and/or disturbance tolerant native spp absent or virtually
	.	Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always,
	\mathcal{Q}	Sparse 5-25% cover (-1)	*	the presence of rare, threatened, or endangered spp
		Nearly absent <5% cover (0)	E4	d A Make Olean Apollika
	E.	Absent (1) d. Microtopography.	Muditat and	d Open Water Class Quality Absent <0.1ha (0.247 acres)
		core all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47
	_	Vegetated hummucks/lussucks	2	Moderate 1 to <4hB (2.47 to
		Coarse woody debris > 15cm (6in)	3	High 4ha (9.88 acres) or more
		Standing dead >25cm (10in) dbh		t de combonio
		O Amphibian breeding pools	Microloper	graphy Cover Scale 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 quality
			. 3	Present in moderate or greater amounts and of highest quality
•	•			I GIO VI INCITO LEGICI

44 GRAND TOTAL (max 100 pts)

Rate to the most recent ORAM Score Calibration Report for the scoring breakpoints between welland categories at the following address: http://www.epe.state.eh.us/dsw/401/40s.html
fast revised 1 February 2001 jim



5	Site:	W	-2	Rater(s):	BEM	Date: \\-\24-05
	A max 6 pts.	aublotal	Metric 1. Wetland Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.3ha) 10 to <25 acres (4 to <10.1ha) 3 to <10 acres (1.2 to <4ha) (0.3 to <3 acres (0.12 to <1.2ha) 0.1 to <0.3 acres (0.04 to <0.	2ha) (5 pts)) (4 pts) 3 pts) a) (2pts)	∌).	
Ę	THEX 14 pis.		NARROW. Buffers average of VERY NARROW. Buffers average of VERY NARROW. Buffers average of VERY LOW. 2nd growth or or LOW. Old field (>10 years), s	elect only one and as (164ft) or more arou fm to <50m (82 to < 10m to <25m (32ft to erage <10m (<32ft) a Select one or double ider forest, prairie, s chrubland, young secential, fenced pastur	sign score. Do not double check nd wettand perimeter (7) 164ft) around wetland perimeter (0 2 <82ft) around wetland perimeter (0) e check and average. avannah, wildlife area, etc. (7) cond growth forest. (5) re, park, conservation tillage, new	4) 0 35 4 /75 (1) -0 50 -
	9 nax 30 pts.	subvotal	Metric 3. Hydrolog 3a. Sources of Water. Score all that at High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface Perennial surface water (lake 3c. Maximum water depth. Select only >0.7 (27.6in) (3) >0.4 to 0.7m (15.7 to 27.6in) (2 <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	water (3) or stream) (5) one and assign sco	Part of wetter Part of ripar 3d. Duration inundet Semi- to pe Regularly in Seasonally or double check and average. point source filling/gradir road bed/Ri dredging	ream/lake and other human use (1) and/upland (e.g. forest), complex (1) rian or upland comidor (1) ion/saturation. Score one or dbi check. rmanently inundated/saturated (4) inundated/saturated (3) inundated (2) saturated in upper 30cm (12in) (1) e (nonstormwater)
	3 nax 20 pts.	/8 subtotel	Metric 4. Habitat A 4a. Substrate disturbance. Score one of None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only of Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or do	or double check and	average	nt.
	[su	18 Iblatel this pag	Recovered (6) Recovering (3) Recent or no recovery (1)	mowing grazing clearcutting selective cutt woody debris toxic pollutan	shrub/saplir herbaceous Sedimentati dredging farming	√aquatic bed removal on

Site:	∂W	-2	Rater(s): BEM		Date: 11/24/05
	18 Submitted this pa				·	
(C)	18	Metric 5. Spe	ecial Wetland	ds.	•	
max 10 pts.	subtotat	Check all that apply and so				
·	(o)	Lake Erle coastal/	• •	d hydrology (5)	0)	
		Relict Wet Praires	• •		,	
			e state/federal threatened	_	• • •	
			ory songbird/water fowl ha nd. See Question 1 Quali			
_					•	
3	2/	Metric 6. Pla	nt communi	ties, inte	erspersion, micro	otopography.
max 20 pls.	subtotal	6a. Wetland Vegetation Co.	mmunities. Vegeta	tion Communit	y Cover Scale	
**		Score all present using 0 to	3 scale.	0	Absent or comprises < 0.1ha (0.24	
		Aquatic bed		1	Present and either comprises sma	
		Emergent O Shrub			vegetation and is of moderate q	· · · · · · · · · · · · · · · · · · ·
		To Forest			significant part but is of low qua	
		Mudifiets		2	Present and either comprises sign	
		Open water			vegetation and is of moderate q part and is of high quality	uality of confiprises a sinali
		Other_		3	Present and comprises significant	nart or more of wetland's
		6b. horizontal (plan view) in	terspersion.	J	vegetation and is of high quality	• •
/ / 5	a \	Select only one.				_
(&	2)	High (5)	Narrati	ve Description	of Vegetation Quality	
_	_	Moderately high(4)	low	Low spp diversity and/or predomin	rance of nonnative or
		Moderate (3)			disturbance tolerant native spec	ies
		Moderately low (2))	mod	Native spp are dominant compone	•
		X Low (1)			although nonnative and/or distu	• •
		None (0)			can also be present, and specie	•
		6c. Coverage of invasive plants			moderately high, but generallyw	/o presence of rare
		to Table 1 ORAM long form		4.7-1-	threatened or endangered spp	
		or deduct points for coverage Extensive >75% c		high	A predominance of native species and/or disturbance tolerant native	
		Moderate 25-75%	• •		absent, and high spp diversity a	• •
		Sparse 5-25% cov	• •		the presence of rare, threatened	· · · · · · · · · · · · · · · · · · ·
		Nearly absent <59	, ,			
	•	Absent (1)	Mudfia	t and Open Wat	er Class Quality	
		6d. Microtopography.		0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to		1	Low 0.1 to <1ha (0.247 to 2.47 ac	res)
		Vegetated hummu	 -	2	Moderate 1 to <4ha (2.47 to 9.88	acres)
		Coarse woody det	` · · · · · · · · · · · · · · · · · · ·	3	High 4ha (9.88 acres) or more	·
		C) Standing dead >2:	•			
		Amphibian breeding	ig pools Microto	pography Cove	,	
				<u>0</u>	Absent Present very small amounts or if r	nore common
				•	of marginal quality	PART VARIETY I
				2	Present in moderate amounts, but	not of highest
					quality or in small amounts of hi	
				3	Present in moderate or greater an	
	•				and of highest quality	
21	GRAN	D TOTAL(max 100	pts)			•

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between welland categories at the following address: http://www.epa.state.ch.us/dsw/401/401.html

ORAM v. 5.0 Field Form (Quantitative Raling			
Site: WB-1		Rater(s): M. Lauf	u	Date: 11/29/05
2 2 M	etric 1. Wetland A	۳٬ Area (size).		,
m≊x 6 pts. subtatat Sele	2ct one size class and assign so >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to < 10 to <25 acres (4 to <10. 2 to <10 acres (1.2 to <4h 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pts	s) 20.2ha) (5 pts) 1ha) (4 pts) a) (3 pts) J.2ha) (2pts) <0.12ha) (1 pt)		
12 14 M	etric 2. Upland bi	affers and surround	ling land use	· 1 .
resx 14 pls. sublotal 2a.	Calculate average buffer width. WIDE. Buffers average 5 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers average VERY NARROW. Buffers Intensity of surrounding land with VERY LOW. 2nd growth VEOW. Old field (>10 year MODERATELY HIGH. R.	Select only one and assign score. On (164ft) or more around welland per 25m to <50m (82 to <164ft) around ge 10m to <25m (32ft to <82ft) around wellar around wellar select one or double check and or older forest, prairie, savannah, will so, shrubland, young second growth esidential, fenced pasture, park, componen pasture, row cropping, mining,	Do not double check. perimeter (7) d wetland perimeter (4) and wetland perimeter (0) average. (diffe area, etc. (7) forest. (5) servation tillage, new f	1)
19 33 M	etric 3. Hydrolog	y .	•	
max 30 pts. substate 3a. 4 3c.	Sources of Water, Score all the High pH groundwater (5) Other groundwater (3) Precipitation (1) SeasonaVIntermittent surf Perennial surface water (1) Maxiprum water depth. Select (2) >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6id) (2) <0.4m (<15.7in) (1)	ist apply. 3b. face water (3) ake or stream) (5) 3d. only one and assign score.	Part of wetland Pert of ripariar Duration inundation's Semi- to permi Regularly inun Seasonally inu	plain (1) m/lake and other human use (1) l/upland (e.g. forest), complex (1) or upland corridor (1) eturation. Score one or doi check. anently hundated/saturated (4) dated/saturated (3)
. 7	•	Cheok all disturbances observe ditch jile	:d • , .	nonstormwater) rack
7.5 40.5 M	etric 4 Hahitat A	Iteration and Devel	onment	
max 20 pts. autotai 4a.		one or double check and average.	opurotti.	
4c.	Habitat atteration. Score one of None or none apparent (9		d	
3 subtotal this page	Recovered (6) Recovering (3) Recent or no recovery (1)	mowing grazing	shrub/sapling	juatic bed removal

last revised 1 February 2001 jim ORAM v. 5.0 Field Form Quantitative Rating

Site:	WB-I	R	ater(s):		Date:
	4-0.5	,	,		•
\bigcirc	40.5 Me	tric 5. Special We	flande		
max 10 pls.		k all that apply and score as indica		•	
***************************************		Bog (10)			
	+	Fen (10) Old growth forest (10)			
	t	Mature forested wetland (5)			
	α	Lake Erie coastal/tributery we			
		Lake Erie coastal/tributary we Lake Plain Sand Prairies (Os		ogy (o)	·
	. t	Relict Wet Prairies (10)			
	· .	Known occurrence state/fede Significant migratory songbire			
	'n	Category 1 Wetland. Sas Or			
	Tine				
3_	43.5 Me	etric 6. Plant comr	nunities, inte	erspersion, microt	opography.
max 20 pts.		Welland Vegetation Communities.		Community Cover Scale	474
	Score	all present using 0 to 3 scale. Aquatic bed	01	Absent or comprises <0.1he (0.2) Present and either comprises sn	
•		Emergent		vegetation and is of moderate	quality, or comprises a
		Shrub Forest	2	significant part but is of low qui Present and either comprises significant	
		Mudilats .	2	vegetation and is of moderate	
	į) Open water		part and is of high quality	
		Other	3	Present and comprises significa	=
		horizontat (plan view) interspersion ct only one.		vegetation and is of high qualit	<u>y</u>
		High (5)	Narrative De	escription of Vegetation Quality	·
		Moderately high(4) Moderate (3)	low	Low spp diversity and/or predom	
	O	Moderately low (2)	mod	disturbance tolerant native spe Native spp are dominant compo	
	٦	Jeow (1)		although nonnative and/or dist	urbance tolerant native spo
	20	None (0)	_	can also be present, and spec	=
		Coverage of invasive plants. Refe able 1 ORAM long form for list, Ad		moderately high, but generally threatened or endangered spp	Mo beseice of the
		educt points for coverage	high	A predominance of native specie	
		Extensive >75% cover (-5) Moderate 25-75% cover (-3)		and/or disturbance tolerant na absent, and high spp diversity	
	1	Sparse 5-25% cover (-1)		the presence of rare, threaten	
÷	1	Nearly absent <5% cover (0)			
	64	Absent (1) Microtopography.	Mudflat and 0	Open Water Class Quality Absent <0.1ha (0.247 acres)	-
		re all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47	<u></u>
	i	Vegetated hummucks/tussv		Moderate 1 to <4ha (2.47 to	
	}	Coarse woody debris > 15cm		High 4ha (9.88 acres) or more	-
	1	Standing dead >25cm (10in) Amphibian breeding pools		raphy Cover Scale	** =:
	•	Land Control of the second party of the second	D	Absent	
			. 1	Present very small amounts or h	more common
			2	of marginal quality Present in moderate amounts, but	ut not of highest
	-			quality or in small emounts of	highest quality
			3	Present in moderate or greater a	mounts
42	COAND 2	TOTAL (max 100 pts)	· · · · · · · · · · · · · · · · · · ·	and of highest quality	
1.2.2	ו ממאטים וכ	OTAL (max 100 bts)		•	

Raier to the most recent ORAM Score Celebration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.skite.oh.us/dsw401/401.iten/liest revised 1 February 2001 jjm

category 2

ORAM v. 5.0 Field Form Q	uantitative Rating			
Site: WB - 2	F	Rater(s): Loosen		Date: 11/29/05
	etric 1. Wetland Are tione size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.10 to <25 acres (4 to <10.1he 3 to <10 acres (1.2 to <4ha) (0.3 to <3 acres (0.12 to <1.2t 0.1 to <0.3 acres (0.04 to <0.4cres (0.04 to <0.1 acres (0.04	2hs) (5 pts) 1) (4 pts) (3 pts) ns) (2pts)	;	
22.		P. A		-
max (4 pts. m/stotal 28. 4	MEDIUM. Buffers everage 2 NARROW. Buffers everage VERY NARROW. Buffers average VERY LOW. 2nd growth crid LOW. Old field (>10 years), MODERATELY HIGH. Resk	ect only one and assign acore. O (164ft) or more around welland pe 5m to <50m (82 to <164ft) around 10m to <25m (32ft to <82ft) around /erage <10m (<32ft) around wellan	o not double check. Inimeter (7) welland perimeter (4) d welland perimeter (1) d perimeter (0) verage. like area, etc. (7) prest. (5) ervation Ullage, new fall	ı
13 20 Me	etric 3. Hydrology.		•	
пех 30 pts. subicts! 3a. 4 3c.	Sources of Water. Score all that a High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/intermittent surface Perennial surface water (lake Maximum water depth. Select only >0.7 (27.5in) (3) 9/4 to 0.7m (15.7 to 27.5in) (<0.4m (<15.7in) (1) Modifications to natural hydrologic	e water (3) so or stream) (5) y one and assign score.	Part of wetland/u Part of ripertan o Duration inundation/sal Semi- to perman Regularly inunda Peasonally inund Seasonally satur ck and average.	ain (1) /fake and other human use (1) /fake and other (1) /fake and other human use (1) /fake and other use (1)
	etric 4. Habitat Alt	weir stormwater input	dredging other	
4	Substrate disturbance. Score one None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) Habital development. Select only Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2)			
4c. 4.5	Poor (1) Habital atteration. Score one or d None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Check all disturbances observed mowing grazing disarcutting selective cutting woody debris removal toxic pollutants	shrub/sapling re	atic bed removal

last revised 1 February 2001 jim ORAM v. 5.0 Field Form Quantitative Raling

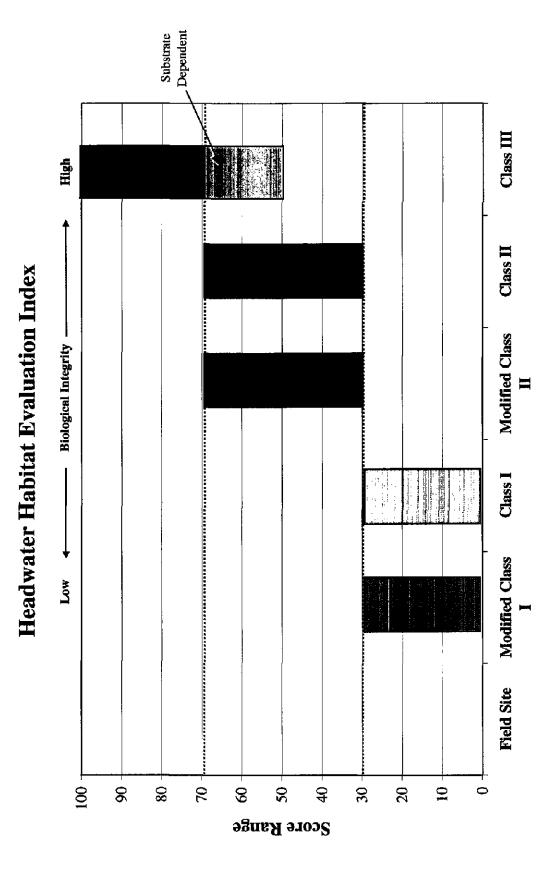
Site: UB-2 Ref	ter(s): Hope	Date: 11/2 1/05
31.5 Metric 5. Special Wet Check all that apply and score as indicate Bog (10) Fan (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/iributary wetland. Lake Piain Sand Prairies (0ak Relict Wet Prairies (10) Known occurrence state/federa Significant migratory songbirds Category 1 Wetland. See Que	and-unrestricted hydro and-restricted hydrolo Openings) (10) If threstened or endan water fow habitet or u	rgy (5) Ingered species (10) Isage (10)
2 33.5 Metric 6. Plant comm	unities, inte	erspersion, microtopography.
max 20 pts. subtotal 5a. Wetland Vegetation Communities.	Vegetation C	Community Cover Scale
Score all present using 0 to 3 scale.	0	Absent or comprises <0.tha (0.2471 acres) contiguous area
Aquatic bed	1	Present and either comprises small part of wetland's
(2) Emergent		vegetation and is of moderate quality, or comprises a
Shrub		significant part but is of low quality
_ , , ,	2	Present and either comprises significant part of wetland's
Mudflats		vegetation and is of moderate quality or comprises a small
Open water		part and is of high quality
Other	3	Present and comprises significant part, or more, of wetlands
6b. horizontal (plan view) Interspersion.		vegetation and is of high quality
Select only one.		•
High (5)	Narrative De	scription of Vegetation Quality
Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or
Moderate (3)		disturbance tolerant native species
Moderately low (2)	mod	Native spp are dominant component of the vegetation,
Cow (1)		although nonnative and/or disturbance tolerant native spp
None (0)		can also be present, and species diversity moderate to
6c. Coverage of invasive plants. Refer		moderately high, but generally w/o presence of rare
to Table 1 ORAM long form for list. Add		threatened or endangered spp
or deduct points for coverage	high	A predominance of native species, with nonnative spp
Extensive >75% cover (-5)		and/or disturbance tolerant native spp absent or virtually
Moderale 25-75% cover (-3)		absent, and high spp diversity and often, but not always,
Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered spp
Nearly absent <5% cover (0)		
Absent (1)	Mudflat and	Open Water Class Quality
6d. Microtopography.	0	Absent <0.1ha (0.247 acres)
Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47
Vegetated hummucks/lussuck	k\$ 2	Moderate 1 to <4ha (2.47 to
Coarse woody debris > 15cm	(6in) 3	High 4ha (9.88 acres) or more
Standing dead >25cm (10in) of	dbh	. •
Amphibian breeding pools	Microtopop	raphy 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 quality
	3	Present in moderate or greater amounts
		and of highest quality
33.5 GRAND TOTAL (max 100 pts)		,

Refer to the most recent ORAM Score Cathration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.ch.us/dasw401401.html fast revised 1 February 2001 ijm

category 2

APPENDIX C

OHIO EPA HEADWATER HABITAT EVALUATION INDEX (HHEI) STREAM CHANNEL ASSESSMENT FORMS AND GRAPH



Site Value Compared to HHEI Score Metrics

Class II

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3):

4	Q

SITE NAME/LOCATION AMPON	J-SI RIVER BASIN	DRAINAGE AREA (m²) 4 1 m; 2
DATE 28 No. 05 SCORER JUK /4 VS NOTE: Complete All Items On This Form	COMMENTS Love of Arms	CODE RIVER MILE
STREAM CHANNEL	RAL CHANNEL STRECOVERED RECOVE	ERING DRECENT OR NO RECOVERY
(Max of 32). Add total number of significant TYPE PER PER BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of	type of substrate present. Check ONLY two pred substrate types found (Max of 8). Final metric sco	PERCENT PERCENT PERCENT PERCENT PERCENT POINTS Substrate Max = 40 1
evaluation. Avoid plunge pools from road c > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts]	imum pool depth within the 61 meter (200 ff) evulverts or storm water pipes) (Check ONLY one > 5 cm - 10 cm [15 pts] < 5 cm [6 pts] NO WATER OR MOIST	box): Max = 30 CHANNEL [0 pts] [5]
> 4.0 meters (> 13') [36 pts] > 3.0 m - 4.0 m (> 9' 7" · 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" · 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3' 3" - 5 1.0 m (s 3' 3") [5 pts] AVERAGE BANK	4'8") [15 pts] Width Max=30
RIPARIAN ZONE AND FLOODPLA		ht (R) as looking downstreamಭ
RIPARIAN WIDTH L R (Per Bank) Wide > 10m Moderate 5-10m	L R (Most Predominant per Bank) Mature Forest, Wetland Immature Forest, Shrub or Old Field	Canservation Tillage Urban or Industrial
Narrow <5m None COMMENTS	Residential, Park, New Field Fenced Pasture	Open Pasture, Row Crop Mining or Construction
Stream Flowing Subsurface flow with isolated pools COMMENTS	Moist Channel,	isolated pools, no flow (Intermittent) water (Ephemeral)
SINUOSITY (Number of bends per None 0.5	61 m (200 ft) of channel) (Check ONLY one box 1.0 2.5):
STREAM GRADIENT ESTIMATE Flat (0.5 W100 a) Flat to Moderate	☐ Moderate (2 liv100 li) ☐ Moderate to S	evere Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	
QHEI PERFORMED? - Yes M No QHEI Score (If Yes, Attach	Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: CWH Name: EWH Name: MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED A	Distance from Evaluated Stream
USGS Quadrangle Name: New Warren, WV - OH NRCS Soil Map Pa	
County: Meigs Township / City: Leta	
Base Flow Conditions? (Y/N): Date of last precipitation:	Quantily:
Photograph Information: Elevated Turbidity? (Y/N): Canopy (% open): Were samples collected for water chemistry? (Y/N): (Note tab sample no. or id. an Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Is the sampling reach representative of the stream (Y/N) If not, please explain:	Conductivity (µmhos/cm)
Additional comments/description of pollution impacts: BIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. ID number. Include appropriate field data sheets from the Print	NOTE: all voucher samples must be labeled with the sile
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrate Comments Regarding Biology:	Voucher? (Y/N) N Voucher? (Y/N)N
DRAWING AND NARRATIVE DESCRIPTION OF STREAM R Include important landmarks and other features of interest for site evaluation and	
FLOW - Should Brief Brie	Dies Aile

Primary Headwater Habitat Evaluation Form And ad chand? HHEI Score (sum of metrics 1, 2, 3):

Ī	41	
ı	"	

SITE NAME/LOCATION AMP-Ohio STE NUMBER	AS-S1 RIVER BASIN	OPA.	NAGE AREA (MP) >100 i 2
LENGTH OF STREAM REACH (ft)L	AT LONG	RIVER CODE	RIVER MILE
DATE 11-28-05 SCORER 35M	COMMENTS		
NOTE: Complete All Items On This Form	- Refer to "Field Evaluation M	anual for Ohio's PHWI	Streams" for Instructions
STREAM CHANNEL WONE/NATU MODIFICATIONS:	RAL CHANNEL DRECOVEREI	R recovering LI	RECENTIOR NO RECOVERY
SUBSTRATE (Estimate percent of every (Max of 32). Add total number of significant			boxes A & B. HHE
TYPE D BLDR:SLABS[16:pis]	RCENT TYPE		PERCENT Metr
□ □ BOULDER (>256 mm) [16 pts]	OO LEAF PAK	KAWOODY DEBRIS <mark>(3</mark> pts) Substra
☐ ☐ BEDROCK [16-pt]		RITUS (3 pes) (ARDPAN (0 pt)	- May a
GRAVEL (2-64 mgm) [9 pts]	OO MUCKIO	pts]	
SAND (<2 mm [6 pts])	O O ARTIFICI	V. [3 ptg]	
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTR		AL NUMBER OF SUBSTRA	ATE TYPES: A+B
2. Maximum Pool Depth (Measure the max	simum pool depth within the 61 m	eter (200 ft) evaluation reac	ch at the time of Pool De
evaluation. Avoid plunge pools from road of >30 centimeters [20 pts]	culverts or storm water pipes) (Ch		Max = :
The same of the sa		pts]	
> 10 < 22.5 cm [25 pts]	ZI SNOWAT	ER OR MOIST CHANNEL	[0-pis]
COMMENTS	M	XXIMUM POOL DEPTH (ce	intimeters):
BANK FULL WIDTH (Measured as the av	verage of 3-4 measurements)	(Check ONLY one bo 1.5 m (> 3" 3" -4' 8") [16 pts	x): Bankfu Width
>3.0 m - 4.0 m (>9'7" - 13') [25 pts]	☐ siom(≤ 3' 3") [5 pts]	Max=3
> 1.5 m > 3.0 m (> 9*7 - 4*8*) (20 pts)			30
COMMENTS	A\	ÆRAGE BANKFULL WIDT	'H (meters)
DIDADUA ZONE AND EL CORM	This information must also be	*	
RIPARIAN ZONE AND FLOODPL RIPARIAN WIDTH	FLOODPLAIN QUALITY	.eft (L) and Right (R) as loo	king downstream w
L R (Per Bank)	L R (Most Predominant per I		Conservation Tillage
☐ ☐ Moderate 5-10m	immature Forest, Shrub	or Old	Jrban or Industrial
☐ ☐ ✓ Narrow <5m	Field Residential, Park, New F	-uald Milit	Open Pasture, Row
None COMMENTS	Fenced Pasture		Crop Vining or Construction
Stream Flowing Subsurface flow with isolated pools COMMENTS	. i . i . i . i . i . i . i . i . i . i	loist Channel, isolated pool ry channel, no water (Ephe	•
SINUOSITY (Number of bends per	61 m (200 ft) of channel) (Check	ONLY one box):	
☐ None ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	1.0		3.0 >3
		_	-

ADDITIONAL STREAM INFORMATION (This Information Must A	
QHEI PERFORMED? - Tyes No QHEI Score _	(if Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
	Distance from Evaluated Stream
BEWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream
	E <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
SGS Quadrangle Name: Yew Haven, WV-C	OH NRCS Soil Map Page: NRCS Soll Map Stream Order Ownship / City: Lotant Falls Ohio area
ounty: NUG WINTY To	winship/City: Kettart Halls, Other area
MISCELLANEOUS	
ase Flow Conditions? (Y/N): Date of last precipitation:_	11-28-05 Quantity: unhown
notograph Information:	
evated Turbidity? (Y/N): V Canopy (% open): 95	<u>5%</u>
4	e lab sample no. or id, and attach results) Lab Number:
eld Measures: Temp (°C)Dissolved Oxygen (mg/i)	pH (S.U.) Conductivity (µmhos/cm)
the sampling reach representative of the stream (Y/N). $\sqrt{-}$ If r	not, please explain:
· · · · · · · · · · · · · · · · · · ·	Total September 1
dditional comments/description of pollution impacts:	
BIOTIC EVALUATION	
· / — · ·	icher collections optional. NOTE: all voucher samples must be labeled with the data sheets from the Primary Headwater Habitat Assessment Manual)
	·
ish Observed? (Y/N) Voucher? (Y/N) Salamander	rs Observed? (Y/N) Voucher? (Y/N) quatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
	Judge Macionivertebrates Cuserved ((1114) Voucies ((1114)
omments Regarding Biology:	
	Mark 1
DRAWING AND NAPPATIVE DESCRIPTION	ON OF STREAM REACH (This must be completed):
	it for site evaluation and a narrative description of the stream's location
3 ····· · · · · · · · · · · · · · · · ·	
7 5	, }
Field Field	S. C. Cortic
E 23	150000
- > 2 % 3+	[3]
LOW TO SEE	
3/70	
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- 22	8883 1 1-1V

ChieFPA Primary Headwater Habitat Evaluation Form

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ı	7 7	

Stre	AME/LOCATION _ A/V^V^	SITE NUMBER	18-SE	RIVER BASIN		DR	AINAGE AREA (mi²)	Imi ²
LENGT	H OF STREAM R	EACH (ft)	ĻAT	LONG.	RIVEI	R CODE	RIVER MILE _	
DATE_	11-28-05	scorer <u>BEyy</u>	<u></u> со	MMENTS				
NOT	E: Complete All	Items On This Fe	orm - Refer t	o "Field Evaluation	Manual for O	hio's PHW	/H Streams" for insti	ructions
	AM CHANNELE FICATIONS:	_□NoNE/	NATURAL CHA	NNEL DREGOVE	RED) (T REG)	ÆRING E	PRECENT OR NO PEC	VERY
1.	(Max of 32). Add		ificant substrate	substrate present. Che types found (Max of	8). Final metric so	core is sum	of boxes A & B.	HHE
TYPE	BLDR SLAB	\$ [16 pts] \		TYPE SILTE	3 pt)		PERCENT	Point
	A south the patenting of the south	:256 mm) [16 pts] [16 pt]			PACKWOODY D DETRITUS (3 pts	A 200 Sept. 1 (1997)		Substrat
		, 256 mm) [12 pts]			OFHARDPAN 10			Max = 44
00	GRAVEL (24	34 mm) [9 pts]			(10 pts)			11
	SAND (<2 m	n) (6 pts)		O O ARTIE	ICIAL [3 pts]			
SCORE	Bidr Slabs, Bould	rcentages of ier, Cobble, Bedrock PREDOMINATE SUI	ESTRATE TYF	(A) 9 TO	OTAL NUMBER (OF SUBSTI	(B) Q	A+B
 2.				oi depth within the 61				Pool Dep
_	evaluation. Avoid	plunge pools from r		storm water pipes)	(Check ONLY on	e box):	order Westerner (And Control	Max = 30
	> 30 centimeters > 22:5: ÷30 cm [3	n ntel		○ □ <am< td=""><td>m - 10 cm [15 pts m [6 pts]</td><td>Jero,</td><td></td><td></td></am<>	m - 10 cm [15 pts m [6 pts]	Jero,		
Ō	> 10 - 22,5 cm [2	5 pts]	All the state of the state of	JZ) NO V	NATER OR MOIS	T CHANNE	[0 pts] **	\cup
	COMMENTS	_		4	_ MAXIMUM POO	L DEPTH (centimeters):	
	RANK FULL WIL	TH (Measured as t	the average of	3-4 measurements)	(Check (ONLY one b	ox):	Bankfuli
Z				ar 🛮 🗀 🖼	m - 1.5 m (> 3' 3"	- 4' 8") [16 p	6]	Width
T	> 3.0 m - 4.0 m (> > 1.5 m - 3.0 m (>) [30 pts] -9' 7" - 13') [25 pts] -9' 7" - 4' 8") [26 pts]	A September of the Sept		m (≤ 3' 3") [5 pts]	ramina A	1	Max=30
	COMMENTS			TOTAL AND	AVEDAGE DAN		Til (motor)	1 30
	COMMEN 19				- WAELWOE DWH	IKFULL TYRE	TH (Heleis)	-
		<u> </u>		information <u>must</u> als				
	RIPARIA	N ZONE AND FLOO <u>AN WIDTH</u>		LITY ANOTE: Riv	rer Left (L) and Ri	ght (R) as k	oking downstreamជា	
	LR (Per B		LR	PLAIN QUALITY (Most Predominant p	per Bank)	LR		
-	□ □ Wide >	-10m	00	Mature Forest, Wetla	and		Conservation Tillage	
	☐ ☐ Moder	ate 5-10m	00	Immature Forest, Shi Field	irug of Oid		Urban or Industrial	
	□□ _ Nепточ	v <5m		Residential, Park, Ne	ew Field	12	Open Pasture, Row Crop	
	M None COMMEN	vts	00	Fenced Pasture		00	Mining or Construction	-
			Euskisten) (Ci	heck ONLY one box):			ols no flow (Intermittent)	
	Stream Fix	owing e flow with isolated p	•	∠ם	Moist Channel, no Dry channel, no			•
	Stream Fix Subsurfac COMMEN	owing e flow with isolated p 4TS	oools (Interstitia	<u>_</u> ,	Dry channel, no	o water (Ep		
	Stream Fix Subsurfac COMMEN	owing e flow with isolated p YTS	oools (Interstitia	u) 💆	Dry channel, no	o water (Ep		•

QHEI PERFORMED? - Tyes No QHEI Score (If Yes, Attac	
•	th Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
With Name:	
CWH Name:	
D EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED	
USGS Quadrangle Name: New Howen, WV-OH NRCS Soil Map Pa	· ——
county: <u>Meigh-County</u> Township/City: Let	art Falls, Ohioana
MESCELLANEOUS	Z) 1
Base Flow Conditions? (Y/N): Y Date of last precipitation: 11-28-05	Quentity: www.nown
Photograph Information:	
Elevated Turbidity? (Y/N): Canopy (% open):	
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. ar	nd attach results) Lab Number:
Field Measures: Temp (°C) Dissolved-Oxygen (mg/l) pH (S.U.)	Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:	_ _
Additional comments/description of pollution impacts:	
BIOTIC EVALUATION	
Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. ID number. Include appropriate field data sheets from the Print Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrate Comments Regarding Biology:	nary Headwater Habitat Assessment Manual) Voucher? (Y/N)
ID number. Include appropriate field data sheets from the Print Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrate	nary Headwater Habitat Assessment Manual) _ Voucher? (Y/N) s Observed? (Y/N)
ID number. Include appropriate field data sheets from the Print Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrate Comments Regarding Biology:	nary Headwater Habitat Assessment Manual) _ Voucher? (Y/N) s Observed? (Y/N) Voucher? (Y/N) EACH (This must be completed):

Q

ChieFPA Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3

ass	工
):	32
(ml²) R MILE	
for instr	vetions PYFRY
boxes	HHEI Metric Points Substrate Max = 40 12 A+B Pool Depth Max = 30 /5 Bankfull Width Max=30
0.9 ema	5
Tillene	

SITE NAME/LOCATION 1/2 / 1/2 / DL. 10			
		DRAINAGE AREA (mi²) _	
LENGTH OF STREAM REACH (R) 200 DATE 30 NOSA SCORER KOOSE	LATLONG	RIVER CODE RIVER MILE	
NOTE: Complete All Items On This For		· ·	structions
· · · · · · · · · · · · · · · · · · ·	•	TRECOVERING TRECENT OR NO RE	
		ONLY two predominant substrate TYPE boxes Final metric score is sum of boxes A & B.	HHE
TYPE PLDR'SLABS [16 pts]	ERCENT TYPE	<u>PERCENT</u>	Metric Points
☐ ☐ BOULDER (≥256.mm) [16 pts] _	DØ LEAFPAC	KWOODY DEBRIS 13 pts) 3 5	Substrate
☐	OO FINEDET	RITUS (3 pls)	Max = 40
Y □ GRAVEL (2-64 mm) [9, pte] _ □ □ SAND (<2 mm) [6 pts]	$\frac{3-5}{2}$	pts] LL [3 pts]	12
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock	2,000 000 000 000 000 000	(B)	A+B
SCORE OF TWO MOST PREDOMINATE SUBS	TRATE TYPES: 72 TOTA	L NUMBER OF SUBSTRATE TYPES:	¹
Maximum Pool Depth (Measure the m evaluation. Avoid plunge pools from road		eter (200 ft) evaluation reach at the time of	Pool Depti Max = 30
> 30 centimeters [20 pts]		(fi.cm (†6.pts)	Max = 30
>22.5 30 cm [30 pts]	Stants	pts] ER OR MOIST CHANNEL [0 pts]	15
COMMENTS	MA	XIMUM POOL DEPTH (centimeters):	J ──
3. BANK FULL WIDTH (Measured as the > 4.0 meters (> 13) [30 pts] > 3.0 m > 4.0 m (> 9'.7" - 13') [25 pts] > 1.5 m > 3.0 m (> 9'.7" - 4'.8") [20 pts]		(Check <i>ONLY</i> one box):] 5 m (> 3' 3' - 4' 8') [15 pts] < 3' 3') [5 pts]	Bankfull Width Max=30
COMMENTS	AV	ERAGE BANKFULL WIDTH (meters)	5
RIPARIAN ZONE AND FLOODS	This information must also be PLAIN QUALITY ANOTE: River L FLOODPLAIN QUALITY	e completed eft (L) and Right (R) as looking downstreamক	
L R / (Per Bank)	L R (Most Predominant per E		
☐ Wide >10m ☐ Moderate 5-10m	Immature Forest, Shrub	-	
□ □ Narrow <5m	Field Residential, Park, New F	Comp Pasture Row	
OMMENTS Recently (c	Fenced Pasture	Crop Mining or Construction Rubus + Kesa	on ·
1	(uation) (Check ONLY one box): M (s (Interstitial)	ioist Channel, isolated pools, no flow (intermitte ry channel, no water (Ephemeral)	ent) .
SINUOSITY (Number of bends p None 0.5	er 61 m (200 ft) of channel) (Check 6 1.0 2.0 1.5 2.5	3.0	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate	Moderate (2 1//100 ft)	Moderate to Severe Severe (10)	n/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PERFORMED? - TYes No. QHEI Score (If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)
WWH Name: Distance from Evaluated Stream
CWH Name: Distance from Evaluated Stream
Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: New Howen, WV-OH NRCS Soil Map Page: NRCS Soil Map Stream Order
county: Merge Township/City: Letart Falls, Ohio onea
MISCELLANEOUS
Base Flow Conditions? (Y/N): Date of last precipitation: 29 NO. 2005 Quantity: University
Photograph Information: #62 BMS-2=6/
Elevated Turbidity? (Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/i) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) / If not, please explain:
Additional comments/description of pollution impacts:
BIOTIC EVALUATION
Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):
include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
Thank less at bottom of
Top Live Lines
34 1 21-34
- Change of the
FLOW The state of
Beaches

ClassI

ChieFPA Primary Headwater Habitat Evaluation **HHEI Score**

uation Form	11
e (sum of metrics 1, 2, 3) :	

SITE NAME/LOCATION _ ATT P ON O		
STYLM SITE NUMBER B	M-52 RIVER BASIN	DRAINAGE AREA (m²) 4/m)2
LENGTH OF STREAM REACH (#) 150	LATLONG R	IVER CODE RIVER MILE
DATE $11.30-05$ SCORER BEN	comments dram into	Stream 1
NOTE: Complete All Items On This Form	n - Refer to "Field Evaluation Manual fo	or Ohio's PHWH Streams" for Instructions
STREAM CHANNEL MANONE NAT	URAL CHANNEL TRECOVERED TRE	COVERING THE CENTURY NO RECOVERY
(Max of 32). Add total number of significa	ry type of substrate present. Check ONLY twant substrate types found (Max of 8). Final metrements by the substrate types found (Max of 8). Final metrements by the substrate types.	nic score is sum of boxes A & B. PERCENT / 200 Points
	LEAR PACKWOOL	¥ 10 pd = \\\ \sqrt{50\%}
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBST	0% (A) 3	(B) A+B SER OF SUBSTRATE TYPES:
2. Maximum Pool Depth (Measure the micevaluation, Avoid plunge pools from road > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [28 pts] COMMENTS	55 cm - 19 cm 14 <5 cm (5 pts) NO WATER OR N	Y one box): Max = 30
3. BANK FULL WIDTH (Measured as the \$\frac{2}{3}\) \$\times 4.0\text{meters} (> 19) [30\text{ pts}] \$\times 3.0\text{ m} - 4.0\text{ m} (> 9' 7"= 19) [25\text{ pts}]\$	average of 3-4 measurements) (Che	eck OWLY one box): Bankfull
O > 1.5 m - 3.0 m (> 9' 7' - 4' 8') (20 pm) COMMENTS	AVERAGE	BANKFULL WIDTH (meters)
RIPARIAN ZONE AND FLOODP RIPARIAN WIDTH	This information must also be comple LAIN QUALITY ☆NOTE: River Left (L) an FLOODPLAIN QUALITY	ted d Right (R) as looking downstream⊈r
L/R (Per Bank)	L K (Most Predominant per Bank)	L R
☑ Wide >10m	Mature Forest, Wetland Immature Forest, Shrub or Old	Conservation Tillage Urban or Industrial
	Field	C B B
□ □ Narrow <5m □ □ None COMMENTS	Residential, Park, New Field Fenced Pasture	Crop Mining or Construction
Stream Flowing Subsurface flow with isolated pool COMMENTS	Moist Chai	nnel, isolated pools, no flow (Intermittent) el, no water (Ephemeral)
SINUOSITY (Number of bends property) None 0.5	er 61 m (200 ft) of channel) (Check OA/LY one 1.0	e box): 3.0 >3

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PERFORMED? - Tyes No QHEI Score(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)
WWH Name: Distance from Evaluated Stream
CWH Name: Distance from Evaluated Stream
Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: New Haven, WV-OH NRCS Soil Map Page: NRCS Soil Map Stream Order
county: Neigh County Township/City: Litart Falls, Ohioarea
MISCELLANEOUS
Base Flow Conditions? (Y/N): N Date of last precipitation: 11-29-05 Quantity: who was
Photograph Information: Y - Photo # 61
Elevated Turbidity? (Y/N): V Canapy (% open): 50070
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (*C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
is the sampling reach representative of the stream (Y/N) / If not, please explain:
Additional comments/description of pollution impacts:
BIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed):
Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
MUCK , WOOD 5 5 b 0 Brive 3 FE
much carry to be some story story some story some story
FLOW -
Standard
Strcam 1

Slope

ChieFPA Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3):

Class I

SITE NAME/LOCATION	AMP Chip				
stream s	SITE NUMBER BWY-53	RIVER BASIN		DRAINAGE AREA (mi ²)
LENGTH OF STREAM REACH	I (ft) LAT	LONG.	RIVER CO	DERIVER MIL	
DATE 11-30-05 SCOP	rer <u>BE7V1</u> co	XMMENTS <u>drama</u>	s into stream	n BM 31	
NOTE: Complete All Item	s On This Form - Refer	to "Field Evaluation	n Manual for Ohio's	PHWH Streams" for I	Instructions
STREAM CHANNEL MODIFICATIONS:	X NONE (NATURAL CH.	ANNEL DRECOVE	REO EIRECOVERI	(G. I. Preezy Orene (m. 1996)	RECOVERY
	te percent of every type of a number of significant substra				HHE
TYPE BEOR SLABS (16)	PERCENT	TYPE		PERCENT	Metric Points
BLDR SLABS [16]			3 pt) Packawoody Debri	363 min 1/40%	, , , , ,
DD BEDROCK [18 p			DETRITUS (3 pm)		Substrate Max = 40
☐☐ GOBBLE (65-256) ☐☐ GRAVEL (2-64 min			or HARDPAN (0 pt) = (0 pts)	7 40%	
SAND (<2 mm) [6		O O ARTIE	ICIAE (3 pts)		0
Total of Percent	ages of 🔥 🔿	(A)	over danne vertigeret til kritige galletin stor versynge ga	(B)	A+B
Bidr Slebs, Boulder, Co SCORE OF TWO MOST PRED	obble, Bedrock () /O	3	OTAL NUMBER OF S	3	
	n <i>(Measure the maximum po</i> ge pools from road culverts o				Pool Dept Max = 30
> 30 centimeters (20 pt			m=10 cm [15 pts]	y.	Max = 30
☐ > 22.5 ≈ 30 cm (30 pts) ☐ ≥ 10 ≈ 22.5 cm (25 pts)			m [5 pts] VATER OR MOIST CH	IANNEL TO rote)	- 0
COMMENTS			MAXIMUM POOL DE	:PIH (centimeters):	-
3. BANK FULL WIDTH (3. **A0.meters (> 13) [30]	Measured as the average of		(Check ONL) m - 1,5 m (> 3' 3" - 4' 8		Bankfull Width
2 > 3.0 m -4.0 m (> 9:7)	- 13') [25 pts]	200 300	The second of th		Max=30
□ >1.5m - 9.0m (>97*	-4' 8") [20 pts]	i de la companya de l		1	5 5
COMMENTS			AVERAGE BANKFU	LL WIDTH (meters)	4
					
RIPARIAN ZOI	This ALQ AND FLOODPLAIN QUA	information <u>must</u> alse LITY ☆NOTE: Riv	-	R) as looking downstream:	tr
RIPARIAN W		PLAIN QUALITY		.,	•
L R (Per Bank) Wide >10m	ı ş	∕(Most Predominant p ∕Mature Forest, Wetts	er Bank) L	R Conservation Titles	16
DD Moderate 5-	_/_/	Immature Forest, Sh		-	-
		Field		O O	
O O Narrow <5m		Residential, Park, No		Crop	
O None COMMENTS_		Fenced Pasture	U	Mining or Construc	tion
Stream Flowing	E (At Time of Evaluation) (C	₫,	✓ Moist Channel, isola Dry channel, no wat	ited pools, no flow (Intermit ter (Ephemeral)	tent)
SINUOSITY (N	lumber of bends per 61 m (20	0 ft) of channel) (Cha	eck ONLY one box1:	-	
None	₫ 1.0		2.0	① 3.0 ① 33	
_ 0.0	☐ 1.5	0	2.5	∐ >3	
STREAM GRADIENT		erate (2 fv100 ft)	Moderate to Seven	e 🗍 Severe (1	0 ft/100 ft)

QHEI PERFORMED? -		
	Yes No QHEI Score	(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIG		Distance from European Ottom
J WWH Name:		Distance from Evaluated Stream
EWH Name:	· · · · · · · · · · · · · · · · · · ·	Distance from Evaluated Stream
County:	Date of last precipitation: Date of last precipitation: Canopy (% open): Chemistry? (Y/N): Dissolved Oxygen (mg/l) ve of the stream (Y/N) If not	NRCS Soll Map Page: NRCS Soil Map Stream Order nship / City: Letart Falls, Olive area 1-29-05 Quantity:unfirment b sample no. or id. and attach results) Lab Number: pH (S.U.) Conductivity (µmhos/cm) please explain: please explain:
BIOTIC EVALUATION erformed? (Y/N):		er collections optional. NOTE: all voucher samples must be labeled with the site
ID	,	ta sheets from the Primary Headwater Habitat Assessment Manual)
ID Fish Observed? (Y/N) Vo	ucher? (Y/N) Salamanders (
ID Fish Observed? (Y/N) Vo Frogs or Tadpoles Observed? (Y/N Comments Regarding Biology:	oucher? (Y/N) Salamanders (N) Voucher? (Y/N) Aqua	ta sheets from the Primary Headwater Habitat Assessment Manual) Observed? (Y/N) Voucher? (Y/N)

Primary Headwater Habitat Evaluation Form (1204)

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	TREAM REACH (I	n) 150'	LAT.	LONG	RIVER	CODE		
DATE 11-30	O-O\score	R BEYYL	COI	UMENTS (DA MCC	J3 41	Dand.	1 BMWIT	2
NOTE: Com	plete Ali Items	On This Form	n - Refer to	"Field Evaluation N	fanual for Oh	ilo's PHW	H Streams" for Inst	ructions
STREAM CH.	中的石器主义的。由这个政治等人的	SANONE / NAT	TURAL CHA	NNEL	D 🗖 RECOV	ERING D	RECENT OR NO REC	OVERY
(Max o		ımber of signific P		ubstrate present. Check types found (Max of 8).				HHI Meti Poin
	OULDER (>256 m DROCK [16 pt] DBBLE (65-256 m RAVEL (2-64 mm)	m) [16 pts] m) [12 pts] [9 pts]		LEAFPA FINE DE	CKWOODY DI TRITUS [3 pis HARDPAN [0] I pis]	1	7 7 5 5 9	Substi Max =
-	ND (<2 mm) [6 p	ges of	 ነማ_	(A)	IAL [3 pts]		(B) W	A+E
	labs, Boulder, Col VO MOST PREDO			ES: 3 TO1	AL NUMBER	OF SUBSTR	RATE TYPES:	
evalua 30 ce		e pools from roa	d culverts or	< 5 cm	heck ONLY one - 10 cm [15 pts	e box): ()		Pool D Max =
COM	MENTS				MAXIMUM POO	L DEPTH (centimeters):	3
3. BANK > 4.0 m > 3.0 m		leasured as the	average of	3-4 measurements)		ONLY one t	oox):	Wid
3. BANK	(FULL WIDTH (Mineters (> 13') [30 pr 1 - 4.0 m (> 9' 7" - 1 - 3.0 m (> 9' 7" -	leasured as the ts] 13") [25 pts] 4' 8") [20 pts]	average of	3-4 measurements)	(Check (- 1.5 m (> 3' 3" (≤ 3' 3") [6 pts	ONLY one t - 4' 8") [18 ;	oox):	Wid
3. BANK	(FULL WIDTH (Noters (> 13) [30 pr 1 - 4.0 m (> 9' 7" - 1 - 3.0 m (> 9' 7" - MENTS	leasured as the [13') [25 pts] 4' 8") [20 pts]	taverage of This	3-4 measurements) > 1.0 m ≤ 1.0 m information must also LITY ☆NOTE: River	(Check (- 1.5 m (> 3° 3° 1 (≤ 3° 3°) [6 pts NVERAGE BAN be completed	ONLY one t - 4' 8") [18 ; [oox):	Wid
3. BANK -> 4.0 m -> 3.0 m -> 1.5 m	(FULL WIDTH (Noters (> 13") [30 pr - 4.0 m (> 9" 7" - 1 - 3.0 m (> 9" 7" - MENTS RIPARIAN ZON RIPARIAN WII	leasured as the [13') [25 pts] 4' 8") [20 pts]	taverage of This	3-4 measurements) > 1.0 m ≥ 1.0 m ≤ 1.0 m information must also LITY ☆ NOTE: River	(Check (- 1.5 m (> 3' 3") (≤ 3' 3") [6 pts] VERAGE BAN be completed Left (L) and Ri	ONLY one t - 4' 8') [18 p [KFULL WII ght (R) as k	OOX): OTH (meters)	Wid
3. BANK	(FULL WIDTH (Noters (> 13) [30 prin - 4.0 m (> 9' 7" - 4.	leasured as the [13') [25 pts] 4' 8") [20 pts]	This PLAIN QUAI	3-4 measurements) > 1.0 m > 1.0 m ≤ 1.0 m information must also LITY ☆ NOTE: River PLAIN QUALITY (Most Predominant pe Mature Forest, Wetlan	(Check (- 1.5 m (> 3' 3") (≤ 3' 3") [6 pts] AVERAGE BAN the completed Left (L) and Ri r Bank)	ONLY one t - 4' 8") [18 ; [OOX): OTH (meters)	Wid
3. BANK -> 4.0 m -> 3.0 m -> 1.5 m	RIPARIAN WIDTH (MINISTERS) RIPARIAN WILL (Per Bank) Wide >10 m	leasured as the sign of the si	This PLAIN QUAI	3-4 measurements) > 1.0 m > 1.0 m ≤ 1.0 m information must also LITY ☆NOTE: River PLAIN QUALITY (Most Predominant pe	(Check (- 1.5 m (> 3' 3") (≤ 3' 3") [6 pts] AVERAGE BAN the completed Left (L) and Ri r Bank)	ONLY one to 4" 8") [15 ; KFULL Will ght (R) as k	oox): OTH (meters) Ooking downstream☆	Wid
3. BANK -> 4.0 m -> 3.0 m -> 1.5 m COMP	RIPARIAN ZON RIPARIAN WII (Per Bank) Wide > 10m Moderate 5-	leasured as the is 13') [25 pts] 4' 8") [20 pts]	This PLAIN QUAI	3-4 measurements) > 1.0 m > 1.0 m ≤ 1.0 m information must also LITY ☆ NOTE: River PLAIN QUALITY (Most Predominant pe Mature Forest, Wetlan Immature Forest, Shru	(Check (- 1.5 m (> 3' 3") [6 pts] AVERAGE BAN the completed r Left (L) and Ri r Bank) d the or Old	ONLY one to 4'87 [18]	DOCKING (meters) OOKING downstream Conservation Tillage Urban or industrial Open Pasture, Row	Wid
3. BANK -> 4.0 m -> 3.0 m -> 1.5 m COMP	RIPARIAN WIDTH (Noters (> 13) [30 prints - 4.0 m (> 9' 7" - 1 - 3.0 m (>	leasured as the is 13') [25 pts] 4' 8") [20 pts]	This PLAIN QUAL	3-4 measurements) > 1.0 m > 1.0 m ≤ 1.0 m information must also LITY ☆NOTE: River PLAIN QUALITY (Most Predominant pe Mature Forest, Wetlan Immature Forest, Shru Field	(Check (- 1.5 m (> 3' 3") [6 pts] AVERAGE BAN the completed r Left (L) and Ri r Bank) d the or Old	ONLY one to 4'87 [18]	oox): OTH (meters) Ooking downstream☆ Conservation Tillage Urban or industrial	Mex-
3. BANK 3. 3.0 m 3	RIPARIAN ZON RIPARIAN WILL (Per Bank) Wide >10m Moderate 5- Narrow <5m None COMMENTS	leasured as the sal	This PLAIN QUAI FLOOD L R D D	information must also ≥ 1.0 m ≤ 1.0 m	(Check (- 1.5 m (> 3: 3* 1 (≤ 3' 3*) [6 pts] AVERAGE BAN the completed r Left (L) and Ri r Bank) d b or Old	ONLY one to 4'87 [18] KFULL WIII ght (R) as id	Conservation Tillage Urban or Industrial Open Pasture, Row Crop Mining or Construction	Max=
3. BANK 3 + 4.0 m 3 3.0 m 3 1.5 m COMP	RIPARIAN ZON RIPARIAN WII PER Bank) Wide > 10m None COMMENTS FLOW REGIME Stream Flowing Subsurface frow COMMENTS	leasured as the tal 13') [25 pts] 4' 8") [20 pts] E AND FLOOD DTH i Om E (At Time of Ev. with isolated po	This PLAIN QUAI FLOOD R R R R R R R R R R R R R	information must also ≥ 1.0 m	(Check to 1.5 m (> 3' 3") [6 pts 1 (≤ 3' 3") [6 pts 1 (< 3' 3") [6 pts	ONLY one binds of the control of the	Conservation Tillage Urban or Industrial Open Pasture, Row Crop Mining or Construction	

BM-54 ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed): QHEI PERFORMED? - Tyes No QHEI Score ______ (If Yes, Attach Completed QHEI Form) DOWNSTREAM DESIGNATED USE(S) WWH Name: ___ _ Distance from Evaluated Stream _ _____ Distance from Evaluated Stream CWH Name: EWH Name: Distance from Evaluated Stream MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION USGS Quadrangle Name: New Howen, WV - OH NRCS Soil Map Page: NRCS Soil Map Stream Order Township/City: Letart Falls MISCELLANEOUS Date of last precipitation: 11-29-05 Quantity: unknow Base Flow Conditions? (Y/N):_N Photograph Information: Canopy (% open): 30 0 Elevated Turbidity? (Y/N): Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____ Field Measures: Is the sampling reach representative of the stream (Y/N) Y ___ If not, please explain:______ Additional comments/description of pollution impacts: **BIOTIC EVALUATION** Performed? (Y/N): _ N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) Comments Regarding Biology:_ DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location BM-WI (wet)

FLOW BMWI (wet)
Stroam BMSY

ChieFPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):

ClassI

SITE NAME/LOCATION AMP-OH				
SITE NUMBER	BM-SS RIVER BAS	in	DRAINA	SE AREA (mi²)
LENGTH OF STREAM REACH (ft) 100	_LATLON	GRIVER	CODE	RIVER MILE
DATE 30ND. OS SCORER 36K/				
NOTE: Complete All Items On This For				
STREAM CHANNEL DAONE NO MODIFICATIONS (2)	The state of the s	THE REPORT OF THE PARTY OF THE	THE REPORT OF THE PARTY OF THE	· 我 · · · · · · · · · · · · · · · · · ·
SUBSTRATE (Estimate percent of ev (Max of 32). Add total number of signifi				
TYPE	PERCENT TYPE	·		PERCENT Met
BLDR:SLABS [16 pts] BOULDER (>256 mm) [16 pts]		SILT [3 pt] LEAR PACKWOODY D		Poi
BEDROCK [16 pt]				
☐ ☐ COBBLE (65-258 mm) [12 pts] ☐ ☐ GRAVEL (2-64 mm) [9 pts]		FINE DETRITUS (3 pts CLAY or HARDPAN (0	pi)	
☐ GRAVEL (2-64 mm). [9 pts] ☐ SAND (<2 mm). [6 pts]	<u> </u>	MUCK [0 pts] Artificial [3 pts]		16
	-	en e	apa a san upang yanan aga	(B) A+
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBS		TOTAL MIMISES)C OI (DOTO 4 TO 1	9 1 7
		TOTAL NUMBER O		
 Maximum Pool Depth (Measure the n evaluation. Avoid plunge pools from ros 				the time of Pool D
☐ > 30 centimeters [20 pts]		> 5 cm - 10 cm [15 pts		
> 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts]		< 5 cm [5 pts] NO WATER OR MOIS	TCHANNEL [0 p	
COMMENTS		MAXIMUM POO	L DEPTH (centin	neters);
. BANK FULL WIDTH (Measured as the				Bank
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7"-13') [25 pts]	0 /	> 1.0 m - 1.5 m (> 3' 3' ≤ 1.0 m (≤ 3' 3') [5 pts]	-4'8") [15 pts]	Wid _Max=
> 1.5 m = 3.0 m (> 8' 7" - 4' 8") [20 pts]		(The State of Manufaction of State of The State of State	to the second of	(A)
COMMENTS		AVERAGE BANI	KFULL WIDTH (n	
RIPARIAN ZONE AND FLOOD		<u>ust</u> also be completed TE: River Left (L) and Rig	tht (R) as looking	downstream ≨r
RIPARIAN WIDTH	FLOODPLAIN QUALITY	<u>(</u>	•	
L_R (Per Bank)	L R (Most Predon	ninant per Bank) t. Wetland	L R Cons	ervation Tillege
Moderate 5-10m	Immature For	est, Shrub or Old		n or Industrial
□ □ Narrow <5m	Field	ark, New Field	•	Pasjųre, Row
O O None	Penced Pastu	•	· Crop	Poへ 人 g or Construction
COMMENTS		·· -		D A
FLOW REGIME (At Time of Even Stream Flowing Subsurface flow with isolated por COMMENTS	, ,	Moist Channel,	isolated pools, no water (Ephemer	flow (Intermittent) al)
·	- 6- C4 1000 C	(Ohad ONE)	A.	<u></u>
6141 IAAIM/ #1	nara na cautatiat at abanaah	TO SHOW (18)/ V ASA NAV	T'	
SINUOSITY (Number of bends None	1.0	2.0	″ 🛄 3.0)

ADDITIONAL STREAM INFORMATION (This information Must Also be Completed):	BM-55
QHEI PERFORMED? - Tyes No QHEI Score(If Yes, Attach	n Completed QHEI-Form)
DOWNSTREAM DESIGNATED USE(S)	.*
WWH Name:	Distance from Evaluated Stream
CWH Name:	Distance from Evaluated Stream
D EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED A	
USGS Quadrangle Name: New Hoven, WV-OH NRCS Soil Map Pa	
County: Mergi Township/City: Lata	it Falls, Ohioarea
MISCELLANEOUS	•
Base Flow Conditions? (Y/N): Date of last precipitation: 29 /Usv. 05	Quantity: unknown
Photograph Information:	
Elevated Turbidity? (Y/N):	N.
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and	d attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.)	Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) / If not, please explain:	
Additional comments/description of pollution impacts:	
BIOTIC EVALUATION	
Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. ID number. Include appropriate field data sheets from the Prima	NOTE: all voucher samples must be labeled with the site ary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Salamanders Observed? (Y/N) Salamanders Observed? (Y/N)	Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates	s Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM RI	
Include important landmarks and other features of interest for site evaluation and	S BAITARIVE DESCRIPTION OF the Stream S focation
//	
O.Lens	
FLOW	
Pursones Photoness Burn 3	
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One FPA Primary Headwater Habitat Evaluation Form

	Di 1. 76	RIVER BASIN		RAINAGE AREA (mi²)	
NGTH OF STREAM REACH (R) 200					
TE 33 1434. 05 SCORER 3564					
OTE: Complete Ali Items On This Fo					
REAM CHANNEL MONE/N ODIFICATIONS:	ATURAL CHA	NNEL RECOVERED .	RECOVERING	RECENT OR NO RECO)VER
SUBSTRATE (Estimate percent of e					
(Max of 32). Add total number of signif YPE	ficant substrate PERCENT	e types found (Max of 8). Final n <u>TYPE</u>	netric score is sui	n of boxes A & B. PERCENT	H
DLDR SLABS [16 pts]		☑ ☑ ∕ SiLT [3 pt]		60	Po
☐ 80ULDER (>256 mm) [16 pts] (☐ BEDROCK [16 pt] (☐			OODY DEBRIS (3 S (3 pts)		Şu
COBBLE (65-256 mm) [12 pts]	- 5	CLAY OF HARD	S [3 pts] PAN [0 pt]		Ma
☐ GRAVEL (2:64 mm) [9 pts] ☐ SAND.(<2 mm) [6 pts]		O MUCK [0 pis]			- 7
Total of Percentages of		(A)	a water to the same	(B)	
Bidr Slabs, Boulder, Cobble, Bedrock		6	uibeb Ar aira	' [5]	A
ORE OF TWO MOST PREDOMINATE SUE			IMBER OF SUBS		
Maximum Pool Depth (Measure the evaluation. Avoid plunge pools from ro				reach at the time of	Pod
30 centimeters [20 pts]	ية. و فالم العالمية المالية التي التي التي التي التي التي التي التي	Ø >5 cm =10 cm	t [15 pts]		
3 > 22.5 - 30 cm [30 pts] 3 > 10 - 22.5 cm [25 pts]					1
) 2 10 - 22:3 Ciri [25 pts]	A A Charles Control	D NO WATER O	R MOIST CHANI	WEL (U DIS)	IL
COMMENTS_	N. M. S. Miles		UM POOL DEPTI	5	_
COMMENTS		MAXIM	JM POOL DEPTI	(centimeters):	
COMMENTSBANK FULL WIDTH (Measured as the	he average of	MAXIMI 3-4 measurements) (UM POOL DEPTI Check ONLY on (>3'3"-4'8") [1	e box):	γ
COMMENTS	he average of	3-4 measurements) (3 > 1.0 m - 1.5 n	JM POOL DEPTI Check ONLY on	e box):	γ
COMMENTS	he average of	MAXIM 3-4 measurements) (3 > 1.0 m - 1.5 n □ ≤ 1.0 m (≤ 3°.3	UM POOL DEPTH Check ONLY on n (> 3' 3" - 4' 8") [1 n) [8 pts]	e box):	Y
COMMENTS	he average of	3-4 measurements) (3 > 1.0 m - 1.5 n	UM POOL DEPTH Check ONLY on n (> 3' 3" - 4' 8") [1 n) [8 pts]	e box):	BV
COMMENTS	he average of	MAXIM 3-4 measurements) (3-1.0 m - 1.5 n ≤ 1.0 m (≤ 3°.3 AVERA Information must also be con	UM POOL DEPTH Check ONLY on n (2-3'3" - 4'8") [1 n) [5 pts]	e box): 6 pts] VIDTH (meters)	γ
COMMENTS	he average of	MAXIM 3-4 measurements) (3-1.0 m - 1.5 n ≤ 1.0 m (≤ 3°.3 AVERA Information must also be con	UM POOL DEPTH Check ONLY on n (2-3'3" - 4'8") [1 n) [5 pts]	e box):	γ
BANK FULL WIDTH (Measured as to > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS RIPARIAN ZONE AND FLOO RIPARIAN WIDTH L R (Per Bank)	the average of This DPLAIN QUA	MAXIM 3-4 measurements) (3-1.0 m - 1.5 m 4 1.0 m (s 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3'	Check ONLY on (Check ONL) (Che	H (centimeters): b box): b pts] VIDTH (meters) c looking downstream: A	γ
BANK FULL WIDTH (Measured as to > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS RIPARIAN ZONE AND FLOO RIPARIAN WIDTH L R (Per Bank) Z D Wide > 10m	he average of This DPLAIN QUA	MAXIM 3-4 measurements) 3-1.0 m - 1.5 n 4 1.0 m (s 3 3 3 4 1.0 m) AVERAL Information must also be contained to the conta	Check ONLY on (2-3'3"-4'8") [1 T) [8 pts] GE BANKFULL Value of Right (R) at L. R.	l (centimeters): b box): b pts] VIDTH (meters) c looking downstream☆ Conservation Tillage	γ
BANK FULL WIDTH (Measured as to > 4.0 meters (> 13) [30 pts] > 3.0 m - 4.0 m (> 9 7 - 13) [25 pts] > 1.5 m - 3.0 m (> 9 7 - 4 8") [20 pts] COMMENTS RIPARIAN ZONE AND FLOO RIPARIAN WIDTH L R (Per Bank) Wide > 10m Moderate 5-10m	This opplain QUA	Information must also be con LITY TrNOTE: River Left (L PLAIN QUALITY (Most Predominant per Bank) Mature Forest, Wetland Immature Forest, Shrub or Ol Field	Check ONLY on (2-3'3"-4'8") [1 T) [8 pts] GE BANKFULL V apleted and Right (R) at	H (centimeters): b box): b pts] VIDTH (meters) c looking downstream: A	γ
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BANK FULL WIDTH (Measured as to > 4.0 meters (> 13) [30 pts] > 3.0 m - 4.0 m (> 9 7 - 13) [25 pts] > 1.5 m - 3.0 m (> 9 7 - 4 8") [20 pts] COMMENTS RIPARIAN ZONE AND FLOO RIPARIAN WIDTH L R (Per Bank) Wide > 10m Moderate 5-10m	This opplain QUA	Information must also be con LITY TrNOTE: River Left (L PLAIN QUALITY (Most Predominant per Bank) Mature Forest, Wetland Immature Forest, Shrub or Ol Field	Check ONLY on (2-3'3"-4'8") [1 T) [8 pts] GE BANKFULL V apleted and Right (R) at	H (centimeters): b box): b pts] VIDTH (meters) Conservation Tillage Urban or Industrial Open Pasture, Row	Y
BANK FULL WIDTH (Measured as to > 4.0 meters (> 13') [30 pts] > 3.0 m = 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m = 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS RIPARIAN ZONE AND FLOO RIPARIAN WIDTH L R (Per Bank) Wide > 10m Moderate 5-10m Narrow < 5m None	This opplain Qua	Information must also be con LITY TrNOTE: River Left (L PLAIN QUALITY (Most Predominant per Bank) Mature Forest, Wetland Immature Forest, Shrub or Of Field Residential, Park, New Field Fenced Pasture Check ONLY one box): Moist	Check ONLY on 1: 3'3" 4'8") [1 1 1 1 1 1 1 1 1 1	(centimeters): box): pis] VIDTH (meters) Conservation Tillage Urban or Industrial Open Pasture, Row Crop Mining or Construction Doots, no flow (Intermittent)	M
BANK FULL WIDTH (Measured as to > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS RIPARIAN ZONE AND FLOO RIPARIAN WIDTH L R (Per Bank) Wide > 10 m Moderate 5-10 m Narrow < 5 m None COMMENTS FLOW REGIME (At Time of E) Stream Flowing Subsurface flow with isolated p	This opplain Qua	Information must also be con LITY ANOTE: River Left (L PLAIN QUALITY (Most Fredominant per Bank) Mature Forest, Wetland Immature Forest, Wetland Immature Forest, New Field Residential, Park, New Field Fenced Pasture Check ONLY one box): Moist Of fi) of channel) (Check ONL)	Check ONLY on 1; 2:3'3" 4'8") [1 1 2 3 3 4'8") [1 1 3 3 4'8") [1 1 3 3 4 8") [1 4 8"] [1 4 4 4 4 4 4 4 4 4	(centimeters): box): pis] VIDTH (meters) Conservation Tillage Urban or Industrial Open Pasture, Row Crop Mining or Construction Doots, no flow (Intermittent)	M
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ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	BM-S6
QHEI PERFORMED? - Tyes No QHEI Score(If Yes, Attack	n Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
☐ WWH Name:	Distance from Evaluated Stream
CWH Name:	Distance from Evaluated Stream
EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED A	REAL CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: New Haven WV -OH NRCS Soil Map Pa	
County: Mega Township / City: Let	art Falls, Ohir area
MISCELLANEOUS	
Photograph Information: VIN): Date of last precipitation: 24 N.J. 05	Quantity: whomn
Photograph Information: 447 + 68	
Elevated Turbidity? (Y/N): Canopy (% open): 60%	
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. an	d attach results) Lab Number
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.)	Conductivity (µmhos/cm)
is the sampling reach representative of the stream (Y/N) / If not, please explain:	
Additional comments/description of pollution impacts:	
BIOTIC EVALUATION	
Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. ID number. Include appropriate field data sheets from the Print	NOTE: all voucher samples must be labeled with the site nary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N)	_ Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrate	s Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM R	
Include important landmarks and other features of interest for site evaluation an	a a narrative description of the stream's location
No.	
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	_
FLOW Plasa wins to	
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	pinns
	en F
West fires	

ChieEPA

Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3): SITE NAME/LOCATION AMP ON SITE NUMBER BM-S7 RIVER BASIN_____ DRAINAGE AREA (mi²) LENGTH OF STREAM REACH (ft) _____ LAT. _____ LONG. _____ RIVER CODE _____ RIVER MILE _ DATE 29 NOV. 05 SCORER 46% / BEM COMMENTS NOTE: Complete All Items On This Form - Refer to "Fleid Evaluation Manual for Ohio's PHWH Streams" for Instructions INONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OF NO RECOVERY MODIFICATIONS: SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes HHEI (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. Metric TYPE Points BLDR SLABS [16 pts] SET 13 00 OO BOULDER (>256 mm) [16 pts] LEAF PACK/WOODY DEBRIS [3 pts] Substrate 1 6 BEDROCK [16 pt] FINE DETRITUS [3 pts] Max = 40 00 COBBLE (65-256 mm) [12 pts] MO 4 3 CLAY OF HARDPAN [0 pt] 00 GRAVEL (2-64 mm) [9 pts] MUCK [0 pts] OO 88 ARTIFICIAL [3 pts] SAND (<2 mm) [6 pts] Total of Percentages of (B) A+B Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: Pool Depth Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge poots from road culverts or storm water pipes) (Check OALY one box): Max = 30 > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts] ⅎ > 22.5 - 30 cm [30 pts] < 5 cm [5 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts] MAXIMUM POOL DEPTH (centimeters): COMMENTS BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): Bankfull > 1.0 m - 1.5 m (> 3'.3" - 4'8") [15 pts] > 1.0 m (> 3' 3") [5 pts] Width > 4.0 melers (> 13') [30 pts] > 3.0 m - 4.0 m (> 9'.7" - 13') [25 pts] ex=30 > 1.5 m - 3.0 m (> 9'7" - 4'8") [20 pts] COMMENTS **AVERAGE BANKFULL WIDTH (meters)** This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆ RIPARIAN WIDTH FLOODPLAIN QUALITY (Per Bank) (Most Predominant per Bank) 00 Mature Forest, Wetland Wide >10m Conservation Tillage Immature Forest, Shrub or Old 00 Moderate 5-10m Urban or Industrial Open Pasture, Row 00 90 Narrow <5m Residential, Park, New Field Cron None Fenced Pasture Mining or Construction COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittent) Subsurface flow with isolated pools (Interstitial) Dry channel, no water (Ephemeral) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 0.5 1.5

Moderate to Severe

Severe (10 1/100 ft)

Moderate (2 fv100 ft)

☐ Flat (0.5 ft/100 ft)

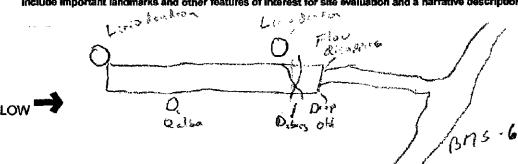
STREAM GRADIENT ESTIMATE

☐ Flat to Moderate

BM-S7 ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed): QHEI PERFORMED? - Tyes O No QHEI Score 2 - (If Yes, Attach Completed QHEI Form) DOWNSTREAM DESIGNATED USE(S) WWH Name: ___ ____ Distance from Evaluated Stream ___ Distance from Evaluated Stream CWH Name: ___ EWH Name: ___ Distance from Evaluated Stream MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION USGS Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order County: Merge Township/City: Letout Falls, Ohing area MISCELLANEOUS Base Flow Conditions? (Y/N): Y Date of last precipitation: 34 223 25 Quantity: unknown Photograph Information: 6 Elevated Turbidity? (Y/N): A Canopy (% open): 57 Were samples collected for water chemistry? (Y/N): // (Note lab sample no. or id. and attach results) Lab Number:______ Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) if not, please explain: Additional comments/description of pollution impacts: **BIOTIC EVALUATION** (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N)_____ Voucher? (Y/N)____ Salamanders Observed? (Y/N)____ Voucher? (Y/ Comments Regarding Biology:___

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

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



ChieFPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):

	AMPONIO			
<u>otram</u> s	SITE NUMBER BM-58 R	IVER BASIN	DRAINAGE AREA (mi²) <u></u>	mia
			R CODE RIVER MILE	
DATE 11-30-05 SCOR	rer <u>BEW</u> comme	ents <u>flows into si</u>	ream le	
NOTE: Complete All Item	ns On This Form - Refer to "F	ield Evaluation Manual for O	hio's PHWH Streams" for Instru	ictions
STREAM CHANNEL MODIFICATIONS:	MONE / NATURAL CHANNE	L DRECOVERED DRECOV	/ERING ☐ RECENT OR NO RECO	VERY
	ste percent of every type of subst number of significant substrate type	es found (Max of 8). Final metric so		HHEI Metric
TYPE DD BLDR SLABS [16]		TYPE SILT (3 pg	PERCENT	Points
BOULDER (>266 r	mm) [16 pts] :	LEAF PACKWOODY D	EBRIS (3 pis) 35%	Substrate
☐ ☐ BEDROCK [16 p		☐ FINE DETRITUS [3 pt ☐ CLAY OF HARDPAN [0] ☐ MUCK [0 pts]	√ 50%	Max ≈ 40
GRAVEL (2-64 mm	Control of the Contro	□ □ MUCK [0 pes]	M)	1.
□	2007 (120 ASS ASS GOOD)	☐☐ ARTIFICIAL [3 pts]		- Ψ
Total of Percent Bidr Slabs, Boulder, C SCORE OF TWO MOST PREE		3 TOTAL NUMBER	(B) OF SUBSTRATE TYPES:	A+B
2. Maximum Pool Depti	h (Measure the maximum pool de	enth within the 61 meter (200 ft) a	evaluation reach at the time of	Pool Depth
evaluation. Avoid plun	nge pools from road culverts or stor	m water pipes) (Check ONLY on	e box):	Max = 30
> 30 centimeters [20 pt		> 5 cm - 10 cm [15 pt:		
> 10 - 22.5 cm [25 pts			T CHANNEL [0 pts]	U
COMMENTS		MAXIMUM POC	OL DEPTH (centimeters):	
3 BANK FULL WIDTH ((Measured as the average of 3-4)	measurements) (Check	ONLY one box1:	Bankfull
2 > 4.0 meters (> 13') (30		> 1.0 m = 1.5 m (> 3′.3°		Bankfull Width
> 4.0 meters (> 13') [30	pts] '- 13') [25 pts]	measurements) (Check > 1.0 m - 1.5 m (> 3'.3") ≤ 1.0 m (≤ 3'.3") [5 pts	-4*87 [1 6 pts]	
> 4.0 meters (> 13) [30 > 3.0 m - 4.0 m (> 9' 7" > 1.6 m - 3.0 m (> 9' 7"	pts] '- 13') [25 pts]	> 1.0 m < 1.5 m (> 3'.3') [5 pts	-4'87 [16 pts]	Width
> 4.0 meters (> 13') [30	pts] '- 13') [25 pts]	> 1.0 m < 1.5 m (> 3'.3') [5 pts	-4*87 [1 6 pts]	Width
> 4.0 meters (> 13) [30 > 3.0 m - 4.0 m (> 9' 7" > 1.6 m - 3.0 m (> 9' 7"	pts] - 13') [25 pts] - 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3'.3') 5 pts	4' 8') [16 pts]	Width
>4.0 meters (> 13) [30 > 3.0 m - 4.0 m (> 9' 7" > 1.6 m - 3.0 m (> 9' 7" COMMENTS	pts] 13) [25 pts] 4 8") [20 pts] This info ONE AND FLOODPLAIN QUALITY	> 1.0 m < 1.5 m (> 3'.3') [5 pts 1.0 m (≤ 3'.3') [5 pts AVERAGE BAN mation must also be completed ☆NOTE: River Left (L) and R	4' 8') [16 pts]	Width
>4.0 meters (> 13) [30 > 3.0 m - 4.0 m (> 9° 7° > 1.6 m - 3.0 m (> 9° 7° COMMENTS RIPARIAN ZO RIPARIAN V	pts] 13) [25 pts] 4 8") [20 pts] This info ONE AND FLOODPLAIN QUALITY MDTH FLOODPLAI	> 1.0 m - 1.5 m (> 3'.3') [5 pts AVERAGE BAN The mation must also be completed ANOTE: River Left (L) and R N QUALITY	4'87) [16 pts] 3,☆ IKFULL WIDTH (maters)	Width
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>4.0 meters (>13) [30	pts] 13) [25 pts] 14 8") [20 pts] This info ONE AND FLOODPLAIN QUALITY MIDTH R (M M S-10m	> 1.0 m · 1.5 m (> 3'.3") [5 pts AVERAGE BAN AVERAGE BAN Transition must also be completed ☆NOTE: River Left (L) and R N QUALITY lost Predominant per Bank) ature Forest, Wetland mature Forest, Shrub or Old	4'87) [16 pts] 3,☆ IKFULL WIDTH (maters)	Width
>4.0 meters (>13) [30	pts] - 13) [25 pts] - 4 8") [20 pts] This info DNE AND FLOODPLAIN QUALITY MIDTH R (M - 1	> 1.0 m < 1.5 m (> 3'.3") [5 pta AVERAGE BAN Trimation must also be completed ☆NOTE: River Left (L) and R N QUALITY lost Predominant per Bank) ature Forest, Wetland mature Forest, Shrub or Old	# 8") [16 pts] IKFULL WIDTH (meters) Ight (R) as looking downstream Conservation Tillage ☐ ☐ Urban or industrial	Width
>4.0 meters (> 13') [30	pts] 13) [25 pts] 14 8) [20 pts] This info DNE AND FLOODPLAIN QUALITY MIDTH L R (M M 5-10m Re	> 1.0 m - 1.5 m (> 3'.3") [5 pts AVERAGE BAN AVERAGE B	IKFULL WIDTH (meters) Ight (R) as looking downstream: Conservation Tillage Urban or Industrial Open Pasture, Row Crop	Width
>4.0 meters (>13) [30	pts] 13) [25 pts] 14 8) [20 pts] This info DNE AND FLOODPLAIN QUALITY MIDTH FLOODPLAI R (M 5-10m Fix The info Re The info The info Re The info T	> 1.0 m < 1.5 m (> 3'.3") [5 pta AVERAGE BAN Trimation must also be completed ☆NOTE: River Left (L) and R N QUALITY lost Predominant per Bank) ature Forest, Wetland mature Forest, Shrub or Old	# 8") [16 pts] IKFULL WIDTH (meters) Ight (R) as looking downstream ↑ Conservation Tillage Urban or Industrial Open Pasture, Row	Width
A.0 meters (> 13') [30 > 3.0 m - 4.0 m (> 9' 7" > 1.6 m - 3.0 m (> 9' 7" COMMENTS	pts] - 13') [25 pts] - 4' 8') [20 pts] This info DNE AND FLOODPLAIN QUALITY MIDTH FLOODPLAI R M 5-10m Re G Fe ME (At Time of Evaluation) (Check g w with isolated pools (Interstitial)	> 1.0 m < 1.5 m (> 3'.3") [5 pts AVERAGE BAN AVERAGE B	IKFULL WIDTH (meters) Ight (R) as looking downstream: Conservation Tillage Urban or Industrial Open Pasture, Row Crop	Width Max=30
A.0 meters (> 13') [30 > 3.0 m - 4.0 m (> 9' 7" > 1.6 m - 3.0 m (> 9' 7" COMMENTS	pts] - 13') [25 pts] - 4' 8') [20 pts] This info DNE AND FLOODPLAIN QUALITY MIDTH FLOODPLAI R M 5-10m Re G Fe ME (At Time of Evaluation) (Check g w with isolated pools (Interstitial)	> 1.0 m - 1.5 m (> 3'.3") [5 pts AVERAGE BAN AVERAGE BAN AVERAGE BAN ANOTE: River Left (L) and R N QUALITY lost Predominant per Bank) ature Forest, Wetland mature Forest, Shrub or Old eld esidential, Park, New Field enced Pasture CONLY one box): Moist Channel Dry channel, n	IKFULL WIDTH (meters) Salar Salar	Width Max=30
A.0 meters (> 13') [30 > 3.0 m + 4.0 m (> 9' 7" > 1.6 m + 3.0 m (> 9' 7" COMMENTS	This info ONE AND FLOODPLAIN QUALITY MOTH FLOODPLAIN M 5-10m Re ME (At Time of Evaluation) (Check w with isolated pools (Interstitial) Number of bends per 61 m (200 ft)	> 1.0 m < 1.5 m (> 3'.3") [5 pts AVERAGE BAN AVERAGE BAN AVERAGE BAN AVERAGE BAN ANOTE: River Left (L) and R N QUALITY lost Predominant per Bank) ature Forest, Wetland mature Forest, Shrub or Old eld esidential, Park, New Field enced Pasture A ONLY one box): Moist Channel Dry channel, r of channel) (Check ONLY one box) 2.0	#8" [16 pts] IKFULL WIDTH (maters) 3,2 Ight (R) as looking downstream ↑ Conservation Tillage Urban or Industrial Open Pasture, Row Crop Mining or Construction It is colated pools, no flow (Intermittent) It is colated pools, no flow (Intermittent) It is colated pools No flow (Intermittent) It is	Width Max=30
A.0 meters (> 13') [30 > 3.0 m + 4.0 m (> 9' 7" > 1.6 m + 3.0 m (> 9' 7" COMMENTS	This info ONE AND FLOODPLAIN QUALITY MIDTH FLOODPLAI R ME (At Time of Evaluation) (Check w with isolated pools (Interstitial) Number of bends per 61 m (200 ft) 1.0 1.5	> 1.0 m < 1.5 m (> 3'.3") [5 pts AVERAGE BAN AVERAGE BAN AVERAGE BAN ANOTE: River Left (L) and R N QUALITY lost Predominant per Bank) ature Forest, Wetland mature Forest, Shrub or Old eid esidential, Park, New Field enced Pasture CONLY one box): Moist Channel Dry channel, record channel Check ONLY one box	IKFULL WIDTH (maters) Salar Salar	Width Max=30

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	BM- 58
QHEI PERFORMED? - Tyes X No QHEI Score (If Yes, Attac	h Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	Biologo Francisco Control Observe
WH Name:	
CWH Name:	
☐ EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED	
USGS Quadrangle Name: New Moven WV-OH NRCS Soil Map Pa	ige: NRCS Soil Map Stream Order
USGS Quadrangle Name: New Marren WV-OH NRCS Soil Map Pr County: Mers County Township / City: Let	art Fells, Ohio area
MISCELLANEOUS	
Base Flow Conditions? (Y/N): N Date of last precipitation: 11-29-05	
Photograph Information: y-Photo 70-Concord Camer	~
Elevated Turbidity? (Y/N): N Canopy (% open): 4000	
Were samples collected for water chemistry? (Y/N): // (Note lab sample no. or id. ar	nd attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.)	Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) / if not, please explain:	
*	
Additional comments/description of pollution impacts:	
BIOTIC EVALUATION	
Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional ID number. Include appropriate field data sheets from the Principle.	
Fish Observed? (Y/N) Voucher? (Y/N) Salamenders Observed? (Y/N) Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrate	
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM I	REACH (This <u>must</u> be completed):
Include important landmarks and other features of interest for site evaluation ar	d a narrative description of the stream's location
=2	
FLOW - BFW-Z BFW-Z BFW-Z STOPE STOP	S. Warts
tree Stope	15

ChieFPA Primary Headwater Habitat Evaluation Form

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-> 11	OF STREAM	EVER TO STORE H	1 AT	_ KIVEK BASIN	RIVER CO	DKAII DE	NACE AREA (MP) _ ~ *** ***	- IAAII a
DATE	1-30-05	SCORER BEY	CO!	MMENTS	RIVER CO	DE	RIVER MILE	
					Manual for Ohio's			struction
STREA	M CHANNEL CATIONS	X NONE /			RED RECOVERI			COVERY
1.	SUBSTRATE (E	stimate percent of	every type of s	ubstrate present. Ch	eck ONLY two predon	ninant sub	strate TYPE boxes	l
TYPE			PERCENT	TYPE	8). Final metric score i		PERCENT	Me:
		S [16 pts] >256 mm) [16 pts]			3 ptj PACK/WOODY DEBR			Poi
00	BEDROCK	(16 pt)	<u></u>		DETRIȚUS (3 pts)	0.5Me		Subs Max
	and the second of the second o	5:256 mm) [12 pts] -64 mm) [9 pts]			OF HARDPAN (10 PM)		<u> </u>	
00		nm) [6 pts]			(d pus)			11-/3
	Total of P	ercentages of	50	(A)	na in the second and a second a	randa almado dellegión de	(B) [14	
		'ercentages or Ider, Cobble, Bedroo ' PREDOMINATE SI		. 4	OTAL NUMBER OF S	ii iqetda	TE TYPES. 4]]
2.					1 meter (200 ft) evalua (Check ONLY one bot		ch at the time of	Pool Max
_	> 30 centimeters		National Automotives		m - 10 cm [15 pts]	renewayen	Michella March	
_ TI						アミシとは		lls.c
	> 22.5 - 30 cm > 10 - 22.5 cm	30 pts]			m [5 pts] VATER OR MOIST CI	I ANNEL	[0 pts]	1 25
<u> </u>	> 22.5 - 30 cm (30 pts]			m [5 pts]		/2] 25
<u>.</u> _	> 22.5 - 30 cm > 10 - 22.5 cm COMMENTS	(30 pts) (26 pts) (7DTH (Measured as (31) [30 pts) (5 91 77 - 131) [25 pts)	the average of	3-4 measurements)	m [5 pts] VATER OR MOIST CI MAXIMUM POOL DI	EPTH (ce Y ope bo	ntimeters): 1/2"	Ban Wi
<u>.</u> _	> 22.5 - 30 cm > 10 - 22.5 cm COMMENTS	(30 pts) (26 pts) (IDTH (Measured as (3) (30 pts)	the average of	3-4 measurements)	m [5 pts] VATER OR MOIST CI MAXIMUM POOL DI (Check ONL m = 1.5 m (> 3*3*-4*)) m (< 3*3*) [5 pts]	EPTH (ce Y one bo	intimeters): 1/2	Ban Wi
<u>.</u> _	> 22.5 - 30 cm > 10 - 22.5 cm COMMENTS	(30 pts) (26 pts) (7DTH (Measured as (31) [30 pts) (5 91 77 - 131) [25 pts)	the average of	3-4 measurements)	m [5 pts] VATER OR MOIST CI MAXIMUM POOL DI (Check ONL m 1.5 m (> 3° 3° 4°)	EPTH (ce Y one bo	intimeters): 1/2	Ban Wi Max
<u>.</u> _	> 22.5 - 30 cm > 10 - 22.5 cm COMMENTS	30 pts] 26 pts] 7DTH (Measured as 3) [30 pts] (> 9' 7" - 13') [25 pts] (> 9' 7" - 4' 8") [20 pts]	the average of	3-4 measurements) > 1.0 > 1.0 s-1.0	m [5 pts] VATER OR MOIST CI MAXIMUM POOL DI (Check ONL m : 1.5 m (> 3*3* - 4*)) m (< 3*3*) [5 pts] AVERAGE BANKFL	EPTH (ce Y ope bo e) [15 pts	intimeters): 1/2 xx): 2/3 xx): 2/4 (meters)	Ban Wi
<u>.</u> _	> 22.5 - 30 cm > 10 - 22.5 cm COMMENTS_ BANK FULL W > 4.0 meters (> 1 > 3.0 m - 4.0 m > 1.5 m - 3.0 m COMMENTS_ RIPARI	(30 pts) (26 pts) (70TH (Measured as 3') [30 pts) (> 9' 7" - 13') [25 pts) (> 9' 7" - 4' 8") [20 pts) AN ZONE AND FLORAN WIDTH	the average of This OODPLAIN QUAI	3-4 measurements) > 1.0 > 1.0 s-1.0	MAXIMUM POOL DI (Check ONL 1.5 m (> 3'3'-4')) m (< 3'3') [8 pts] AVERAGE BANKFL So be completed ver Left (L) and Right (EPTH (ce Y one bo e) [15 pts JLL WIDT (R) as loo	intimeters): 1/2 xx): 2/3 xx): 2/4 (meters)	Ban Wi Max //
<u></u>	> 22.5 - 30 cm > 10 - 22.5 cm COMMENTS	30 pts] 25 pts] 7DTH (Measured as 3') [30 pts] (> 9' 7' - 13') [25 pts] (> 9' 7'' - 4' 8'') [20 pts] AN ZONE AND FLORIAN WIDTH Bank)	the average of This OODPLAIN QUAI FLOODS L R	information must als	MAXIMUM POOL DI (Check ONL. 1.5 m (> 3'3' - 4') MAXIMUM POOL DI (Check ONL. (C	Y ope bo Y is pts (15 pts (R) as loo	intimeters): 1/2 x): TH (meters) king downstream:	22.4 5
<u></u>	> 22.5 - 30 cm > 10 - 22.5 cm COMMENTS_ BANK FULL W > 4.0 meters (> 1 > 3.0 m - 4.0 m > 1.5 m - 3.0 m COMMENTS_ RIPARI RIPARI L R (Per Wide	(30 pts] (26 pts] (26 pts] (7DTH (Measured as 3) [30 pts] (> 9' 7" - 13') [25 pts] (> 9' 7" - 4' 8") [20 pts] (> 9' 7" - 4' 8") [20 pts] AN ZONE AND FLORIAN WIDTH Bank) (> > 10m	This DODPLAIN QUAI	information must als LITY ANOTE: Riv PLAIN QUALITY (Most Predominant) Mature Forest, Weti	MAXIMUM POOL DI (Check ONL. m 1.5 m > 3°3° 4°1) m (< 3°3°) [8 pts] AVERAGE BANKFL to be completed ver Left (L) and Right (per Bank) Land	Y one bo Y one bo Y its pas	intimeters): 1/2 ix): TH (meters) King downstream & Conservation Tillage	Bar Wi Max
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<u>.</u> _	> 22.5 - 30 cm > 10 - 22.5 cm > 10 - 22.5 cm COMMENTS BANK FULL W > 4.0 meters (> 1 > 3.0 m - 4.0 m > 1.5 m - 3.0 m COMMENTS RIPARI RIPARI RIPARI QUE Widd	(30 pts) (25 pts) (25 pts) (30 pts) (25 pts) (25 pts) (25 pts) (25 pts) (25 pts) (25 pts) (20	This DODPLAIN QUAIN FLOODS LR	information must als LITY ANOTE: Ric PLAIN QUALITY (Most Predominant Mature Forest, Wett Immature Forest, Si Field Residential, Park, N	MATER OR MOIST CI MAXIMUM POOL DI (Check ONL. im = 1.5 m (> 3*3**4*))m (< 3*3*) [5 pts] AVERAGE BANKFU So be completed ver Left (L) and Right (per Bank) and nrub or Old	Y ope bo	intimeters): 1/2 x): (H (meters) King downstream Conservation Tillage Urban or Industrial Open Pasture, Row Crop	22.4 5
<u>.</u> _	> 22.5 - 30 cm > 10 - 22.5 cm > 10 - 22.5 cm COMMENTS_ BANK FULL W > 4.0 meters (> 1 > 3.0 m - 4.0 m > 1.5 m - 3.0 m COMMENTS_ RIPARI RIPARI RIPARI VI VI Wide	(30 pts) (25 pts) (25 pts) (30 pts) (25 pts) (25 pts) (25 pts) (25 pts) (25 pts) (26 pts) (27 - 4' 8") [20 pts) (28 pts) (30 pts) (29 pts) (29 pts) (20 pts)	This DODPLAIN QUAI	information must als LITY ANOTE: Rie PLAIN QUALITY (Most Predominant) Mature Forest, Wett Immature Forest, Si	MATER OR MOIST CI MAXIMUM POOL DI (Check ONL. im = 1.5 m (> 3*3**4*))m (< 3*3*) [5 pts] AVERAGE BANKFU So be completed ver Left (L) and Right (per Bank) and nrub or Old	Y ope bo	intimeters): 1/2 x): (H (meters) King downstream Conservation Tillage Urban or Industrial Open Pasture, Row	22.4 5
<u>.</u> _	PARIE	(30 pts) (26 pts) (26 pts) (26 pts) (26 pts) (26 pts) (27 pts) (28 pts) (29 pts) (29 pts) (29 pts) (20	This ODPLAIN QUAI FLOODS L R D D	information must als LITY ANOTE: Ric PLAIN QUALITY (Most Predominant Immature Forest, Wett Immature Forest, St Field Residential, Park, N Fenced Pasture	MATER OR MOIST CI MAXIMUM POOL DI (Check ONL im + 1.5 m (> 3*3**.4*))m (< 3*3*) [5 pts] AVERAGE BANKFU so be completed ver Left (L) and Right (per Bank) and nrub or Old	Y one bo	intimeters): 1/2	2-2.4 5
<u>.</u> _	PARIBLE RIPARI L R Per	(30 pts) (26 pts) (26 pts) (26 pts) (26 pts) (26 pts) (27 pts) (28 pts) (29 pts) (20	This ODPLAIN QUAI FLOODS L R D D	information must als LITY ANOTE: Ric PLAIN QUALITY (Most Predominant Immature Forest, Wett Immature Forest, St Field Residential, Park, N Fenced Pasture	MAXIMUM POOL DI (Check ONL. (Y one bo	intimeters): 1/2	22.4 5
<u>.</u> _	P 22.5 - 30 cm 10 - 22.5 cm 20 - 22.5 cm 21 - 22.5 cm 21 - 22.5 cm 22 - 30 cm 23 - 40 m 24 - 40 m 25 - 40 m 26 - 40 m 27 - 40 m 28 - 40 m 29 - 40 m 20 m 20 m 21 - 22.5 cm 22 - 23 m 23 m 24 0 m 24 0 m 25 m 26 m 27	(30 pts) (26 pts) (26 pts) (26 pts) (26 pts) (27 pts) (29 7"- 4" 8") [20 pts) (29 7"- 4" 8") [20 pts) (29 7"- 4" 8") [20 pts) (29 pts) (29 pts) (29 pts) (29 pts) (29 pts) (29 pts) (20 pts) (29 pts) (20	This DODPLAIN QUAIR FLOODS Compared to the second of the	information must als LITY ANOTE: Ric PLAIN QUALITY (Most Predominant Immature Forest, Wett Immature Forest, St Field Residential, Park, N Fenced Pasture	MAXIMUM POOL DI (Check ONL. (Y one bo	intimeters): (X): 2-2.4 5	
<u>.</u> _	P 22.5 - 30 cm 10 - 22.5 cm 20 -	(30 pts) (26 pts) (26 pts) (26 pts) (26 pts) (27 pts) (29 7"- 4" 8") [20 pts) (29 7"- 4" 8") [20 pts) (29 7"- 4" 8") [20 pts) (29 pts) (29 pts) (29 pts) (29 pts) (29 pts) (29 pts) (20 pts) (29 pts) (20	This DODPLAIN QUAI FLOODS R FLOODS FEvaluation) (Cd pools (Interstitis) (20 1.0	information must als LITY ANOTE: Rie PLAIN QUALITY (Most Predominant Mature Forest, Wett Immature Forest, Si Field Residential, Park, N Fenced Pasture	MAXIMUM POOL DI (Check ONL (Y one bo	intimeters): 1/2	22.4 5
	PARIFERIOR PARIFERIOR PARIFERIOR RIPARI RI	(30 pts) (26 pts) (26 pts) (26 pts) (26 pts) (27 pts) (29 7"- 4" 8") [20 pts) (29 7"- 4" 8") [20 pts) (29 7"- 4" 8") [20 pts) (29 pts) (29 pts) (29 pts) (29 pts) (29 pts) (29 pts) (20 pts) (29 pts) (20	This CODPLAIN QUAI FLOOD R FLOOD FEValuation) (Cod pools (Interstitis	information must als LITY ANOTE: Rie PLAIN QUALITY (Most Predominant) Mature Forest, Wett Immature Forest, Si Field Residential, Park, N Fenced Pasture Check ONLY one box): al)	MAXIMUM POOL DI (Check ONL. (Y one bo	intimeters): (X): 22.4 5	

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	BM-59
QHEI PERFORMED? - Yes No QHEI Score(If Yes, Attac	th Campleted QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
_	Distance from Evaluated Stream
CWH Name:	Distance from Evaluated Stream
D EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED	
USGS Quadrangle Name: New Maven, WV-OH NRCS Soil Map Pr	age: NRCS Soil Map Stream Order
County: mely County Township / City: Let	ant Falls, Ohio area
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Y Date of last precipitation: $11-29-05$	quantity: whom
Photograph Information: Y-71-72	
Elevated Turbidity? (Y/N): V Canopy (% open): 40 //.	•
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. a)	nd attach results) Lab Number:
Field Measures: Temp (*C) Dissolved Oxygen (mg/l) pH (S.U.)	Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:	
Additional comments/description of pollution impacts:	
Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional ID number. Include appropriate field data sheets from the Pri	•
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrat	Voucher? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM Include important landmarks and other features of interest for site evaluation are	· — , , ,
R. C.	Wes'
BENER, CB	(5/2)
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ChicEPA Primary Headwater Habitat Evaluation Form

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	BEDRO	CK [16 pt]		10	00 00	FINE DETRITU	IS [3 pts]	 –	4/0	Max
	CRAME!	E (65-256 mm) L (2-64 mm) [1	otel Potel			MUCK [0 pts]	went in ini	- · · · ·		
		<2 mm) (6 pts		_	55	ARTIFICIAL (3				
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81	idr Slabs, i	of Percentage Boulder, Cobb	is oi ile, Bedrock	10	(A) 6				(¹⁰)	A٠
		OST PREDOM			PES:	. TOTAL NI	UMBER OF SUE	STRATE TY	PES:	
2. M	laximum F	Pool Denth /M	leasure the	maximum n	ool denth wit	hin the 61 meter	(200 ft) evaluatio	n reach of the	e time of	Pool
ė1	valuation.	Avoid plunge p	pools from (road cuiverts o		pipes) (Check (Max
	30 centime	eters [20 pts]	*			> 5 cm - 10 c				
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C.	OMMENT									
		'S				MAXIM	UM POOL DEPT	TH (centimet	ers):	
3 B	ANK FUL	L WIDTH (Me			of 3-4 measur				ers):	Ber
3 B	ANK FUL	L WIDTH (Me				ements)	(Check <i>ONLY</i> o m (> 3' 3" - 4' 8")	ne box): [15 pts]		W
3 B	ANK FUL	L WIDTH (Me					(Check <i>ONLY</i> o m (> 3' 3" - 4' 8")	ne box): [15 pts]		W
3. B	ANK FUL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0	L WIDTH (Me (> 13') [30 pts]) m (> 9' 7" - 1;) m (> 9' 7" - 4'				ements) 1.0 m - 1.5 5 1.0 m (\$\(3 \)	(Check <i>ONL</i> Y o m (> 3*3* - 4*8*) 3*) [5 pts]	ne box); (15 pts]	0.5	W
3. B	ANK FUL	L WIDTH (Me (> 13') [30 pts]) m (> 9' 7" - 1;) m (> 9' 7" - 4'				ements) 1.0 m - 1.5 5 1.0 m (\$\(3 \)	(Check <i>ONLY</i> o m (> 3' 3" - 4' 8")	ne box); (15 pts]	0.5	W
3. B	ANK FUL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0	L WIDTH (Me (> 13') [30 pts]) m (> 9' 7" - 1;) m (> 9' 7" - 4'				ements) 1.0 m - 1.5 5 1.0 m (≤ 3*) AVERA	(Check <i>ONL</i> Y o m (> 3'3' - 4'8') 3') [5 pts] AGE BANKFULL	ne box); (15 pts]	0.5	W
3. B	ANK FUL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0	L WIDTH (Me (> 13') [30 pts) m (> 9' 7" - 4') m (> 9' 7" - 4'] 3') [25 pts] 8") [20 pts]	Thir	information	ements) 1.0 m - 1.5 1.0 m (≤ 3' AVERA	(Check <i>ONL</i> Y o m (> 3'3' - 4'8') 3') [5 pts] AGE BANKFULL mpleted	ne box): (15 pts] WIDTH (met	0.5	W
3. B	ANK FUL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT	L WIDTH (Me (> 13') [30 pts)) m (> 9' 7" - 4') m (> 9' 7" - 4' 'S] 3') [25 pts] 8') [20 pts] AND FLOO	This DDPLAIN QU FLOOL	s information	ements) 1.0 m (1.5) 1.0 m (≤ 3') AVERA Must also be convote: River Left ((Check ONLY o m (> 3'3' - 4'8') 3") [6 pts] AGE BANKFULL Impleted L) and Right (R)	ne box): (15 pts] WIDTH (met	0.5	W
3. B	ANK FUL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT	L WIDTH (Me. (> 13') [30 pts)) m (> 9' 7" - 4')) m (> 9' 7" - 4') 'S 'ARIAN ZONE PARIAN WIDTO] 3') [25 pts] 8') [20 pts] AND FLOO	This DDPLAIN QU FLOOI L R	s information	ements) 1.0 m (1.5) 1.0 m (≤ 3') AVERA Must also be conounced from the conounced from	(Check ONLY o m (>3'3'-4'8') 3') [5 pts] AGE BANKFULL Impleted L) and Right (R)	ne box): (15 pts] WIDTH (met	ers) 0.5	W
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3. B	ANK FUL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT	L WIDTH (Me. (> 13') [30 pts)) m (> 9' 7" - 4')) m (> 9' 7" - 4') 'S 'ARIAN ZONE PARIAN WIDTO	3) [25 pts] 8") [20 pts] AND FLOO	This DDPLAIN QU FLOOI L R	s information ALITY ☆I OPLAIN QUAL (Most Prec Mature Fo	ements) 1.0 m (1.5) 1.0 m (≤ 3') AVERA Must also be conounced from the conounced from	(Check ONLY on (> 3'3' - 4'8') 3") [5 pts] AGE BANKFULL Impleted L) and Right (R)	ne box): (15 pts] WIDTH (met as looking do Consen	winstream trivation Tillage or Industrial	W
3. B	ANK FUL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT	L WIDTH (Medical 130) pts (2-13") [30 pts (2-13") m (2-9" 7" - 4") m (2-9" 7" - 4") m (2-9" 7" - 4") The control of the contro	3) [25 pts] 8") [20 pts] AND FLOO	This DDPLAIN QUA FLOOI L R	s information ALITY AT DPLAIN QUAL (Most Prec Mature Fo Immature	ements) 1.0 m ≤ 1.5 1.0 m (≤ 3' AVERA Must also be cononer River Left (ITY Iominant per Bank rest, Wetland	(Check ONLY on (>3'3'-4'8')) 3") [5 pts] AGE BANKFULL Impleted L) and Right (R)	ne box): (15 pts] WIDTH (met as looking do Consent Urban o	wnstream & vation Tillage	W
3. B	ANK FULL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT	L WIDTH (Medical States of the Communication of the	3) [25 pts] 8") [20 pts] AND FLOO	This DDPLAIN QU FLOOI L R G G	s information ALITY AT DPLAIN QUAL (Most Prec Mature Fo Immature	AVERA AVERA AVERA Must also be con NOTE: River Left (ITY Iominant per Bank rest, Wetland Forest, Shrub or O II, Park, New Field	(Check ONLY on (>3'3'-4'8')) 3") [5 pts] AGE BANKFULL Impleted L) and Right (R)	ne box): (15 pts] WIDTH (met as looking do Consent Urban o Copen P	winstream trivation Tillage or Industrial	W
3. B	ANK FULL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT	L WIDTH (Me. (> 13') [30 pts)) m (> 9' 7" - 4')) m (> 9' 7" - 4') (S	3) [25 pts] 8") [20 pts] AND FLOC TH	This DDPLAIN QUI	s information ALITY AIDPLAIN QUAL (Most Prec Mature Fo Immature Field Residentia Fenced Pa	AVERA AVERA AVERA Must also be convote: River Left (ITY Iominant per Bank rest, Wetland Forest, Shrub or O II, Park, New Field asture	(Check ONLY on (> 3'3' - 4'8') 3') [5 pts] AGE BANKFULL Impleted L) and Right (R)	ne box): (15 pts] WIDTH (met as looking do Consent Urban o Copen P	winstream tr wation Tillage or Industrial asture, Row	Bar William Maria
3. B	ANK FULL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT RIP RI L R () CO CO CO Street	L WIDTH (Me. (> 13') [30 pts)) m (> 9' 7" - 4')) m (> 9' 7" - 4') 'S	3) [25 pts] 8") [20 pts] AND FLOC TH	This DDPLAIN QUI	s information ALITY AIDPLAIN QUAL (Most Prec Mature Fo Immature Field Residentia Fenced Pa	AVERA AVERA AVERA Must also be connote: River Left (ITY Iominant per Bank rest, Wetland Forest, Shrub or O II, Park, New Field asture	(Check ONLY on (> 3'3' - 4'8') 3') [5 pts] AGE BANKFULL Impleted L) and Right (R)	ne box): (15 pts] WIDTH (met as looking do Consen Urban o Crop Mining o	winstreams? wation Tillage or Industrial lasture, Row or Construction	Ma.
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3. B	ANK FULL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT RIP RI L R () CO Street CO Street CO	L WIDTH (Me. (> 13') [30 pts)) m (> 9' 7" - 4')) m (> 9' 7" - 4') CARIAN ZONE (PARIAN WIDT) (Per Bank) Wide > 10m Moderate 5-10 Narrow < 5m None MMENTS DW REGIME (am Flowing surface flow w MMENTS	AND FLOOTH	This DDPLAIN QUA FLOOI L R G G G G G G G D Evaluation) (pools (intersti	s information ALITY AT DPLAIN QUAL (Most Prec Mature Fo Immature Field Residentla Fenced Pa Check ONLY	AVERA Must also be convoted River Left (ITY) Idominant per Bank rest, Wetland Forest, Shrub or Online Park, New Field asture Dry company to the convoted River Left (ITY) Moist Dry company to the convolution of the con	(Check ONLY on (>3'3'-4'8')) 3") [5 pts] AGE BANKFULL Impleted L) and Right (R) I) Channel, isolate hannel, no water	ne box): (15 pts] WIDTH (met as looking do Consen Urban o Crop Mining o	winstreams? wation Tillage or Industrial lasture, Row or Construction	Ma.
3. B	ANK FULL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT RIP RI L R () STP CO Street Street Sinon	L WIDTH (Me. (> 13') [30 pts)) m (> 9' 7" - 4')) m (> 9' 7" - 4') CARIAN ZONE (PARIAN WIDT) (Per Bank) Wide > 10m Moderate 5-10 Narrow <5m None MMENTS OW REGIME (am Flowing surface flow w MMENTS IUOSITY (Num	AND FLOOTH	This DDPLAIN QUA FLOOI L R G G G G G G G G G G G G G G G G G G G	s information ALITY AT DPLAIN QUAL (Most Prec Mature Fo Immature Field Residentla Fenced Pa Check ONLY	AVERA AV	(Check ONLY on (>3'3'-4'8')) 3") [5 pts] AGE BANKFULL Impleted L) and Right (R) I) Channel, isolate hannel, no water	me box): (15 pts] WIDTH (met as looking do Consen Urban o Crop Mining o d pools, no for (Ephemeral)	winstreams? wation Tillage or Industrial lasture, Row or Construction	Ma
3. B	ANK FULL 4.0 meters 3.0 m - 4.0 1.5 m - 3.0 COMMENT RIP CO Sire Subs	L WIDTH (Me. (> 13') [30 pts)) m (> 9' 7" - 4')) m (> 9' 7" - 4') CARIAN ZONE (PARIAN WIDT) (Per Bank) Wide > 10m Moderate 5-10 Narrow <5m None MMENTS OW REGIME (am Flowing surface flow w MMENTS IUOSITY (Num	AND FLOOTH	This DDPLAIN QUA FLOOI L R DDPLAIN QUA FLOOI C DDPLAIN QUA FLOOI C DDPLAIN QUA FLOOI C DPLAIN QUA FLOOI C DP	s information ALITY AT DPLAIN QUAL (Most Prec Mature Fo Immature Field Residentla Fenced Pa Check ONLY	AVERA Must also be convote: River Left (interest, Wetland Forest, Shrub or Only, Park, New Field asture Moist Dry clinet) (Check OWL	(Check ONLY on (>3'3'-4'8')) 3") [5 pts] AGE BANKFULL Impleted L) and Right (R) I) Channel, isolate hannel, no water	me box): (15 pts] WIDTH (met as looking do Consen Urban o Crop Mining o d pools, no for (Ephemeral)	winstreams? wation Tillage or Industrial lasture, Row or Construction	Ma

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	012-ME
QHEI PERFORMED? - Yes No QHEI Score (If Yes, Attac	th Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
WWH Name:	•
CWH Name:	
D EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED.	
USGS Quadrangle Name: New Haven, WV-OH NRCS Soil Map P	age: NRCS Soil Map Stream Order
County: Megs Township/City: Let	ant Falls, Ohio area
MISCELLANEOUS	
Base Flow Conditions? (Y/N): \(\sum_{\text{of last precipitation: \(\frac{21}{21} \ \text{NJJ.} \) \(05 \)	
Photograph Information: Photograph Information: Photograph Information:	
Elevated Turbidity? (Y/N): Canopy (% open):	
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. a	and attach results) Lab Number:
Field Measures: Temp (*C)Dissolved Oxygen (mg/l)pH (S.U.)	Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:	
· · · · · · · · · · · · · · · · · · ·	
Additional comments/description of pollution impacts: BIOTIC EVALUATION	
Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional ID number. Include appropriate field data sheets from the Pri	
Fish Observed? (Y/N) Salamanders Observed? (Y/N)	Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebra	tes Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM	REACH (This must be completed):
include important landmarks and other features of interest for site evaluation a	· · · · · · · · · · · · · · · · · · ·
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Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION AMPOUNT SITE NUMBER S SITE NUMBER S LENGTH OF STREAM REACH (#) 100 DATE (2/1/05 SCORER KOOSE) NOTE: Complete All Items On This Form	ATLONG	RIVER	CODE RIVER MILE _	
	ural channel Ørec a, ponding	OVERED TRECOV	VERING TO RECENT OR NO REC	COVERY
BLDR SLABS [16 pts]	nt substrate types found (M. RCENT TYPE IV)	ax of 8). Final metric so SILT (3 pt) .EAF PACK/WOODY DO FINE DETRITUS (3 pts CLAY or HARDPAN (0) MUCK (0 pts) ARTIFICIAL (3 pts)	ore is sum of boxes A & B. PERCENT 60 EBRIS (3 pts)	HHEI Metric Points Substrate Max = 40
3. BANK FULL WIDTH (Measured as the	culverts or storm water pip	es) (Check ONLY one 5 cm - 10 cm [15 pts < 5 cm [5 pts] NO WATER OR MOIS MAXIMUM POO	e box) CHANNEL [0 pts] L DEPTH (centimeters): DNLY one box):	Pool Depth Max = 30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9'.7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9'.7" - 4'.8") [20 pts] COMMENTS	Q*	> 10 m - 15 m (> 3' 3" ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BAN	0.4	Max=30
RIPARIAN ZONE AND FLOODS	LAIN QUALITY \$NOT		ight (R) as looking downstreamsት	
RIPARIAN WIDTH L R (Per Bank) Wide > 10m Moderate 5-10m Narrow <5m None COMMENTS	Mature Forest Immature Fore Field	inant per Bank) , Wetland est, Shrub or Old ark, New Field	Conservation Tillage Urban or Industrial Open Pasture, Row Crop Mining or Construction	n
Stream Flowing Subsurface flow with isolated por COMMENTS Stry 1, 11	ls (Interstitial) E Flow	Moist Channel, n	i, isolated pools, no flow (Intermitted to water (Ephemeral)	n()
SINUOSITY (Number of bends in None	er 61 m (200 ft) of channel) 1 0 1 5 Moderate (2 (4/100 ft)	(Check ONLY one bo	☐ 3.0 ☐ >3	v10a n;

DOITIONAL STREAM INFORMATION (This Information M.	ust Also be Completedi:
QHEI PERFORMED? - 1 Yes 1 No QHEI Scor	re (If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
WWH Name:	
CWH Name:	
	Distance from Evaluated Stream
	THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
	NRCS Soil Map Page: NRCS Soil Map Stream Order
univ: Muga Country	Township/City: Letart Falls, Ohio area
MISCELLANEOUS	
se Flow Conditions? (Y/N): Date of last precipitation	on: 11-29-05 Quantity: unmann
olograph Information:	
evated Turbidity? (Y/N): Canopy (% open): _	99
	(Note lab sample no. or id. and attach results) Lab Number:
	g/l)pH (S.U.) Conductivity (µmhos/cm)
_	If not, please explain:
we anapping reach representance or the sheam (1714)	ппот. реазе скраят.
BIOTIC EVALUATION arformed? (Y/N):	. Voucher collections optional. NOTE, all voucher samples must be (abaled with the field data sheets from the Primary Headwater Habitat Assessment Manual)
sh Observed? (Y/N) Voucher? (Y/N) Salama	anders Observed? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N)
omments Regarding Biology:	
Simonto regarding Goody.	
DRAWING AND NARRATIVE DESCRI	IPTION OF STREAM REACH (This <u>must</u> be completed):
finclude important landmarks and other features of ini As	Iterest for site evaluation and a narrative description of the stream's location
73	Annual Control of the
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ChieFA Primary Headwater Habitat Evaluation Form

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	SH LENGT DATE NOT	H OF STREAM REACH (ft) 12-1-05 SCORER POWN E: Complete All Items On This Form AM CHANNEL NAT	M-S 2 RIVER BASIN LAT. LONG. RIVE COMMENTS CITALING WETTE 1 - Refer to "Field Evaluation Manual for Coural Channel Precovered Recovered Recover	nd Bm-w3 Ohio's PHWH Streams* for instructions
	1.	(Max of 32). Add total number of signification of the control of t	MUCKTO DISTANTIFICIAL [3 pbs]	DEBRIS [3 pts] DEBRIS [3 pts] DEBRIS [3 pts] DEBRIS [3 pts]
			45 cm [5 pts] NO WATER OR MOI MAXIMUM PO average of 3-4 measurements (Check > 1.0 m - 1.5 m (> 3', 3') [5 pt]	Max = 30 ST CHANNEL [0 pts] OL DEPTH (centimeters): ONLY one box): Bankfull Width
		RIPARIAN WIDTH (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Every Stream Flowing) Subsurface flow with isolated por COMMENTS SINUOSITY (Number of bends in None) None 0.5	_	Right (R) as looking downstream to L R Conservation Tillage Urban or industrial Open Pasture, Row Crop Mining or Construction
,	Øε	STREAM GRADIENT ESTIMATE lat (0.5 ft/100 ft)	☐ Moderate p n/100 h) ☐ Moderate to	Severe (10 #/100 H)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed): \$\$BM - 512\$
QHEI PERFORMED? - Tyes No QHEI Score (If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)
WWH Name: Distance from Evaluated Stream
CWH Name: Distance from Evaluated Stream
EWH Name: Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: New Haven, UV-OH NRCS Soil Map Page: NRCS Soil Map Stream Order
county: meigs County township/city: Letart Jalle, Ohio area
MISCELLANEOUS
Base Flow Conditions? (Y/N): Y Date of last precipitation: 11-29-05 Quantity: www.
Photograph Information: Y-Photo 76-Concord 1 are con
Elevated Turbidity? (Y/N): N Canopy (% open): \(\frac{\fin}{\finte}}}}}}}}{\frac{\fir\f{\frac{\fir}}}{\fra
Were samples collected for water chemistry? (Y/N): Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:
BIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations, Voucher collections optional, NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Comments Regarding Biology:
DRAMMIC AND NADDATRIE DESCRIPTION OF STREAM DEACH (This must be completed):
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed):
Include important landmarks and other features of Interest for site evaluation and a narrative description of the stream's location New Tallow Felco
Stream extend Step 6lope
FLOW BFWE 15'
- MUCK, SIH BFW=15' Heep Slope
New Fallow (Field