Functions and Values Assessment

for

ALABAMA STAMP

Town of Alabama
Genesee County, New York

for

Conservation Connects

EARTH DIMENSIONS, INC.
Soil & Hydrogeologic Investigations • Wetland Delineations
1091 Jamison Road • Elma New York 14059
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July 13, 2010
EDI Project Code: W9A10b

REPORT SUMMARIZING
THE RESULTS OF
A FUNCTIONS AND VALUES ASSESSMENT OF

ALABAMA STAMP

Prepared by

EARTH DIMENSIONS, INC.
1091 JAMISON ROAD
ELMA, NEW YORK 14059

for

CONSERVATION CONNECTS
5787 SALT WORKS ROAD
MIDDLEPORT, NEW YORK 14105

DATE PREPARED

July 13, 2010

Project Code: W9A10b

PROJECT INFORMATION

Project Name ..... Alabama STAMP

Street Address ..... Southwest of Lewiston Road & Allegany Road Intersection

Town ..... Alabama

County ..... Genesee

State ..... New York

Latitude/Longitude (NAD83) ..... 43.08903° N, 78.40360° W

Investigation Area ..... 1,340.37± Acres

USGS 7.5 Minute Topographical Map ..... Akron Quadrangle

Consultant ..... Earth Dimensions, Inc.
1091 Jamison Road
Elma, New York 14059

Point of Contact ..... Scott Livingstone
(716) 655-1717

Engineer ..... Conservation Connects
205 St. Paul Street, Suite 500
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Waterway ..... Whitney Creek

Hydrologic Unit Code 04130001

ACKNOWLEDGMENTS

Conservation Connects has retained Earth Dimensions, Inc. (EDI) to complete a wetland functions and values assessment for the Alabama STAMP located southwest of the Lewiston Road & Allegany Road intersection in the Town of Alabama, County of Genesee, State of New York. EDI would like to thank Clark Patterson Lee Design Professionals for their assistance with this project. Clark Patterson Lee Design Professionals provided the drafting services required to prepare the baseline map included in this report. EDI would also like to thank Copy Market, Inc. for providing the duplicating and binding services.

Duplicated onto recycled paper.

EXECUTIVE SUMMARY

Genesee County Economic Development Center (GCEDC) has proposed the development of a 1,340.37± acre site located southwest of the Lewiston Road & Allegany Road intersection in the Town of Alabama, County of Genesee, State of New York. Conservation Connects, as a consultant to GCEDC has retained Earth Dimensions, Inc. (EDI) to complete a wetland functions and values assessment that would allow the project team to properly evaluate the quality of the wetlands within the project area and to determine wetland avoidance and mitigation measures.

EDI applied methodology specified both the The Highway Methodology Workbook *Supplement*; Wetland Functions and Values; *A Descriptive Approach* published by the U.S. Army Corps of Engineers, New England District, 1987 and the Delaware Rapid Assessment Procedure *Version 5.1*, Jacobs, A.D. 2007. Delaware Department of Natural Resources and Environmental Control, Dover, DE.

EDI identified fifty-two (52) wetland areas within the Alabama STAMP. Included within those 52 wetland areas are 6 wetland vegetative community types including

1. Palustrine Shrub Swamp
2. Palustine Deep Emergent Marsh
3. Palustine Shallow Emergent Marsh
4. Palustrine Reed Canary Grass/ Phragmites Marsh
5. Palustrine Forested Floodplain Wetland
6. Palustrine Forested Hardwood Swamp

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SECTION I
INTRODUCTION

GCEDC has proposed the development of a 1,340.37± acre site located southwest of the Lewiston Road & Allegany Road intersection, in the Town of Alabama, County of Genesee, State of New York. The project has been given the name Alabama STAMP and is located on the USGS 7.5 minute quadrangle map indexed as Akron (DeLorme 2002) (Figure 1).

Conservation Connects, as a consultant to GCEDC has retained Earth Dimensions, Inc. (EDI) to complete a wetland Functions and Values Assessment study at this site. The investigation utilized data collected in the field during the course of the Federal Wetland Delineation and the Threatened and Endangered Species Study.

EDI has performed a wetland delineation study at the site under guidelines specified by The Highway Methodology Workbook *Supplement*; Wetland Functions and Values; *A Descriptive Approach* published by the U.S. Army Corps of Engineers, New England District, 1987 and the Delaware Rapid Assessment Procedure *Version 5.1*, Jacobs, A.D. 2007. Delaware Department of Natural Resources and Environmental Control, Dover, DE. The purpose of this report is to present EDI's methods, results and conclusions with respect to the Alabama STAMP project site.

SECTION II
SITE DESCRIPTION

Alabama STAMP is comprised of a series of land parcels with various owners. The investigation area has a total acreage of 1,340.37± acres and is outlined on Figure 1. Two roads, Patterson Road (abandoned) and Crosby Road are located within the project boundaries. The investigation area is depicted on the USGS Topographical Map in Attachment A (Figure 1).

The natural topography of the Alabama STAMP site is a flat to moderately sloping landscape, with the steeper slopes associated with the banks of Whitney Creek. The upland within the project area is comprised of successional shrubland, successional northern hardwood, cropland/ field crop, successional old field, and successional southern hardwood communities. The wetland areas are comprised of floodplain forest, reed canary/phragmites marsh, shallow emergent marsh, shrub swamp, hardwood swamp, and deep emergent marsh communities. The vegetative communities of the investigation area are described according to *Ecological Communities of New York State* (Edinger et al. 2002).

SECTION III
METHODS

Step 1

EDI collected wetland data during the wetland delineation field work and applied methodology specified by the *1987 Corps of Engineers Wetlands Delineation Manual* and *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* while performing the delineation of Federal wetlands. A total of sixty three (63) data points were used to characterize the site.

In addition, during the threatened and endangered species studies, EDI collected data pertaining to wildlife habitat, quality of wetlands and overall site conditions.

This collection of data was the basis of the functions and values assessment. The majority of the field work was conducted between March 24 and May 3, 2010.

Step 2

EDI utilized the both the The Highway Methodology Workbook *Supplement*; Wetland Functions and Values; *A Descriptive Approach* published by the U.S. Army Corps of Engineers, New England District, 1987 and the Delaware Rapid Assessment Procedure *Version 5.1*, Jacobs, A.D. 2007. Delaware Department of Natural Resources and Environmental Control, Dover, DE. EDI utilized three ecologists and two soil scientists to examine the collected data, summarize the wetlands based on cover type and disturbance, and filled out the data sheets from the two wetland assessment methods noted above.

SECTION IV
RESULTS AND CONCLUSIONS

Earth Dimensions, Inc. (EDI) has completed a functions and values assessment of the wetlands found within the Alabama STAMP site located in the Town of Alabama, County of Genesee, State of New York. The field investigations were conducted by two Soil Scientists and three Wetland Ecologists.

EDI identified 6 major wetland types within the Alabama STAMP. An assessment of each community type and major features found within each are described below.

1. PSS- Palustrine Shrub Swamp

General Description:

The shrub swamp communities within Alabama STAMP are generally medium quality wetland areas. The successional nature of the shrub swamp is evident with these areas. They exhibit seasonal inundation. These areas likely draw down or dry out completely during summer months. Scattered pioneer tree species occur within these areas. Dominant shrub species found were mostly willows and dogwoods. Honeysuckle, multiflora rose and buckthorn were prevalent along the fringes of the wetland areas and within the small upland inclusions often present within shrub swamps.

According to the Highway Methodology, the principal functions and values provided by the wetlands at the STAMP site with this vegetative cover type include: floodflow alteration, sediment and toxicant retention, nutrient removal and wildlife habitat. Secondary functions provided include groundwater recharge/discharge and potential habitat for threatened or endangered species.

Wetlands 2, 8, 20: are higher quality areas within larger wetland complexes. The shrubby portions are small portions of the total area, likely occurring in less successional areas of the wetlands along wood edges to farming activities.

Wetlands 48, 49, 50, 52: are medium to high quality areas. These areas were all located within Parcel 12. Parcel 12 is comprised of successional shrubland with shrub swamp inclusions. The shrub layer is very dense throughout. The wetlands are relatively isolated from each other. Dogwoods and willows were more prevalent within the interior to Parcel 12, while the edge wetlands had a higher degree of invasive shrubs such as honeysuckle, multiflora rose and buckthorn.

Wetlands 12, 13, 14, 17, 18, 19, 26, 30, 31, 34, 38, 39, 46 are considered medium to low quality. Many of these wetland areas were identified within hedgerows adjacent to farming, along roadsides, adjacent to homes and within the drainageways that cross actively farmed areas. The wetlands contained mostly dogwoods, honeysuckle and willows. There was a high degree of disturbance noted and including debris, periodic mowing, tractor ruts, etc. Many of these areas also contained a developed herbaceous layer consisting mostly of reed canary grass and cattails. Many of the hedgerows contained high concentrations of grape vines. Hydrology appeared to be stressed and inconsistent with naturally occurring wetlands. Soils found were poorly to very poorly drained. The majority of soil textures found were nearly level with silty clay textures. Portions of the channels and floodplains showed minor erosion from past high volume storm events. Some invasive species were present throughout.

Data Points taken within this community type:

D16, 19, 39, 47, 51

Wetlands with this community within:

Wetlands 2, 8, 12, 13, 14, 17, 18, 19, 20, 26, 30, 31, 34, 38, 39, 46, 48, 49, 50, 52

Dominant Species found within this community type:

grey dogwood (*Cornus racemosa*), silky dogwood (*Cornus amomum),* green ash (*Fraxinus pennsylvanica),* reed canary grass (*Phalaris arundinacea),* sensitive fern (*Onoclea sensibilis),* wild cucumber (*Echinocytis lobata),* crooked stem aster (*Aster prenanthoides),* aster (*Aster* spp.), bebb willow (*Salix bebbiana),* fowl bluegrass (*Poa palustris),* fringed sedge (*Carex crinita),* box

elder (*Acer negundo),* crack willow (*Salix fragilis),* tartarian honeysuckle (*Lonicera tatarica),* skunk currant (*Ribes glanulosum),* creeping jennie (*Lysimachia nummularia),* marsh marigold (*Caltha palustris),* sedge (*Carex* spp.), white willow (*Salix alba),* eastern cottonwood (*Populus deltoides),* broad leaf cattail (*Typha latifolia)* and summer grape (*Vitis aestivalis).*

PSS- Palustrine Shrub Swamp
Representative photos of this community type:

2. PEM Palustrine Shallow Emergent Marsh

General Description:

The shallow emergent marsh communities within Alabama STAMP were generally medium quality wetland areas. A majority of these areas were small isolated pockets of emergent vegetation within or adjacent to farmed areas. These areas contained varying amounts of standing water. The vegetative layer found consisted of typical emergent species such as cattails, sedges, various wetland grasses and rushes. Species diversity was minimal and often these wetlands were dominated by two or three species. A majority of these areas were mapped as extensions of the wooded wetlands as they passed though the actively farmed areas. These areas are often mown or disrupted by farming activities. Soil structure associated with these areas was massive, likely due to farming (plowing, etc.).

According to the Highway Methodology, the principal functions and values provided by the wetlands at the STAMP site with this vegetative cover type include: nutrient removal and wildlife habitat. Secondary functions provided include floodflow alteration and sediment/toxicant retention.

Data Points for this community:

D15, D26, 30, 34, 38, 40, 46, 49, 53, 54

Wetlands with this community within:

Wetlands 1, 4, 7, 10, 15, 23, 25, 26, 32, 34, 35, 39, 40, 41, 43, 44, 45, 46, 51

Dominant Species found in this community type:

water plantain (*Alisma plantago-aquatica),* staghorn sumac (*Rhus typhina),* multiflora rose (*Rosa multiflora),* common burdock (*Arctium minus),* reed canary grass (*Phalaris arundinacea),* Pennsylvania smartweed (*Polygonum pensylvanicum),* fowl bluegrass (*Poa palustris),* water knotweed (*Polygonum amphibium emersum),* black willow (*Salix nigra),* tartarian honeysuckle (*Lonicera tatarica),* silky dogwood (*Cornus amomum),* common reed (*Phragmites australis),* Queen Anne's lace (*Daucus carota),* annual bluegrass (*Poa annua),* bebb willow (*Salix bebbiana),* white clover (*Trifolium repens),* silky willow (*Salix sericea),* Canada goldenrod (*Solidago*

canadensis), goldenrod (*Solidago* spp.), small spike false nettle (*Boehmeria cylindrical),* white ash (*Fraxinus americana),* green ash (*Fraxinus pennsylvanica),* grey dogwood (*Cornus racemosa*), aster (*Aster* spp.), box elder (*Acer negundo),* white willow (*Salix alba),* summer grape (*Vitis aestivalis),* narrow leaf cattail (*Typha angustifolia),* and giant goldenrod (*Solidago gigantea).*

PEM Palustrine Shallow Emergent Marsh
Representative photos of this community type:

3. PEM Palustrine Reed Canary/ Phragmites Marsh

General Description:

The reed canary/Phragmites marsh communities within Alabama STAMP were generally medium to low quality wetland areas. A majority of these areas were small isolated pockets of reed canary grass or *Phragmites* adjacent to roadways, development and farmed areas. These areas contained varying amount of standing water. The vegetative layer included monocultures of invasive plant species reed canary grass and/or *Phragmites*, often with few other species present. A majority of these areas were identified as extensions of the wooded wetlands as they passed though the actively farmed areas or in disturbed areas adjacent to development. These areas are often mown or disrupted by farming activities. Soil structure associated with these areas was somewhat disturbed, likely due to farming (plowing, etc.).

According to the Highway Methodology, the principal functions and values provided by the wetlands at the STAMP site with this vegetative cover type include: nutrient removal and wildlife habitat. Secondary functions provided include flood flow alteration and sediment and toxicant retention.

Data Points for this community:

D13, D27

Wetlands with this community within:

Wetlands2, 4, 11, 16, 20, 24, 25, 26, 34, 39, 46, 47, 51

Dominant Species found in this community type:

eastern cottonwood (*Populus deltoides),* silky dogwood (*Cornus amomum),* reed canary grass (*Phalaris arundinacea),*common reed (*Phragmites australis),* green ash (*Fraxinus pennsylvanica),* tartarian honeysuckle (*Lonicera tatarica),*fowl bluegrass (*Poa palustris),* goldenrod (*Solidago* spp.) and riverbank grape (*Vitis riparia).*

PEM Palustrine Reed Canary/ Phragmites Marsh
Representative photos of this community type:

4. PEM Palustrine Deep Emergent Marsh

General Description:

The deep emergent marsh communities within Alabama STAMP are generally medium quality wetland areas. A majority of these areas are manmade farm ponds found within fragmented woodlots. These areas contain permanent standing water. The vegetative layer found often

consisted of sparse coverage along the outer edges of these areas. Duckweed was prevalent throughout many of these areas. There was evidence of debris in wetland 27. The wetlands likely contain high nutrient levels due to adjacent faming activities. Soil structure associated with these areas was massive, likely due to their disturbed nature.

According to the Highway Methodology, the principal functions and values provided by the wetlands at the STAMP site with this vegetative cover type include: floodflow alteration, sediment and toxicant retention, nutrient removal and wildlife habitat. Secondary functions provided include potential fish and shellfish habitat.

Data Points taken within this community type:

D48

Wetlands with this community within:

Wetlands 8, 27, 42

Dominant Species found in this community type:

soft rush (*Juncus effusus),* cattails (*Typha* spp.), duckweed (*Lemna minor),* fowl bluegrass (*Poa palustris),* silky dogwood (*Cornus amomum),* and bebb willow (*Salix bebbiana).*

PEM Palustrine Deep Emergent Marsh
Representative photos of this community type:

PEM Palustrine Deep Emergent Marsh
Representative photos of this community type:

5. PFO Palustrine Floodplain Forest

General Description:

The floodplain forest wetland communities within Alabama STAMP are generally high quality wetland areas. They exhibit seasonal inundation and water conveyance. The channels were fairly narrow (roughly 1-5' wide). Channelized flow is present during higher velocities flows, post storm events. The channels showed a low density of vegetation in the spring and likely have a higher density when the channels draw down during drier months. Vegetation present within the channels were mostly herbaceous species, tolerant of periodic flooding and high water velocities. Areas along the channels contained a high degree of shade providing trees and shrubs. Standing water was noted within the floodplain forest during the investigation. The soils found were poorly to very poorly drained. The major soils found were nearly level with silty clay and loamy till textures. Portions of the channels and floodplains showed minor erosion from past high volume storm events. Some invasive species present.

These wetlands are high quality areas with interconnecting, relatively undisturbed corridors to the

west and are likely part of the same wetland system. The areas that were considered floodplain are adjacent to channelized flow features, and found within the relatively flat portions of the site. The floodplain areas adjacent to the channels varied in width. The floodplains found on site were generally undisturbed by human activities.

According to the Highway Methodology, the principal functions and values provided by the wetlands at the STAMP site with this vegetative cover type include: floodflow alteration, nutrient removal, wildlife habitat and potential habitat for threatened or endangered species. Secondary functions provided include groundwater recharge/discharge, sediment and toxicant retention and sediment/ shoreline stabilization.

Data Points taken within this community type:

D6, 18, D28

Wetlands with this community within:

Wetlands 2, 20, 22 (high quality wetlands)

Dominant Species found in this community type:

eastern cottonwood (*Populus deltoides),* red maple (*Acer rubrum),* American hophorn beam *(Carpinus caroliniana),* pin cherry (*Prunus pennsylvanica),* green ash (*Fraxinus pennsylvanica),* American beech (*Fagus grandifolia),*yellow birch (*Betula allegheniensis),* American elm (*Ulmus americana),* eastern hemlock (*Tsuga canadensis),* Ostrich Fern (*Matteuccia struthiopteris*), sensitive fern (*Onoclea sensibilis),* fowl bluegrass (*Poa palustris),* black ash (*Fraxinus nigra),* hawthorn (*Crataegus* spp.), large leaf avens (*Geum macrophyllum),* giant goldenrod (*Solidago gigantea),* fowl manna grass (*Glyceria striata),* summer grape (*Vitis aestivalis),*box elder (*Acer negundo),* tartarian honeysuckle (*Lonicera tatarica),* silky dogwood (*Cornus amomum),* rough avens (*Geum lacinatum),* garlic mustard (*Alliaria petiolata*) and riverbank grape (*Vitis riparia).*

PFO Palustrine Floodplain Forest
Representative photos of this community type:

6. PFO Palustrine Hardwood Swamp
General Description:

The hardwood swamp communities within Alabama STAMP are generally high quality wetland areas. They exhibit seasonal inundation and a dominant layer of deciduous hard woods. Occasional occurrences of evergreen species such as eastern hemlock *(Tsuga canadensis)* were noted. These areas, true to their definition, demonstrate a mature treed canopy, wetland hummocks, natural drainageways and a high diversity of species. The corridors within the wetlands have a high degree of wetland and upland mosaic due to the undulating topography of the area. Many of the uplands

found were islands within the wetlands. The soils found were poorly to very poorly drained. The major soil textures found were nearly level with silty clay textures.

Wetlands 1, 2, 6, 8, 9, 20 and 22 are higher quality areas with interconnecting, relatively undisturbed corridors to the west, likely part of the same wetland system. The easterly parcels exhibit wetlands that are more segmented and the corridors that remain across the farmed areas are narrow and at times maintained, mown or utilized as for agricultural purposes. Outside of the hardwood swamp areas, many of these linear connections contain high degrees of invasive species such as reed canary grass (*Phalaris arundinacea)* and Phragmites (*Phragmites australis).* The fringes of these wetland areas as they abut actively farmed areas have varying degrees of invasive plant species and straight edged wood lots.

Wetlands 21, 27, 28, 29, 36, 37, 42 are medium to high quality wetlands. These areas are surrounded on at least two sides by active farming activities. These areas exhibit some cultural disturbance including past logging efforts (including some trails and tire ruts) and farm dumping (including spoils, old equipment). These areas have a high degree of edge effect invasive species and straight edged wood lots.

Wetlands 5, 33, 51 are medium quality wetlands. These wetlands are surrounded by active faming activities on 3 or more sides. These areas are more isolated in relation to other woodlots on-site. They were likely avoided during farm clearing due wetness of the soil. Wetland 33 occurs at the high point in the land on parcel 6. It contains a higher degree of invasive species and shows signs of past disturbance. Wetland 51 lies within a hedge row between parcels 17 and 18. Wetland 5 contains a high degree of invasive species along with pioneer tree species such as eastern cottonwood (*Populus deltoides).*

According to the Highway Methodology, the principal functions and values provided by the wetlands at the STAMP site with this vegetative cover type include: floodflow alteration, sediment and toxicant retention, nutrient removal, wildlife habitat and potential habitat for threatened or endangered species. Secondary functions provided include groundwater recharge/discharge, educational/scientific value and visual quality/ aesthetics.

Data Points taken within this community type:

D2, 7, 8, 10, 11, 12, 22, 24, 32, 41, 44, 57, 60

Wetlands with this community within:

Wetlands 1, 2, 6, 8, 9, 20 and 22 (highest quality wetlands)

Wetlands 21, 27, 28, 29, 36, 37, 42 (medium-high quality wetlands)

Wetlands 5, 33, 51 (medium quality wetlands)

Dominant Species found in this community type:

white willow (*Salix alba),* green ash (*Fraxinus pennsylvanica),* tartarian honeysuckle (*Lonicera tatarica),* grey dogwood (*Cornus racemosa),* fowl bluegrass (*Poa palustris),* summer grape (*Vitis aestivalis),* silver maple *(Acer saccharinum),* eastern cottonwood (*Populus deltoides),* American hophorn beam *(Carpinus caroliniana),* northern spicebush (*Lindera benzoin),* pin cherry (*Prunus pennsylvanica),* eastern hophorn beam *(Ostrya virginiana),* fringed sedge (*Carex crinita),* common frog bit *(Hydrocharis morsus-ranae),* poison ivy *(Toxicodendron radicans),* swamp white oak *(Quercus bicolor),* cockspur hawthorn *(Crataegus crus-galli),* shagbark hickory *(Carya ovata),* tartarian honeysuckle (*Lonicera tatarica),* eastern woodland sedge (*Carex blanda),* Pennsylvania sedge (*Carex pennsylvanica),* fineleaf sheep fescue (*Festuca filiformis),* Virginia strawberry (*Fragaria virginiana),* shellbark hickory (*Carya laciniosa),* American elm (*Ulmus americana),* giant goldenrod (*Solidago gigantea),* water purslane (*Ludwigia palustris*), Canada clearweed (*Pilea pumila),* multiflora rose (*Rosa multiflora*), silky dogwood (*Cornus amomum),* cinnamon fern (*Osmunda cinnamomea),* rattlesnake mannagrass (*Glyceria canadensis*), white snake root (*Eupatorium rugosum),* fowl manna grass (*Glyceria striata),* large leaf avens (*Geum macrophyllum),* blue wood aster (*Aster cordifolius),* heal all (*Prunella vulgaris),* red maple (*Acer rubrum),* yellow birch (*Betula allegheniensis),* eastern hemlock (*Tsuga canadensis),* American beech (*Fagus grandifolia),* New York fern *(Thelypteris noveboracensis),* grey dogwood *(Cornus racemosa*), upright sedge *(Carex stricta*), dogtooth violet *(Erythronium americanum),* rough avens (*Geum lacinatum),* soft rush (*Juncus effusus),* poison ivy (*Toxicodendron radicans),* quaking aspen *(Populus tremuloides),* bebb willow (*Salix bebbiana),* marsh marigold (*Caltha palustris),* wood (*Anemone quinquefolia),* herb Robert (*Geranium robertianum),* field horsetail (*Equisetum*

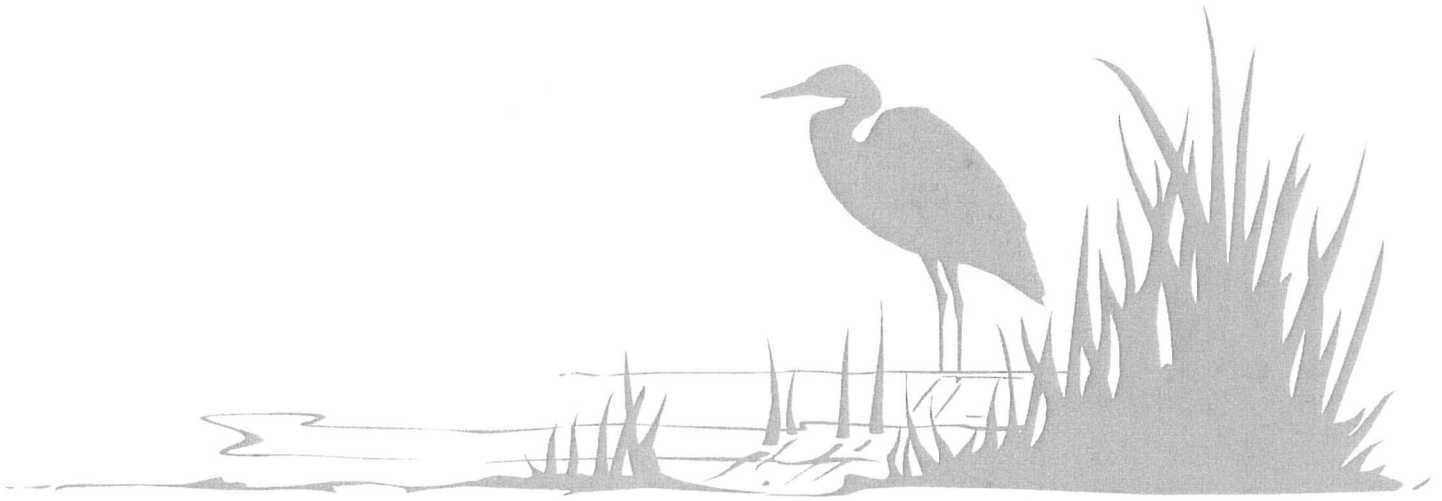
arvense), white ash (*Fraxinus americana),* pussy willow (*Salix discolor),* hawkweed (*Hieracium* spp.), goldenrod (*Solidago* spp.), common dandelion (*Taraxacum officinale),* large leaf avens (*Geum macrophyllum),* freeman's maple (*Acer freemanii),* common red raspberry (*Rubus idaeus)* and giant goldenrod (*Solidago gigantea).*

PFO Palustrine Hardwood Swamp
Representative photos of this community type:




A map which depicts the site boundaries and the location of all observation points established during the field survey is included as Figure 5 in Attachment A of this report. Data forms for the Highway Methodology and the Rapid Assessment method are included as Attachments B and C respectively. Attachment D consists of the General Wetland Assessment Chart outlining each individual wetland. Attachment E notes the references used during the preparation of this report and during the field investigation. Attachment F provides the names, addresses and phone numbers of the survey personnel involved in the wetland delineation study.

Alabama STAMP
Functions and Values Assessment



ATTACHMENT A
Figures

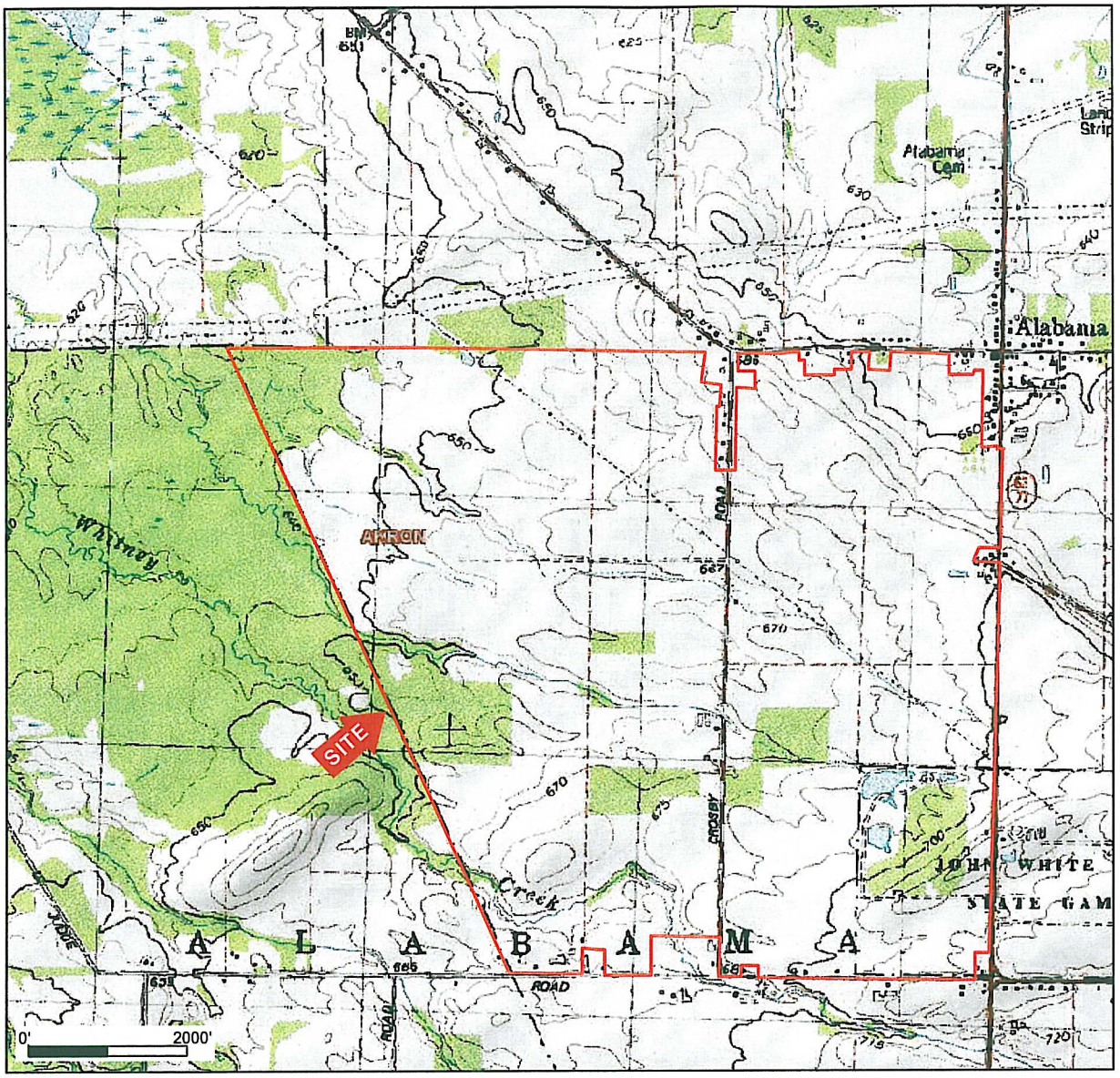


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Figure 1: USGS 7.5 Minute Topographical Map
Akron Quadrangle/2002 DeLorme

Alabama STAMP
Town of Alabama, Genesee County, New York

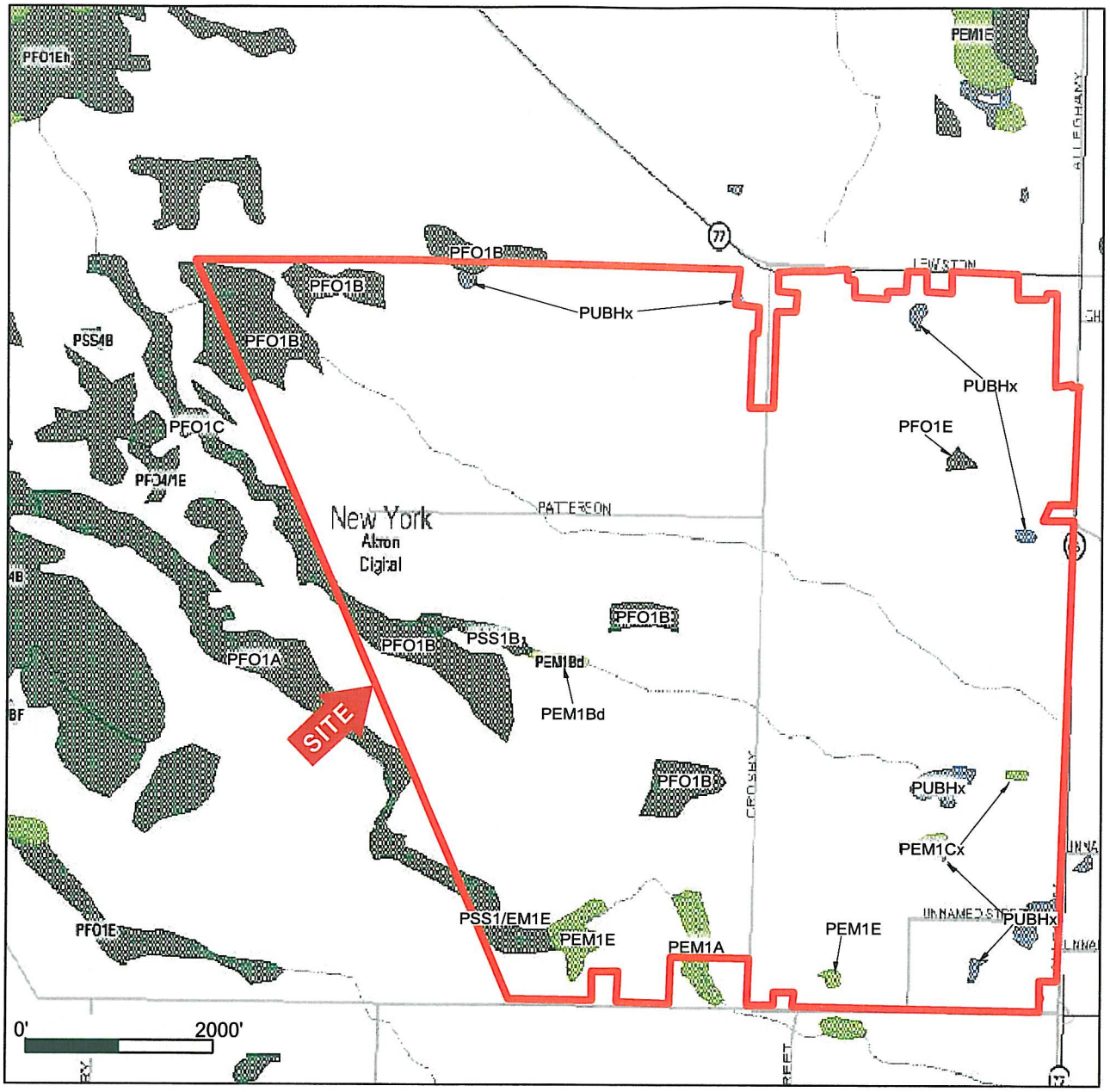

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Figure 2: National Wetlands Inventory Map
http://wetlandsfws.er.usgs.gov
Site visited 2/4/2010

Alabama STAMP
Town of Alabama, Genesee County, New York

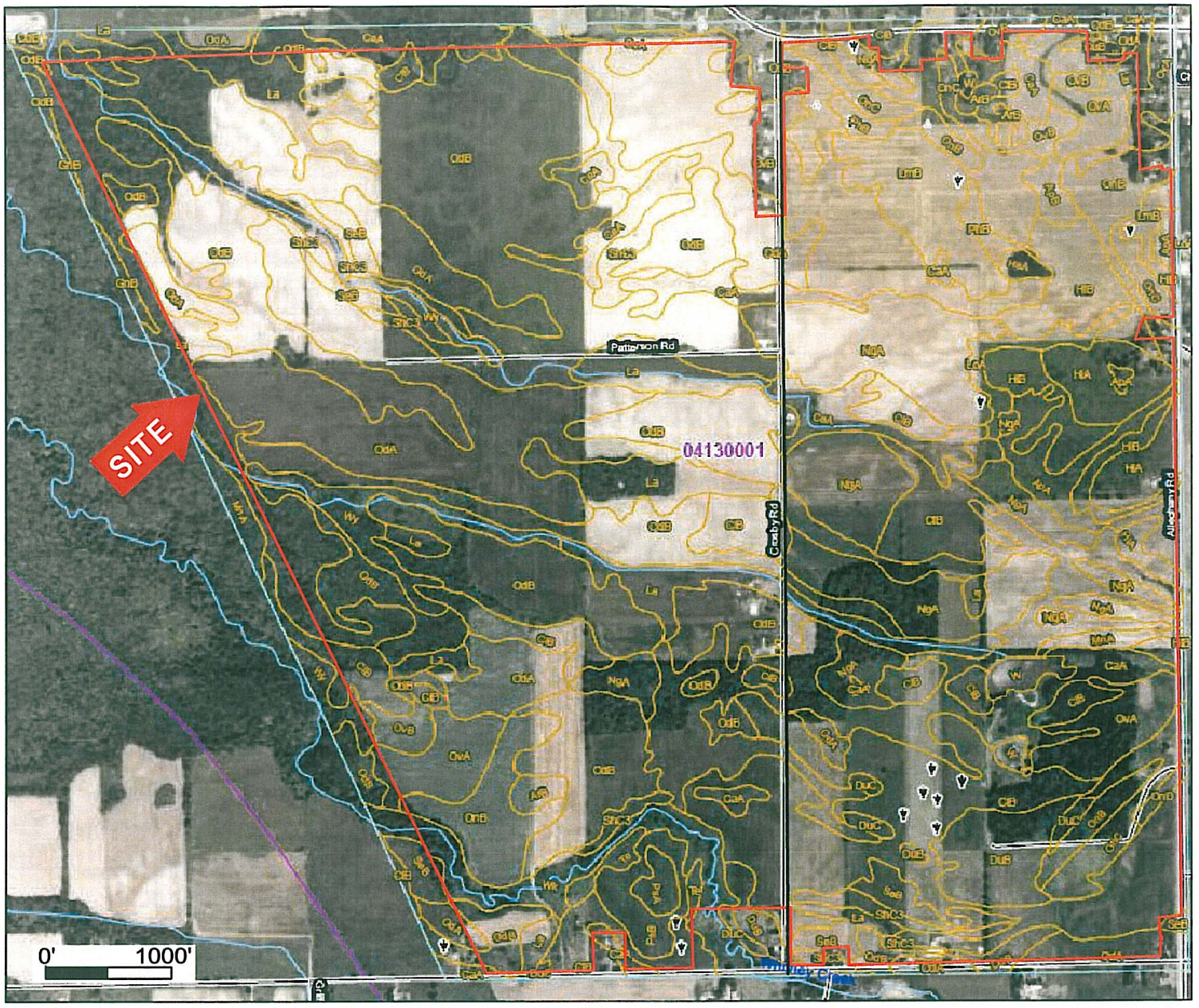

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Figure 3: SCS Genesee County Soil Survey Map
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
Site visited: 2/4/2010

Alabama STAMP
Town of Alabama, Genesee County, New York

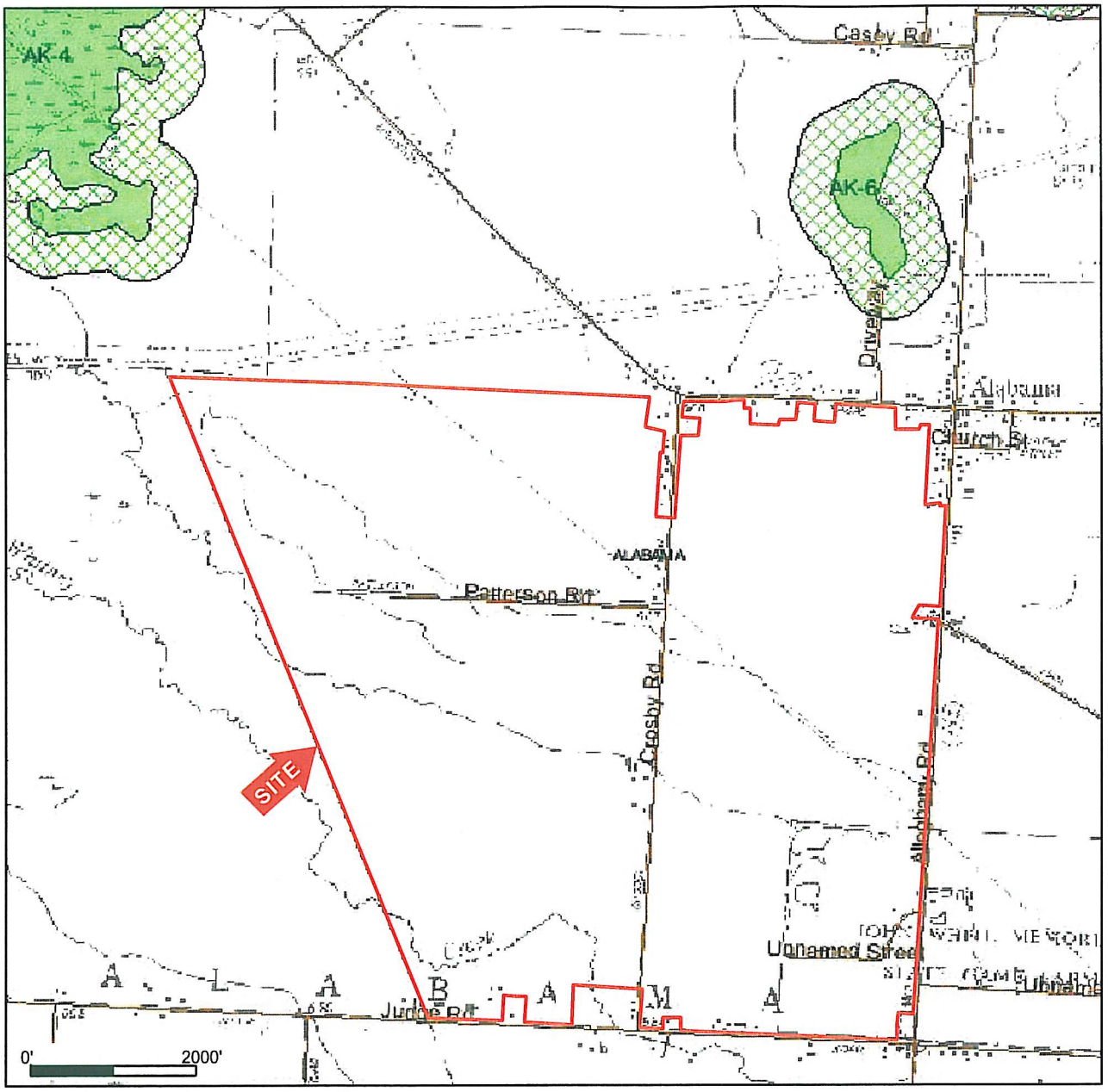

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Figure 4: NYSDEC Environmental Resource Mapper
http://www.dec.ny.gov/imsmaps/ERM/Viewer.htm
Site visited: 2/4/2010

Alabama STAMP
Town of Alabama, Genesee County, New York

Alabama Stamp

Figure 5: Data Point Loation Map

Town of Alabama — Genesee County, New York

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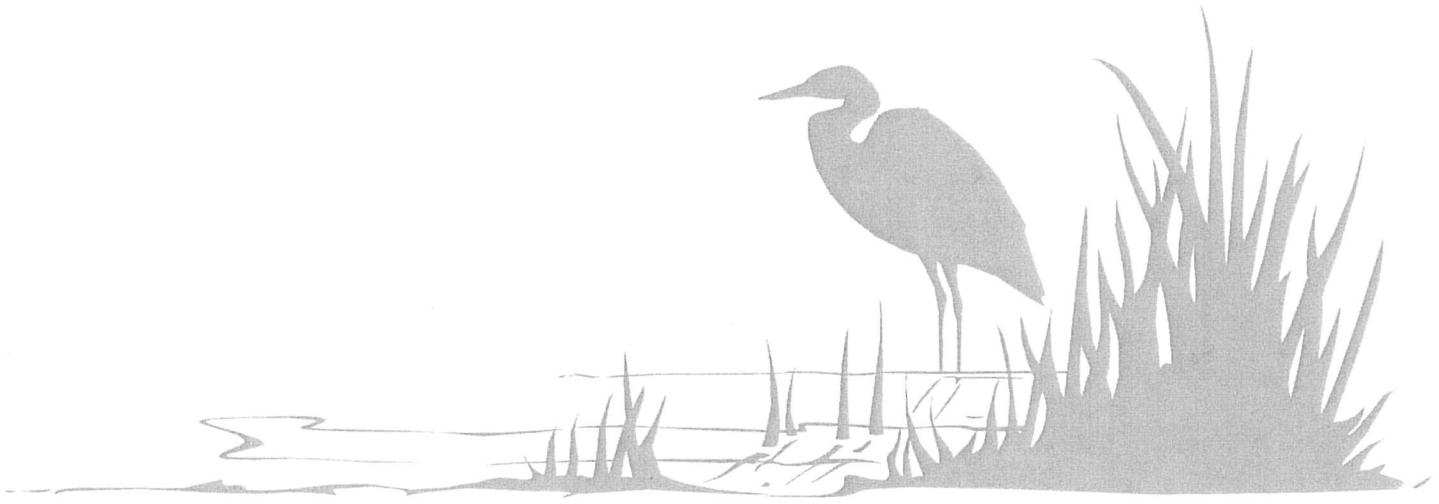
Scale: Not To Scale
Map Date: June 16, 2010/ JMC for EDI Revised:
Base Map Provided By: Clark Patterson Lee
File Name: FV Figure 5.dwg
EDI Project Code: W9A10

Alabama STAMP
Functions and Values Assessment



ATTACHMENT B
Functions and Values Data Forms
(Highway Methodology)

HARDWOOD SWAMP

Wetland Function-Value Evaluation Form

HARDWOOD SWAMP

Wetland I.D. 1,2,5,6,8,9,20,21,22 27,28 29,33 36,37 42, 51

Total area of wetland (*) Human made? NO Is wetland part of a wildlife corridor? YES or a "habitat island"? NO

Adjacent land use AGRICULTURAL, RESIDENTIAL Distance to nearest roadway or other development 0-300'

Dominant wetland systems present NORTHERN HARDWOOD SWAMP Contiguous undeveloped buffer zone present SOME

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? Middle to Upper

How many tributaries contribute to the wetland? > 8 Wildlife & vegetation diversity/abundance (see attached list) ✓

Latitude 43.09513 Longitude 78.42378

Prepared by: EDI Date 03-24-2010 05-10-2010

Wetland Impact: Type (*) Area (*)

Evaluation based on: Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	X		1,2,5,7,15		NO fragipan within these soil units
Floodflow Alteration	X		3,5,7,9,10,13,14,16,18	X	High capacity of floodwater attenuation exists
Fish and Shellfish Habitat		X	2,15,17		minimal habitat found, typically seasonal inundation in this community
Sediment/Toxicant Retention	X		1,2,3,7,8,9,10,11,15	X	heavy agricultural uses adjacent to these wetlands
Nutrient Removal	X		1,3,4,9,10	X	heavy agricultural uses adjacent to these wetlands
Production Export		X	1,4,5,7,8,12,		Mostly wildlife food production in this wetland
Sediment/Shoreline Stabilization		X	1,2,3,4,7,14		
Wildlife Habitat	X		4,5,6,7,8,9,10,11,14,15,17,18,19,20,21	X	high quality habitat, mosaic of wetland & upland features present
Recreation		X	1,4,5,7		Wetlands within private land ownership, only passive recreation opportunities exist
Educational/Scientific Value	X		1,5		wetlands on private property
Uniqueness/Heritage		X	4,5,6,7,19,24,		Wetland common to region, although high quality
Visual Quality/Aesthetics	X		8		wetlands on private property
ES Endangered Species Habitat	X		1,2	X	Potential presence of the species and/or habitat occur within these wetlands
Other					

000895

Notes:

(*) undetermined at this point

* Refer to backup list of numbered considerations.

PEM - RCG/Phragmites marsh

Wetland Function-Value Evaluation Form

Total area of wetland (*) Human made? No Is wetland part of a wildlife corridor? YES or a "habitat island"? No

Adjacent land use Agriculture + Residential Distance to nearest roadway or other development 0-300'

Dominant wetland systems present PEM Contiguous undeveloped buffer zone present YES

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Med-High

How many tributaries contribute to the wetland? >8 Wildlife & vegetation diversity/abundance (see attached list) ✓

Wetland I.D. Wetland

Latitude 43.09513 Longitude 78.42378

Prepared by: EDI Date 3-24-2010 05-06-2010

Wetland Impact: UNKNOWN currently

Type (*) Area (*)

Evaluation based on:

Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X	1,2,5,7		limited value, within Farmed Areas
Floodflow Alteration	X		2,5,9,		minimal value, wetlands are small + linear
Fish and Shellfish Habitat		X	~~0~~		NO HABITAT PRESENT for Fish/Shellfish
Sediment/Toxicant Retention	X		1,2,10,		minimal value.
Nutrient Removal	X		9,14	X	Primary Function
Production Export		X	2		little to no WILDLIFE food value
Sediment/Shoreline Stabilization		X	1,3,4,15		No defined sed + bank, RCG is invasive but a good stabilizer
Wildlife Habitat	X		5,11,17	X	minimal habitat due to low diversity of species
Recreation		X	~~0~~		private property
Educational/Scientific Value		X	~~0~~		Private Property
Uniqueness/Heritage		X	5		NOT UNIQUE, INVASIVE SPECIES
Visual Quality/Aesthetics		X	~~0~~		minimal value
ES Endangered Species Habitat		X	NA ~~0~~		not likely habitat for T+E species
Other					

968000

Notes: (*) undetermined

* Refer to backup list of numbered considerations.

PSS- Shrub Swamp wetlands (2,8,12,13,14,17,18,19,20,26,30,31,34,38,39,46,48,49,50,52

Wetland Function-Value Evaluation Form

Total area of wetland (*) Human made? NO Is wetland part of a wildlife corridor? YES or a "habitat island"? NO

Adjacent land use Agricultural, Residential Distance to nearest roadway or other development 0-+200'

Dominant wetland systems present PSS Contiguous undeveloped buffer zone present Some

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? medium-high

How many tributaries contribute to the wetland? >8 Wildlife & vegetation diversity/abundance (see attached list) ✓

Wetland I.D. Wetland

Latitude 43.08513 Longitude 78.42378

Prepared by: EDI Date 3/24/10 5/13/2010

Wetland Impact: UNKNOWN currently Type (*) Area (*)

Evaluation based on: Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	X		1,2,5,7,9,	X	some value
Floodflow Alteration	X		5,6,18	X	the dense vegetation present presents higher uptake of waters
Fish and Shellfish Habitat		X	2		NO HABITAT present for fish/shellfish
Sediment/Toxicant Retention	X		1,2,16	X	adjacent agricultural uses
Nutrient Removal	X		3,8,12	X	↓
Production Export		X	4,7		minimal value
Sediment/Shoreline Stabilization		X	3,4		NO Shoreline present
Wildlife Habitat	X		4,5,6,7,8,13,17,21	X	cover + foraging habitat present
Recreation		X	5.		Private property
Educational/Scientific Value		X	5		↓
Uniqueness/Heritage		X	0		NA
Visual Quality/Aesthetics		X	0		NA
ES Endangered Species Habitat	X		0		potential for habitat occurs NO species found
Other					

Notes: (*) Not currently available

* Refer to backup list of numbered considerations.

000897

Floodplain forested wetland

Wetland Function-Value Evaluation Form

Total area of wetland (*) Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"? No

Adjacent land use undeveloped / Agricultural Distance to nearest roadway or other development >500'

Dominant wetland systems present PFO Contiguous undeveloped buffer zone present Yes

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? middle to upper reaches

How many tributaries contribute to the wetland? >8 Wildlife & vegetation diversity/abundance (see attached list) ✓

Wetland I.D. Wetland

Latitude 43.09513 Longitude 78.42378

Prepared by: EDI Date 8-24-2010 & 8-12-2010

Wetland Impact: Type (*) Area (*) currently

Evaluation based on:

Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	X		1,2,5,7,15		No Fragipan within soil units
Floodflow Alteration	X		2,5,9,10,13	X	Floodwater attenuation exists
Fish and Shellfish Habitat		X	8,15,17		intermittent flow, low potential to sustain fish/shellfish no evidence was found
Sediment/Toxicant Retention	X		1,2,3,7,8,9,10,11,15		heavy adjacent agricultural use found
Nutrient Removal	X		3,4,9	X	adjacent farming activity shows higher nutrient load
Production Export		X	1,4,5,7,8,12		Minimal WILDLIFE food production
Sediment/Shoreline Stabilization	X		1,2,3,4,8,9,15		vegetation along "shore edge" is sparse signs of bank erosion present
Wildlife Habitat	X		4,5,6,7,8,9,10,11,17 18,	X	
Recreation		X	NA		Private property NA
Educational/Scientific Value		X	NA		" " "
Uniqueness/Heritage		X	4,5,19,24		wetland type common to area
Visual Quality/Aesthetics		X	8		Private property NA
ES Endangered Species Habitat	X		1	X	potential habitat
Other					

868000

Notes:

(*) currently unknown

* Refer to backup list of numbered considerations.

Shallow emergent marsh

Wetland Function-Value Evaluation Form

Total area of wetland (*) Human made? NO Is wetland part of a wildlife corridor? YES or a "habitat island"? NO

Adjacent land use Agriculture, Residential Distance to nearest roadway or other development 0-100'

Dominant wetland systems present PEM Contiguous undeveloped buffer zone present YES

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? MED-HIGH

How many tributaries contribute to the wetland? >8 Wildlife & vegetation diversity/abundance (see attached list) ✓

Wetland I.D. Wetland

Latitude 43.09513 Longitude 78.42378

Prepared by: EDI Date

Wetland Impact: UNKNOWN currently

Type (*) Area (*)

Evaluation based on:

Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X	1,2,5,7		Some value
Floodflow Alteration	X		2,5,9		Areas are small & isolated
Fish and Shellfish Habitat		X	1,2		NO WATERCOURSE, only intermittent flow
Sediment/Toxicant Retention	X		1,2,10		little functional value
Nutrient Removal	X		3,9,14	X	Primary function
Production Export		X	2,4		Minimal food for WILDLIFE present
Sediment/Shoreline Stabilization		X	1,3,4,5,15		little value
Wildlife Habitat	X		5,11,17	X	Some cover, fringe to agricultural, little value
Recreation		X	Ø		Private property
Educational/Scientific Value		X	Ø		Private Property
Uniqueness/Heritage		X	5		Private property
Visual Quality/Aesthetics		X	Ø		little value
ES Endangered Species Habitat		X	Ø		Not likely habitat for TE species, periodically mown, plowed, etc
Other					

668000

Notes:

(*) Undetermined

* Refer to backup list of numbered considerations.

Deep Emergent Marsh

Wetland Function-Value Evaluation Form

Total area of wetland (*) Human made? YES Is wetland part of a wildlife corridor? YES or a "habitat island"? NO

Adjacent land use agricultural + residential Distance to nearest roadway or other development ~400'

Dominant wetland systems present PEM - Deep emergent / ponded Contiguous undeveloped buffer zone present Some

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? medium-high

How many tributaries contribute to the wetland? >8 Wildlife & vegetation diversity/abundance (see attached list) ✓

Wetland I.D. Wetland

Latitude _____ Longitude _____

Prepared by: EDI Date 3/24-5/13-10

Wetland Impact: UNKNOWN currently

Type (*) Area (*)

Evaluation based on:

Office X Field X

Corps manual wetland delineation completed? Y X N _____

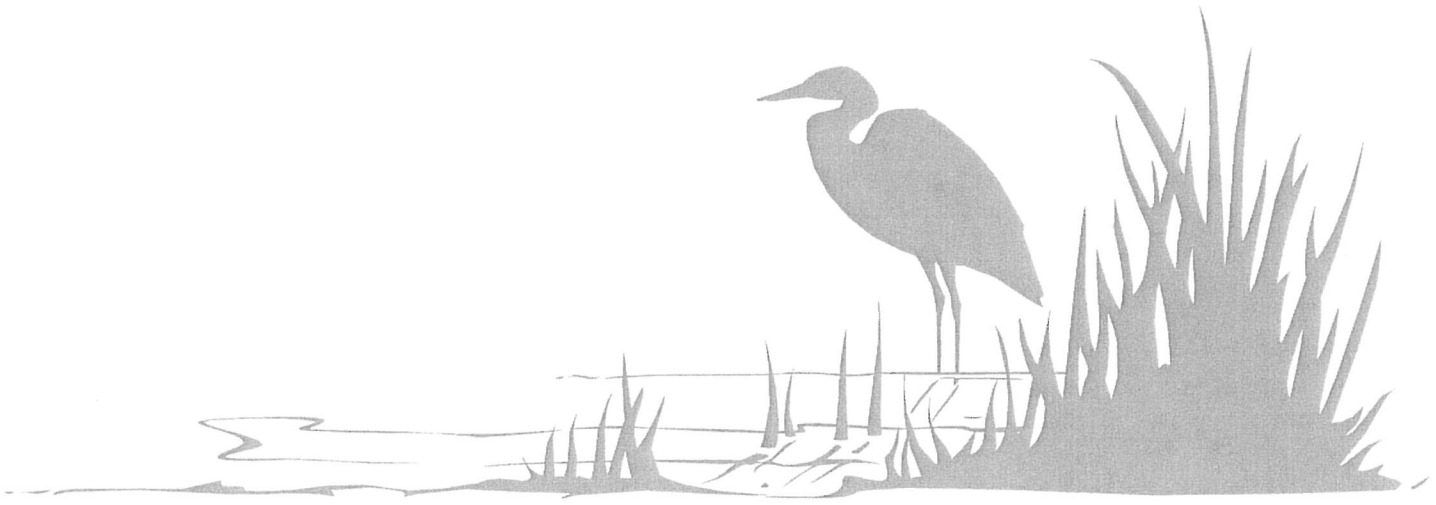
Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X	5		impounded area created historically, in an upland area.
Floodflow Alteration	X		5,7,6,	X	Stagnant water, low quality
Fish and Shellfish Habitat	X		2		ponds are contaminated, detritus, heavy with nutrients, stagnant, minimal habitat
Sediment/Toxicant Retention	X		1,2,5,12	X	↑
Nutrient Removal	X		2,3,4,5,6,10,14	X	primary function
Production Export		X	4,6		little quality wildlife food present
Sediment/Shoreline Stabilization		X	3,4,12		water flow is limited to storm events to topography in area is relatively flat
Wildlife Habitat	X		3,4,5,17,18,19	X	minimal, OUTER HABITAT provides most value to fringe, prime MOSQUITO HABITAT
Recreation		X	NA		Private Property
Educational/Scientific Value		X	NA		↓
Uniqueness/Heritage		X	5		Man-made
Visual Quality/Aesthetics		X	NA		overgrown, lacking water quality.
ES Endangered Species Habitat		X	NA		NOT SUITABLE, disturbed + man-made, low water quality
Other					

Notes: (*) not currently known

* Refer to backup list of numbered considerations.

006000

Alabama STAMP
Functions and Values Assessment



ATTACHMENT C
Functions and Values Data Forms
(Rapid Assessment Method)

HARDWOOD SWAMP (wetlands 1,2,5,6,8,9,20,21,22,27,28,29,33,36,37,42,51)

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA SWAMP Date 04-27-2010

Observers TOM SOMERVILLE, CHARLOTTE STALLONE, DONALD OWENS, JODY CELESTE, SCOTT LIVINGSTONE Completed? [X]

HGM Class ____ HGM sub-class ____ Reference or (Assessment Site) (circle one)

(Natural) Re-establishment Establishment Rehabilitation Enhancement (circle one)

Watershed Whitney Creek HUC# 04130001 Photos SEE ATTACHED

lat/long 43.08903°N, 78.40360°W AA size and shape Polygon, 1340.37 ACRES WITHIN TOTAL AREA

AA moved from original location? yes or (no) (circle one) If yes, reason ____

Qualitative Condition Rating Least Disturbed 1 (2) 3 4 5 6 Highly Disturbed (circle one number)

HABITAT/PLANT COMMUNITY (within site) Weight

FOREST HARVESTING w/in 50yrs — 0
- ☐ Clear Cut
  - ☐ <10% ☐ 11-50% ☐ >50%
- ☒ Selective Cut

DOMINANT FOREST AGE — 0
- ☒ >50 years
- ☐ 31-50 years
- ☐ 16-30 years
- ☐ 3 - 15 years
- ☐ </= 2 years

BAF(10) (of dominant forest) ____

CONVERTED FROM NATIVE FOREST — 7.4
check all present
- ☐ Pine plantations
- ☐ Mowed
- ☒ Farmed
- ☐ Grazed
- ☒ Other Selective loggings, farm ponds

PRESENCE OF INVASIVE SPECIES — 0
- ☐ < 1% ☐ 6 - 50%
- ☒ 1 - 5% ☐ > 50%

☐ **CHEMICAL DEFOLIATION** — X

☐ **EXCESSIVE HERBIVORY** — X
(e.g. pinebark beetle, gypsy moth, nutria)

☐ **BURNED** — X

☒ **GARBAGE/ISOLATED DUMPING** — 0

HABITAT/PLANT COMMUNITY (within site) (CONTINUED) Weight

INCREASED NUTRIENTS — X
- ☐ Dense algal mats

Presence of Nutrient Indicator Species (dep. only)
- ☐ Dominating Site (>50%)
- ☐ NOT Dominating Site (<50%)

TRAILS AND ROADS — 0
- ☐ Walking/ horse trails
- ☒ Non elevated road (Logging, dirt, ATV)
- ☐ Elevated road (dirt or gravel)
- ☐ Paved road

☒ **OTHER** WHITNEY CREEK WATERSHED — 0

COMMENTS ON HABITAT/PLANT COMMUNITY

SEE ATTACHED INFORMATION ON THIS COMMUNITY

Assessment Area Sketch

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

HYDROLOGY STRESSORS — Weight

DITCHES (not including main channel for riverine) — X
- ☐ 1-3 shallow ditches (<.3m deep) within AA
- ☐ >3 shallow ditches in AA or 1 ditch (>.3m deep) in AA OR 1 ditch (>.6m deep) within 25m of AA
- ☐ >1 ditch .3-.6m deep or 1 ditch >.6m deep within AA

STREAM ALTERATION — 0
- ☒ Channelized Stream (If yes)
  - ☒ Not maintained, reverting to natural morphology
  - ☐ Spoil bank only one AA side ☐ Spoil bank opposite AA
  - ☐ Spoil bank both sides
- ☐ Stream Incision

WEIR/DAM/ROAD — X
- ☐ Decreasing flooding of AA
- ☐ Impounding water <10% AA
- ☐ Impounding water 10-75% AA
- ☐ Impounding water >75% AA

☐ **STORMWATER INPUTS** — X

☐ **POINT SOURCE (NON-STORMWATER)** — X

FILLING, EXCAVATION (includes roads not impeding flow) — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

MICROTO ALTERATIONS - plowing, bedding, skidder tracks — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

EXCESSIVE SEDIMENTATION — X
- ☐ In stream channel
- ☐ In wetland

☐ **SOIL SUBSIDENCE/ROOT EXPOSURE** — X

☐ **TIDAL RESTRICTION** — X

☐ **OTHER** _____ — X

BUFFER STRESSORS(100m surrounding AA) — Weight

DEVELOPMENT - Density — 0
- ☐ Commercial, industrial
- ☐ Residential >2 houses/acre
- ☐ Residential </=2 houses/acre
- ☒ Residential </=1 house/ acre

IF DEVELOPED, WHAT TYPE SEWAGE DISPOSAL — X
- ☐ Sewer
- ☒ Septic

ROADS (most intense type, not including trails and logging roads) — X
- ☐ Mostly dirt or gravel roads
- ☐ Mostly 2-lane paved roads
- ☐ Mostly 4-lane paved roads

☐ **LANDFILL/WASTE DISPOSAL** — X

☐ **CHANNELIZED STREAMS OR DITCHES (>0.6m DEEP)** — X

AGRICULTURE — X

	adjacent	>10m
Row crops or nursery plants	☒	☐
Orchards	☐	☐
Poultry or livestock operation	☒	☐

☒ **FOREST HARVESTING WITHIN LAST 15 YEARS** (minimal) — 3.3

PIERS/DOCKS — X
- ☐ Slips/docks present
- ☐ Moorings present
- ☐ Individual piers # of piers in buffer _____

☐ **GOLF COURSE** — X

☐ **MOWED AREA** — X

☐ **SAND/GRAVEL OPERATION** — X

☐ **OTHER** _____ — X

COMMENTS ON HYDROLOGY

COMMENTS ON BUFFER

likely has high degree of nutrient load due to adjacent farming activities

checked: _____
entered: TMC

SUM of WEIGHTS: 10.7 — Refer to protocol to assing weights and calculate total score — **TOTAL SCORE:** 83.7

HARDWOOD SWAMP — Moderately Stressed

PEM REED CANARY/PHRAGMITES MARSH (Wetlands 2, 4, 11, 16, 20, 24, 25, 26, 34, 39, 46, 47, 51)

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

Observers TOM SOMERVILLE, CHARLOTTE STALLONE, DONALD OWENS, JODY CELESTE, SCOTT LIVINGSTONE Completed? [X]

HGM Class HGM sub-class Reference or (Assessment Site) (circle one)

Natural Re-establishment Establishment Rehabilitation Enhancement (circle one)

Watershed Whitney Creek HUC# 04130001 Photos SEE Attached

lat/long 43.08903°N, 78.40360°W AA size and shape Polygon, 1340.37 Acres WITHIN TOTAL AREA

AA moved from original location? yes or (no) (circle one) If yes, reason

Qualitative Condition Rating Least Disturbed 1 2 3 4 5 6 Highly Disturbed (circle one number)

HABITAT/PLANT COMMUNITY (within site) Weight

FOREST HARVESTING w/in 50yrs [X]
- ☐ Clear Cut
  - ☐ <10% ☐ 11-50% ☐ >50%
- ☐ Selective Cut

DOMINANT FOREST AGE [X]
- ☐ >50 years
- ☐ 31-50 years
- ☐ 16-30 years
- ☐ 3 - 15 years
- ☐ </= 2 years

BAF(10) (of dominant forest) —

CONVERTED FROM NATIVE FOREST 10.8
check all present
- ☐ Pine plantations
- ☑ Mowed 10.8
- ☑ Farmed 0
- ☐ Grazed
- ☐ Other _____

PRESENCE OF INVASIVE SPECIES 0
- ☐ < 1% ☐ 6 - 50%
- ☐ 1 - 5% ☒ > 50%

☐ **CHEMICAL DEFOLIATION** [X]

☐ **EXCESSIVE HERBIVORY** [X]
(e.g. pinebark beetle, gypsy moth, nutria)

☐ **BURNED** [X]

☐ **GARBAGE/ISOLATED DUMPING** [X]

HABITAT/PLANT COMMUNITY (within site) (CONTINUED) Weight

INCREASED NUTRIENTS 15.1
- ☑ Dense algal mats

Presence of Nutrient Indicator Species (dep. only)
- ☑ Dominating Site (>50%)
- ☐ NOT Dominating Site (<50%)

TRAILS AND ROADS [X]
- ☐ Walking/ horse trails
- ☐ Non elevated road (Logging, dirt, ATV)
- ☐ Elevated road (dirt or gravel)
- ☐ Paved road

☐ **OTHER** _____ [X]

COMMENTS ON HABITAT/PLANT COMMUNITY

Assessment Area Sketch

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

HYDROLOGY STRESSORS — Weight

DITCHES (not including main channel for riverine) — 9.5
- [x] 1-3 shallow ditches (<.3m deep) within AA
- [ ] >3 shallow ditches in AA or 1 ditch (>.3m deep) in AA OR 1 ditch (>.6m deep) within 25m of AA
- [ ] >1 ditch .3-.6m deep or 1 ditch >.6m deep within AA

STREAM ALTERATION — X
- [ ] Channelized Stream (If yes)
  - [ ] Not maintained, reverting to natural morphology
  - [ ] Spoil bank only one AA side
  - [ ] Spoil bank opposite AA
  - [ ] Spoil bank both sides
- [ ] Stream Incision

WEIR/DAM/ROAD — X
- [ ] Decreasing flooding of AA
- [ ] Impounding water <10% AA
- [ ] Impounding water 10-75% AA
- [ ] Impounding water >75% AA

STORMWATER INPUTS — 0
- [x] STORMWATER INPUTS

POINT SOURCE (NON-STORMWATER) — X
- [ ] POINT SOURCE (NON-STORMWATER)

FILLING, EXCAVATION (includes roads not impeding flow) — X
- [ ] <10% of AA
- [ ] 10-75% of AA
- [ ] >75% of AA

MICROTO ALTERATIONS - plowing, bedding, skidder tracks — 15.0
- [ ] <10% of AA
- [x] 10-75% of AA
- [ ] >75% of AA

EXCESSIVE SEDIMENTATION — X
- [ ] In stream channel
- [x] In wetland

SOIL SUBSIDENCE/ROOT EXPOSURE — X
- [ ] SOIL SUBSIDENCE/ROOT EXPOSURE

TIDAL RESTRICTION — X
- [ ] TIDAL RESTRICTION

OTHER — X
- [ ] OTHER _____

BUFFER STRESSORS(100m surrounding AA) — Weight

DEVELOPMENT - Density — 0
- [ ] Commercial, industrial
- [ ] Residential >2 houses/acre
- [ ] Residential </=2 houses/acre
- [x] Residential </=1 house/ acre

IF DEVELOPED, WHAT TYPE SEWAGE DISPOSAL — 0
- [ ] Sewer
- [x] Septic

ROADS (most intense type, not including trails and logging roads) — 2.7
- [ ] Mostly dirt or gravel roads
- [x] Mostly 2-lane paved roads
- [ ] Mostly 4-lane paved roads

LANDFILL/WASTE DISPOSAL — X
- [ ] LANDFILL/WASTE DISPOSAL

CHANNELIZED STREAMS OR DITCHES (>0.6m DEEP) — X
- [ ] CHANNELIZED STREAMS OR DITCHES (>0.6m DEEP)

AGRICULTURE — X

	adjacent	>10m
Row crops or nursery plants	[x]	[ ]
Orchards	[ ]	[ ]
Poultry or livestock operation	[ ]	[x]

FOREST HARVESTING WITHIN LAST 15 YEARS — X
- [ ] FOREST HARVESTING WITHIN LAST 15 YEARS

PIERS/DOCKS — X
- [ ] Slips/docks present
- [ ] Moorings present
- [ ] Individual piers # of piers in buffer _____

GOLF COURSE — X
- [ ] GOLF COURSE

MOWED AREA — 8.9
- [x] MOWED AREA

SAND/GRAVEL OPERATION — X
- [ ] SAND/GRAVEL OPERATION

OTHER — X
- [ ] OTHER _____

COMMENTS ON HYDROLOGY

COMMENTS ON BUFFER

checked:_____
entered:_____

SUM of WEIGHTS: 62 — Refer to protocol to assing weights and calculate total score — **TOTAL SCORE:** 32.4

RCG/PHRAG

Severly Stressed

PSS-Shrub swamp (wetlands 2, 8, 12, 13, 14, 17, 18, 19, 20, 26, 30, 31, 34, 38, 39, 46, 48, 49, 50, 52)

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA SWAMP Date 04-27-2010

Observers TOM SOMERVILLE, CHARLOTTE STALLONE, DONALD OWENS, JODY DELESTE, SCOTT LIVINGSTONE Completed? ☒

HGM Class HGM sub-class Reference or (Assessment Site) (circle one)

Natural Re-establishment Establishment Rehabilitation Enhancement (circle one)

Watershed Whitney Creek HUC# 04130001 Photos SEE Attached

lat/long 43.08903°N, 78.40360°W AA size and shape Polygon 1340.37 Acres WITHIN TOTAL AREA

AA moved from original location? yes or (no) (circle one) If yes, reason

Qualitative Condition Rating Least Disturbed 1 2 3 4 5 6 Highly Disturbed (circle one number)

HABITAT/PLANT COMMUNITY (within site) Weight

FOREST HARVESTING w/in 50yrs X
- ☐ Clear Cut
  - ☐ <10% ☐ 11-50% ☐ >50%
- ☐ Selective Cut

DOMINANT FOREST AGE X
- ☐ >50 years
- ☐ 31-50 years
- ☐ 16-30 years
- ☐ 3 - 15 years
- ☐ </= 2 years

BAF(10) (of dominant forest) —

CONVERTED FROM NATIVE FOREST X
check all present
- ☐ Pine plantations
- ☐ Mowed
- ☐ Farmed
- ☐ Grazed
- ☐ Other

PRESENCE OF INVASIVE SPECIES 0
- ☐ < 1% ☒ 6 - 50%
- ☐ 1 - 5% ☐ > 50%

☐ **CHEMICAL DEFOLIATION** X

☐ **EXCESSIVE HERBIVORY** X
(e.g. pinebark beetle, gypsy moth, nutria)

☐ **BURNED** X

☐ **GARBAGE/ISOLATED DUMPING** X

HABITAT/PLANT COMMUNITY (within site) (CONTINUED) Weight

INCREASED NUTRIENTS X
- ☐ Dense algal mats

Presence of Nutrient Indicator Species (dep. only)
- ☐ Dominating Site (>50%)
- ☐ NOT Dominating Site (<50%)

TRAILS AND ROADS 0
- ☐ Walking/ horse trails
- ☐ Non elevated road (Logging, dirt, ATV)
- ☐ Elevated road (dirt or gravel)
- ☐ Paved road

☐ **OTHER** X

COMMENTS ON HABITAT/PLANT COMMUNITY

Assessment Area Sketch

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

HYDROLOGY STRESSORS — Weight

DITCHES (not including main channel for riverine) — X
- ☐ 1-3 shallow ditches (<.3m deep) within AA
- ☐ >3 shallow ditches in AA or 1 ditch (>.3m deep) in AA OR 1 ditch (>.6m deep) within 25m of AA
- ☐ >1 ditch .3-.6m deep or 1 ditch >.6m deep within AA

STREAM ALTERATION — X
- ☐ Channelized Stream (If yes)
  - ☐ Not maintained, reverting to natural morphology
  - ☐ Spoil bank only one AA side ☐ Spoil bank opposite AA
  - ☐ Spoil bank both sides
- ☐ Stream Incision

WEIR/DAM/ROAD — 0
- ☐ Decreasing flooding of AA
- ☐ Impounding water <10% AA
- ☒ Impounding water 10-75% AA
- ☐ Impounding water >75% AA

☐ **STORMWATER INPUTS** — X

☐ **POINT SOURCE (NON-STORMWATER)** — X

FILLING, EXCAVATION (includes roads not impeding flow) — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

MICROTO ALTERATIONS - plowing, bedding, skidder tracks — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

EXCESSIVE SEDIMENTATION — 0
- ☐ In stream channel
- ☒ In wetland

☐ **SOIL SUBSIDENCE/ROOT EXPOSURE** — X

☐ **TIDAL RESTRICTION** — X

☐ **OTHER** _____ — X

COMMENTS ON HYDROLOGY

Man-made ponds + naturally ponded areas

BUFFER STRESSORS(100m surrounding AA) — Weight

DEVELOPMENT - Density — 0
- ☐ Commercial, industrial
- ☐ Residential >2 houses/acre
- ☐ Residential </=2 houses/acre
- ☒ Residential </=1 house/ acre

IF DEVELOPED, WHAT TYPE SEWAGE DISPOSAL — 0
- ☐ Sewer
- ☒ Septic

ROADS (most intense type, not including trails and logging roads) — 2.7
- ☐ Mostly dirt or gravel roads
- ☒ Mostly 2-lane paved roads
- ☐ Mostly 4-lane paved roads

☐ **LANDFILL/WASTE DISPOSAL** — X

☐ **CHANNELIZED STREAMS OR DITCHES (>0.6m DEEP)** — X

AGRICULTURE — 0

	adjacent	>10m
Row crops or nursery plants	☒	☐
Orchards	☐	☐
Poultry or livestock operation	☐	☐

☐ **FOREST HARVESTING WITHIN LAST 15 YEARS** — X

PIERS/DOCKS — X
- ☐ Slips/docks present
- ☐ Moorings present
- ☐ Individual piers # of piers in buffer _____

☐ **GOLF COURSE** — X

☐ **MOWED AREA** — X

☐ **SAND/GRAVEL OPERATION** — X

☐ **OTHER** _____ — X

COMMENTS ON BUFFER

checked: _____
entered: _____

SUM of WEIGHTS: 2.7 — Refer to protocol to assing weights and calculate total score — **TOTAL SCORE:** 91.7

94.4
-2.7

PSS

000908

Minimally or not Stressed

Floodplain Forest (wetlands 2, 20, 22)

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

Observers TOM SOMERVILLE, CHARLOTTE STALLONE, DONALD OWENS, JODY CELESTE, SCOTT LIVINGSTONE Completed? ☒

HGM Class HGM sub-class Reference or (Assessment Site) (circle one)

(Natural) Re-establishment Establishment Rehabilitation Enhancement (circle one)

Watershed Whitney Creek HUC# 04130001 Photos SEE Attached

lat/long 43.08903°N, 78.40360°W AA size and shape Polygon, 1340.37 Acres WITHIN TOTAL AREA

AA moved from original location? yes or (no) (circle one) If yes, reason

Qualitative Condition Rating Least Disturbed (1) 2 3 4 5 6 Highly Disturbed (circle one number)

HABITAT/PLANT COMMUNITY (within site) Weight

FOREST HARVESTING w/in 50yrs ☒
- ☐ Clear Cut
  - ☐ <10% ☐ 11-50% ☐ >50%
- ☐ Selective Cut

DOMINANT FOREST AGE ☒
- ☒ >50 years
- ☐ 31-50 years
- ☐ 16-30 years
- ☐ 3 - 15 years
- ☐ </= 2 years

BAF(10) (of dominant forest) —

CONVERTED FROM NATIVE FOREST ☒
check all present
- ☐ Pine plantations
- ☐ Mowed
- ☐ Farmed
- ☐ Grazed
- ☐ Other

PRESENCE OF INVASIVE SPECIES ☒
- ☐ < 1% ☐ 6 - 50%
- ☐ 1 - 5% ☐ > 50%

☐ **CHEMICAL DEFOLIATION** ☒

☐ **EXCESSIVE HERBIVORY** ☒
(e.g. pinebark beetle, gypsy moth, nutria)

☐ **BURNED** ☒

☐ **GARBAGE/ISOLATED DUMPING** ☒

HABITAT/PLANT COMMUNITY (within site) Weight (CONTINUED)

INCREASED NUTRIENTS ☒
- ☐ Dense algal mats

Presence of Nutrient Indicator Species (dep. only)
- ☐ Dominating Site (>50%)
- ☐ NOT Dominating Site (<50%)

TRAILS AND ROADS ☒
- ☐ Walking/ horse trails
- ☐ Non elevated road (Logging, dirt, ATV)
- ☐ Elevated road (dirt or gravel)
- ☐ Paved road

☒ **OTHER** property lines + trails along edge ☐

COMMENTS ON HABITAT/PLANT COMMUNITY

Assessment Area Sketch

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

HYDROLOGY STRESSORS — Weight

DITCHES (not including main channel for riverine) — X
- ☐ 1-3 shallow ditches (<.3m deep) within AA
- ☐ >3 shallow ditches in AA or 1 ditch (>.3m deep) in AA OR 1 ditch (>.6m deep) within 25m of AA
- ☐ >1 ditch .3-.6m deep or 1 ditch >.6m deep within AA

STREAM ALTERATION — 0
- ☒ Channelized Stream (If yes)
  - ☒ Not maintained, reverting to natural morphology
  - ☐ Spoil bank only one AA side ☐ Spoil bank opposite AA
  - ☐ Spoil bank both sides
- ☐ Stream Incision

WEIR/DAM/ROAD — X
- ☐ Decreasing flooding of AA
- ☐ Impounding water <10% AA
- ☐ Impounding water 10-75% AA
- ☐ Impounding water >75% AA

☐ **STORMWATER INPUTS** — X

☐ **POINT SOURCE (NON-STORMWATER)** — X

FILLING, EXCAVATION (includes roads not impeding flow) — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

MICROTO ALTERATIONS - plowing, bedding, skidder tracks — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

EXCESSIVE SEDIMENTATION — X
- ☐ In stream channel
- ☐ In wetland

☒ **SOIL SUBSIDENCE/ROOT EXPOSURE** — 0

☐ **TIDAL RESTRICTION** — X

☐ **OTHER** _____ — X

COMMENTS ON HYDROLOGY

Channelized flow intermittent

BUFFER STRESSORS(100m surrounding AA) — Weight

DEVELOPMENT - Density — X
- ☐ Commercial, industrial
- ☐ Residential >2 houses/acre
- ☐ Residential </=2 houses/acre
- ☐ Residential </=1 house/ acre

IF DEVELOPED, WHAT TYPE SEWAGE DISPOSAL — X
- ☐ Sewer
- ☐ Septic

ROADS (most intense type, not including trails and logging roads) — X
- ☐ Mostly dirt or gravel roads
- ☐ Mostly 2-lane paved roads
- ☐ Mostly 4-lane paved roads

☐ **LANDFILL/WASTE DISPOSAL** — X

☐ **CHANNELIZED STREAMS OR DITCHES (>0.6m DEEP)** — X

AGRICULTURE — X

	adjacent	>10m
Row crops or nursery plants	☐	☐
Orchards	☐	☐
Poultry or livestock operation	☐	☐

☐ **FOREST HARVESTING WITHIN LAST 15 YEARS** — X

PIERS/DOCKS — X
- ☐ Slips/docks present
- ☐ Moorings present
- ☐ Individual piers # of piers in buffer _____

☐ **GOLF COURSE** — X

☐ **MOWED AREA** — X

☐ **SAND/GRAVEL OPERATION** — X

☐ **OTHER** _____

COMMENTS ON BUFFER

Contiguous Buffer of both wetland + upland habitat

checked: _____
entered: JMC

SUM of WEIGHTS: 0 — Refer to protocol to assing weights and calculate total score — **TOTAL SCORE:** 94.4

Flood plain Forest

Minimally OR NOT Stressed

000910

PEM - SHALLOW EMERGENT MARSH (WETLANDS 1, 4, 7, 10, 15, 23, 25, 26, 32, 34, 35, 39, 40, 41, 43, 44, 45, 46, 51)

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

Observers TOM SOMERVILLE, CHARLOTTE STALLONE, DONALD OWENS, JODY CELESTE, SCOTT LIVINGSTONE Completed? ☒

HGM Class HGM sub-class Reference or (Assessment Site) (circle one)

(Natural) Re-establishment Establishment Rehabilitation Enhancement (circle one)

Watershed Whitney Creek HUC# 04130001 Photos SEE ATTACHED

lat/long 43.08903°N, 78.40360°W AA size and shape Polygon, 1340.37 ACRES WITHIN TOTAL AREA

AA moved from original location? yes or (no) (circle one) If yes, reason

Qualitative Condition Rating Least Disturbed 1 2 3 4 5 6 Highly Disturbed (circle one number)

HABITAT/PLANT COMMUNITY (within site) Weight

FOREST HARVESTING w/in 50yrs — X
- ☐ Clear Cut
  - ☐ <10% ☐ 11-50% ☐ >50%
- ☐ Selective Cut

DOMINANT FOREST AGE — 0
- ☐ >50 years
- ☐ 31-50 years
- ☐ 16-30 years
- ☐ 3 - 15 years
- ☒ </= 2 years

BAF(10) (of dominant forest) —

CONVERTED FROM NATIVE FOREST (check all present)
- ☐ Pine plantations
- ☒ Mowed 10.8
- ☒ Farmed 0
- ☐ Grazed
- ☐ Other _____

PRESENCE OF INVASIVE SPECIES — 0
- ☐ < 1% ☒ 6 - 50%
- ☐ 1 - 5% ☐ > 50%

☐ **CHEMICAL DEFOLIATION** — X

☐ **EXCESSIVE HERBIVORY** (e.g. pinebark beetle, gypsy moth, nutria) — X

☐ **BURNED** — X

☐ **GARBAGE/ISOLATED DUMPING** — X

HABITAT/PLANT COMMUNITY (within site) (CONTINUED) Weight

INCREASED NUTRIENTS — 0
- ☒ Dense algal mats

Presence of Nutrient Indicator Species (dep. only)
- ☒ Dominating Site (>50%)
- ☐ NOT Dominating Site (<50%)

TRAILS AND ROADS — X
- ☐ Walking/ horse trails
- ☐ Non elevated road (Logging, dirt, ATV)
- ☐ Elevated road (dirt or gravel)
- ☐ Paved road

☐ **OTHER** _____ — X

COMMENTS ON HABITAT/PLANT COMMUNITY

Assessment Area Sketch

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMF Date 04-27-2010

HYDROLOGY STRESSORS — Weight

DITCHES (not including main channel for riverine) — X
- ☐ 1-3 shallow ditches (<.3m deep) within AA
- ☐ >3 shallow ditches in AA or 1 ditch (>.3m deep) in AA OR 1 ditch (>.6m deep) within 25m of AA
- ☐ >1 ditch .3-.6m deep or 1 ditch >.6m deep within AA

STREAM ALTERATION — 0
- ☒ Channelized Stream (If yes)
  - ☐ Not maintained, reverting to natural morphology
  - ☐ Spoil bank only one AA side ☐ Spoil bank opposite AA
  - ☒ Spoil bank both sides
- ☐ Stream Incision

WEIR/DAM/ROAD — X
- ☐ Decreasing flooding of AA
- ☐ Impounding water <10% AA
- ☐ Impounding water 10-75% AA
- ☐ Impounding water >75% AA

☐ **STORMWATER INPUTS** — X

☐ **POINT SOURCE (NON-STORMWATER)** — X

FILLING, EXCAVATION (includes roads not impeding flow) — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

MICROTO ALTERATIONS - plowing, bedding, skidder tracks — 5.1
- ☒ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

EXCESSIVE SEDIMENTATION — X
- ☐ In stream channel
- ☐ In wetland

☐ **SOIL SUBSIDENCE/ROOT EXPOSURE** — X

☐ **TIDAL RESTRICTION** — X

☐ **OTHER** _____ — X

COMMENTS ON HYDROLOGY

BUFFER STRESSORS(100m surrounding AA) — Weight

DEVELOPMENT - Density — 0
- ☐ Commercial, industrial
- ☐ Residential >2 houses/acre
- ☐ Residential </=2 houses/acre
- ☒ Residential </=1 house/ acre

IF DEVELOPED, WHAT TYPE SEWAGE DISPOSAL — X
- ☐ Sewer
- ☒ Septic

ROADS (most intense type, not including trails and logging roads) — 2.7
- ☐ Mostly dirt or gravel roads
- ☒ Mostly 2-lane paved roads
- ☐ Mostly 4-lane paved roads

☐ **LANDFILL/WASTE DISPOSAL** — X

☐ **CHANNELIZED STREAMS OR DITCHES (>0.6m DEEP)** — X

AGRICULTURE — 0

	adjacent	>10m
Row crops or nursery plants	☒	☐
Orchards	☐	☐
Poultry or livestock operation	☐	☐

☐ **FOREST HARVESTING WITHIN LAST 15 YEARS** — X

PIERS/DOCKS — X
- ☐ Slips/docks present
- ☐ Moorings present
- ☐ Individual piers # of piers in buffer _____

☐ **Ggolf COURSE** — X

☒ **MOWED AREA** — 8.9

☐ **SAND/GRAVEL OPERATION** — X

☐ **OTHER** _____ — X

COMMENTS ON BUFFER

checked: _____
entered: _____

SUM of WEIGHTS: 27.5 — Refer to protocol to assing weights and calculate total score — **TOTAL SCORE:** 66.9

PEM SHALLOW

Moderately Stressed

PEM - Deep Emergent Marsh — (Wetlands 8, 27, 42)

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

Observers TOM SOMERVILLE, CHARLOTTE STALLONE, DONALD OWENS, JODY CRESITE, SCOTT LIVINGSTONE Completed? [X]

HGM Class HGM sub-class Reference or (Assessment Site) (circle one)

(Natural) Re-establishment Establishment Rehabilitation Enhancement (circle one)

Watershed Whitney Creek HUC# 04130001 Photos SEE ATTACHED

lat/long 43.08333°N, 78.40360°W AA size and shape Polygon, 1340.37 ACRES TOTAL AREA

AA moved from original location? yes or (no) (circle one) If yes, reason

Qualitative Condition Rating Least Disturbed 1 2 3 4 5 6 Highly Disturbed (circle one number)

HABITAT/PLANT COMMUNITY (within site) Weight

FOREST HARVESTING w/in 50yrs [X]
- ☐ Clear Cut
  - ☐ <10% ☐ 11-50% ☐ >50%
- ☐ Selective Cut

DOMINANT FOREST AGE [X]
- ☐ >50 years
- ☐ 31-50 years
- ☐ 16-30 years
- ☐ 3 - 15 years
- ☐ </= 2 years

BAF(10) (of dominant forest) —

CONVERTED FROM NATIVE FOREST [X]
check all present
- ☐ Pine plantations
- ☐ Mowed
- ☐ Farmed
- ☐ Grazed
- ☐ Other

PRESENCE OF INVASIVE SPECIES [0]
- ☐ < 1% ☒ 6 - 50%
- ☐ 1 - 5% ☐ > 50%

☐ **CHEMICAL DEFOLIATION** [X]

☐ **EXCESSIVE HERBIVORY** [X]
(e.g. pinebark beetle, gypsy moth, nutria)

☐ **BURNED** [X]

☐ **GARBAGE/ISOLATED DUMPING** [X]

HABITAT/PLANT COMMUNITY (within site) Weight (CONTINUED)

INCREASED NUTRIENTS [X]
- ☐ Dense algal mats

Presence of Nutrient Indicator Species (dep. only)
- ☐ Dominating Site (>50%)
- ☐ NOT Dominating Site (<50%)

TRAILS AND ROADS [X]
- ☐ Walking/ horse trails
- ☐ Non elevated road (Logging, dirt, ATV)
- ☐ Elevated road (dirt or gravel)
- ☐ Paved road

☐ **OTHER** [X]

COMMENTS ON HABITAT/PLANT COMMUNITY

Assessment Area Sketch

DELAWARE RAPID ASSESSMENT Version 5.1

Site # W9A10 Site Name ALABAMA STAMP Date 04-27-2010

HYDROLOGY STRESSORS — Weight

DITCHES (not including main channel for riverine) — X
- ☐ 1-3 shallow ditches (<.3m deep) within AA
- ☐ >3 shallow ditches in AA or 1 ditch (>.3m deep) in AA OR 1 ditch (>.6m deep) within 25m of AA
- ☐ >1 ditch .3-.6m deep or 1 ditch >.6m deep within AA

STREAM ALTERATION — X
- ☐ Channelized Stream (If yes)
  - ☐ Not maintained, reverting to natural morphology
  - ☐ Spoil bank only one AA side ☐ Spoil bank opposite AA
  - ☐ Spoil bank both sides
- ☐ Stream Incision

WEIR/DAM/ROAD — 0
- ☐ Decreasing flooding of AA
- ☐ Impounding water <10% AA
- ☒ Impounding water 10-75% AA
- ☐ Impounding water >75% AA

☐ **STORMWATER INPUTS** — X

☐ **POINT SOURCE (NON-STORMWATER)** — X

FILLING, EXCAVATION (includes roads not impeding flow) — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

MICROTO ALTERATIONS - plowing, bedding, skidder tracks — X
- ☐ <10% of AA
- ☐ 10-75% of AA
- ☐ >75% of AA

EXCESSIVE SEDIMENTATION — 0
- ☐ In stream channel
- ☒ In wetland

☐ **SOIL SUBSIDENCE/ROOT EXPOSURE** — X

☐ **TIDAL RESTRICTION** — X

☐ **OTHER** _____ — X

COMMENTS ON HYDROLOGY

Man-made ponds + naturally ponded areas

BUFFER STRESSORS(100m surrounding AA) — Weight

DEVELOPMENT - Density — 0
- ☐ Commercial, industrial
- ☐ Residential >2 houses/acre
- ☐ Residential </=2 houses/acre
- ☒ Residential </=1 house/ acre

IF DEVELOPED, WHAT TYPE SEWAGE DISPOSAL — 0
- ☐ Sewer
- ☒ Septic

ROADS (most intense type, not including trails and logging roads) — 2.7
- ☐ Mostly dirt or gravel roads
- ☒ Mostly 2-lane paved roads
- ☐ Mostly 4-lane paved roads

☐ **LANDFILL/WASTE DISPOSAL** — X

☐ **CHANNELIZED STREAMS OR DITCHES (>0.6m DEEP)** — X

AGRICULTURE — 0

	adjacent	>10m
Row crops or nursery plants	☒	☐
Orchards	☐	☐
Poultry or livestock operation	☐	☐

☐ **FOREST HARVESTING WITHIN LAST 15 YEARS** — X

PIERS/DOCKS — X
- ☐ Slips/docks present
- ☐ Moorings present
- ☐ Individual piers # of piers in buffer _____

☐ **GOLF COURSE** — X

☐ **MOWED AREA** — X

☐ **SAND/GRAVEL OPERATION** — X

☐ **OTHER** _____ — X

COMMENTS ON BUFFER

checked:_____
entered:_____

SUM of WEIGHTS: 2.7 — Refer to protocol to assing weights and calculate total score — **TOTAL SCORE:** 91.7

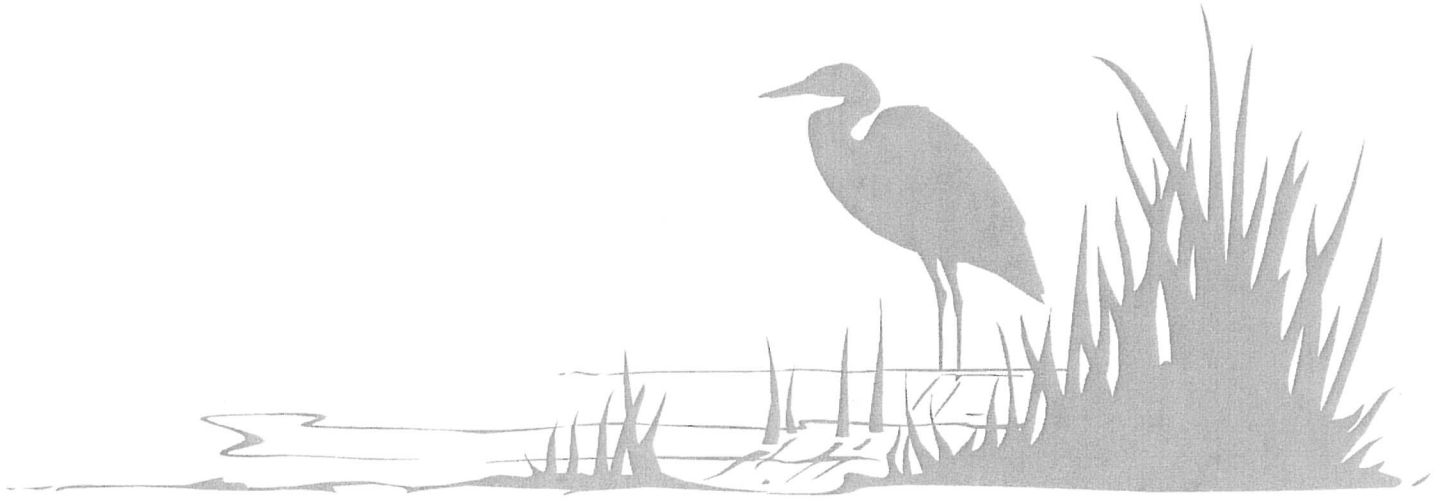
94.4
-2.7
91.7

PSS

000914

Minimally or not Stressed

Alabama STAMP
Functions and Values Assessment



ATTACHMENT D
General Wetland Assessment Chart

EARTH DIMENSIONS, INC.
Soil & Hydrogeologic Investigations * Wetland Delineations
1091 Jamison Road, Elma NY 14059
(716) 655-1717 * Fax (716) 655-2915 www.earthdimensions.com

Functions and Values Assessment- General Wetland Assessment

Alabama Stamp W9A10d

Parcels 1-23 &16a; although some parcels had no access,

Wetlands 1-52

Wetland Number/ Parcel Number (s)	Data Point Numbers Recorded (Data from similar wetland complex)	Community Type(s)/ Comments	Soil Map Unit Name and Findings	Wetland > 1 acre? (rough calc.)	Latitude & Longitude at approx. center of wetland	Wetland Flags
Wetland 1 Parcel 1	D11	PFO Hardwood Swamp and PEM cattail marsh, adjacent to active farming, high quality, subdued kettle hole on the lake plain	Lakemont silty clay loam	No	43.09255 78.42409	W1-1 through W1-14
Wetland 2 Parcel 1 & 2	D6, D7, D8, D10	PFO Floodplain Forest and PFO Hardwood Swamp, with linear water course through farmed areas, linear features, include reed canary grass (RCG), nice uplands within, some areas shrubby in field, few openings, adjacent to active farming, high quality, slight micro-depressions, lake plain, kettle holes, drainageway through	Odessa silt loam, Lakemont silty clay loam	Yes	43.09427 78.42165	W2-1 through W2-264
Wetland 3 Parcel 1	No data	PSS scrubby, fragmented by farming, overgrown with vines, invasive species, debris, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.08982 78.41918	W3-1 through W3-5
Wetland 4 Parcel 1	No data	In hedge row, PEM/PSS, scrubby, RCG, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.09078 78.49837	W4-1 through W4-11
Wetland 5 Parcel 1	No data	PFO hardwood swamp, fragmented by farming, small, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.09510 78.41798	W5-1 through W5-4
Wetland 6 Parcel 1	D2	PFO hardwood swamp, edges contain invasive species, adjacent to active farming, dissected lake plain, flowing water in sw direction in concave trough	Lakemont silty clay loam, nearly level	Yes	43.09584 78.41944	W6-1 through W6-90
Wetland 7 Parcel 1	No data	PEM Shallow Emergent Marsh, fragmented by farming, small, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.09601 78.41761	W7-1 through W7-4
Wetland 8 Parcels 1 & 2	No data (D2)	PFO Hardwood Swamp and PSS Shrub Swamp, contains farm pond with fish, adjacent to active farming	Canandaigua silty clay loam, nearly level	Yes	43.09633 78.41585	W8-1 through W8-13
Wetland 9 Parcel 2	D12	PFO Hardwood Swamp, adjacent to active farming, high quality, nearly level micro-relief, lake plain, power line right of way through wetland	Lakemont silty clay loam	Yes	43.09596 78.41385	W9-1 through W9-37
Wetland 10 Parcel 3	No data	PEM Shallow Emergent Marsh, farmed, possibly contains contaminants, water stagnant adjacent to active farming	Canandaigua silty clay loam, nearly level	No	43.09248 78.40895	W10-1 through W10-12

EARTH DIMENSIONS, INC.
Soil & Hydrogeologic Investigations * Wetland Delineations
1091 Jamison Road, Elma NY 14059
(716) 655-1717 * Fax (716) 655-2915 www.earthdimensions.com

Wetland Number/ Parcel Number (s)	Data Point Numbers Recorded (Data from similar wetland complex)	Community Type(s)/ Comments	Soil Map Unit Name and Findings	Wetland > 1 acre? (rough calc.)	Latitude & Longitude at approx. center of wetland	Wetland Flags
Wetland 11 Parcel 2	D13	PEM- Reed Canary Marsh (RCG), adjacent to active farming, concave	Odessa silt loam, gently sloping	No	43.08992 78.41140	W11-1 through W11-7
Wetland 12 Parcel 3	No data	PSS Shrub Swamp, in hedgerow, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.08928 78.40917	W12-1 through W12-4
Wetland 13 Parcel 3	No data	PSS Shrub Swamp, in hedgerow	Lakemont silty clay loam, nearly level	No	43.08925 78.40857	W13-1 through W13-8
Wetland 14 Parcel 3	No data	PSS Shrub Swamp, in hedgerow, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.08925 78.40634	W14-1 through W14-4
Wetland 15 Parcel 3	D15	PEM Shallow Emergent Marsh, man-made farm pond, adjacent to active farming, ground moraine, concave	Canandaigua silt loam, nearly level	No	43.09055 78.40748	W15-1 through W15-5
Wetland 16 Parcel 3	No data	PEM Shallow emergent marsh reed canary grass, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.09048 78.40791	W16-1 through W16-4
Wetland 17 Parcel 8	No data	PSS Shrub Swamp, in hedgerow, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.08918 78.41695	W17-1 through W17-4
Wetland 18 Parcel 8	D16	PSS Shrub Swamp, in hedgerow, adjacent to active farming, slightly concave	Odessa silt loam, nearly level	No	43.08922 78.41775	W18-1 through W18-4
Wetland 19 Parcel 8	No data	PSS Shrub Swamp, in hedgerow, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.08926 78.41863	W19-1 through W19-11
Wetland 20 Parcels 7, 8, 9	D18, D19, D22, D24, D34	PFO Floodplain Forest, PSS Shrub swamp and PFO Hardwood Swamp, with linear water course through farmed areas, includes reed canary grass nice uplands within, some areas shrubby in field, few openings, adjacent to active farming, concave drainageway, concave, lake plain, kettle hole	Odessa silt loam, gently sloping, Wayland silt loam, Lakemont silty clay loam, nearly level, Collamer silt loam, gently sloping	Yes	43.08440 78.41633	W20-1 through W20-471
Wetland 21 Parcel 7	No data	PFO Hardwood Swamp, adjacent to active farming, hemlock swamp within as well as vernal pools	Lakemont silty clay loam, nearly level	No	43.08206 78.41587	W21-1 through W21-26
Wetland 22 Parcel 8, 21	D28	Whitney Creek corridor, Class C- non-trout, PFO Hardwood Swamp, some invasive species, fish present in channel, fringe of wetlands/floodplains, adjacent to active farming, high quality, concave, small farm dump area located by D28	Wayland silt loam, nearly level, rocky substrate with clay outcrops	Yes	43.07798 78.40654	W22-1 through W22-186
Wetland 23 Parcel 21	No data	PEM Shallow emergent marsh adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.07732 78.40714	W23-1 through W23-11

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Wetland Number/ Parcel Number (s)	Data Point Numbers Recorded (Data from similar wetland complex)	Community Type(s)/ Comments	Soil Map Unit Name and Findings	Wetland > 1 acre? (rough calc.)	Latitude & Longitude at approx. center of wetland	Wetland Flags
Wetland 24 Parcel 8	D27	PEM Phragmites marsh adjacent to active farming, lake plain, concave	Lakemont silt loam, nearly level	No	43.07538 78.41141	W24-1 through W24-11
Wetland 25 Parcel 8	D26	PEM cattail marsh adjacent to active farming, adjacent to road, concave drainageway	Lakemont silt loam, nearly level	No	43.07495 78.41157	W25-1 through W25-6
Wetland 26 Parcel 9	D30	PEM/PSS linear water course through farmed areas, includes reed canary grass, some areas shrubby in field, adjacent to active farming, concave	Lakemont silt loam, nearly level	Yes	43.08876 78.40849	W26-1 through W26-27
Wetland 27 Parcel 9	D32	PFO Hardwood swamp, fragmented edges from farming, squared wood edges, upland islands within, farm pond or old farm dump within some logging trails present and/or debris, adjacent to active farming, wetland hummocks	Lakemont silt loam, nearly level	Yes	43.08629 78.40820	W27-1 through W27-75
Wetland 28 Parcel 20	No data	PFO Hardwood swamp, small, adjacent to active farming	Canandaigua silt loam, nearly level	No	43.08141 78.40508	W28-1 through W28-4
Wetland 29 Parcel 20	No data	PFO Hardwood swamp, fragmented from farming, squared wood edges, upland islands within, some logging trails present and/or debris, adjacent to active farming, vernal pools present	Lakemont silty clay loam, nearly level	Yes	43.08106 78.40770	W29-1 through W29-138
Wetland 30 Parcel 6	D51	PSS Shrub Swamp, along road/ part of road side ditch, adjacent to active farming, lake plain, concave	Niagara silt loam, nearly level,	No	43.09630 78.40074	W30-1 through W30-9
Wetland 31 Parcel 6	D53, D54	PSS Shrub Swamp- scrubby, Old channel scar, adjacent to active farming, lake plain, concave and convex, ground moraine, convex slope to maintained drain, old foundation found, some debris at southern end.	Niagara silt loam, nearly level, Ovid silt loam, gently sloping	Yes	43.09545 78.39508	W31-1 through W31-25
Wetland 32 Parcel 6	No data	PEM Shallow Emergent/Cattail Marsh, adjacent to active farming	Lakemont silty clay loam, nearly level	No	43.09553 78.39236	W32-1 through W32-3
Wetland 33 Parcel 6	D57	PFO hardwood swamp with some shrubs, some open water, garbage, somewhat disturbed from farming, adjacent to active farming, ground moraine, concave, excavated pit	Halsey silt loam, nearly level	No	43.09101 78.39589	W33-1 through W33-17
Wetland 34 Parcel 11	D38, D39	PEM/PSS linear water course through farmed areas, include reed canary grass, some areas shrubby in field, adjacent to active farming, irregular topography, slightly altered, lake plain	Canandaigua silt loam, nearly level, massive soils structure Udorthents	Yes	43.08756 78.40235	W34-1 through W34-35

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Wetland Number/ Parcel Number (s)	Data Point Numbers Recorded (Data from similar wetland complex)	Community Type(s)/ Comments	Soil Map Unit Name and Findings	Wetland > 1 acre? (rough calc.)	Latitude & Longitude at approx. center of wetland	Wetland Flags
Wetland 35 Parcel 11	No data	PEM shallow emergent marsh, overgrown and scrubby, some debris, old foundation within wetland area, adjacent to active farming	Canandaigua silt loam, nearly level	No	43.08691 78.40320	W35-1 through W35-8
Wetland 36 Parcels 16, 17, 18, 22	D44, D60	PFO Hardwood swamp, fragmented edges from farming, squared wood edges, upland islands within, some logging trails present and/or debris, adjacent to active farming, lake plain, nearly level with microtopography, concave drainageway	Odessa silt loam, nearly level, Lakemont silt loam, nearly level, Wayland soil	Yes	43.08260 78.40042	W36-1 through W36-263
Wetland 37 Parcels 16, 17, 22	No data	PFO Hardwood swamp, fragmented edges from farming, squared wood edges, upland islands within, some logging trails present and/or debris	Canandaigua silt loam, nearly level	Yes	43.08120 78.40278	W37-1 through W37-115
Wetland 38 Parcel 16	No data	PSS Shrub Swamp, in hedgerow, adjacent to active farming	Canandaigua silt loam, nearly level	No	43.08072 78.39996	W38-1 through W38-4
Wetland 39 Parcels 16, 22	No data	PEM/PSS linear water course through farmed areas, include reed canary grass, some areas shrubby in field, adjacent to active farming	Lakemont silty clay loam, nearly level	Yes	43.07559 78.40081	W39-1 through W39-20
Wetland 40 Parcel 23	D49	Man excavated pond/ PEM Shallow emergent marsh	Lakemont silty clay loam, nearly level, massive soil structure	Yes	43.07747 78.39275	W40-1 through W40-24
Wetland 41 Parcel 23	No data (D49)	Man excavated pond/ PEM Shallow emergent marsh	Lakemont silty clay loam, nearly level	No	43.07577 78.39526	W41-1 through W41-6
Wetland 42 Parcel 23	D47, D48	PFO Hardwood swamp, fragmented edges from land manipulation from game farm development, manmade ponds and trail system within, slightly concave,	Lakemont silty clay loam, nearly level, Collamer silt loam, gently sloping, Udorthents, massive soil structure	Yes	43.07975 78.39538	W42-1 through W42-254
Wetland 43 Parcel 23	No data	PEM shallow emergent marsh	Canandaigua silt loam, nearly level	No	43.08034 78.39737	W43-1 through W43-6
Wetland 44 Parcel 23	No data	PEM shallow emergent marsh	Canandaigua silt loam, nearly level	No	43.08025 78.39764	W44-1 through W44-6
Wetland 45 Parcel 23	No data	PEM shallow emergent marsh, part of trail edge at wood line, tire ruts	Canandaigua silt loam, nearly level	No	43.07893 78.39611	W45-1 through W45-5

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Wetland Number/ Parcel Number (s)	Data Point Numbers Recorded (Data from similar wetland complex)	Community Type(s)/ Comments	Soil Map Unit Name and Findings	Wetland > 1 acre? (rough calc.)	Latitude & Longitude at approx. center of wetland	Wetland Flags
Wetland 46 Parcel 18 &12	D46	PEM/PSS linear water course through farmed areas, include reed canary grass, some areas shrubby in fields, very dense in spots	Odessa silt loam, gently sloping, Lakemont silt loam	Yes	43.08414 78.39428	W46-1 through W46-88
Wetland 47 Parcel 12	D40	PEM Shallow emergent marsh, roadside, Phragmites and reed canary grass, concave, recessional moraine	Hilton loam, nearly level	No	43.08620 78.39140	W47-1 through W47-4
Wetland 48 Parcel 12	D41	PSS- shrub swamp, successional shrubland, very dense in spots	Niagara silt loam, nearly level, concave, Canandaigua silt loam	Yes	43.08639 78.39711	W48-1 through W48-65
Wetland 49 Parcel 12	No data (D41)	PSS- shrub swamp, successional shrubland, very dense in spots	Lyons silt loam, nearly level	No	43.08909 78.39380	W49-1 through W49-7
Wetland 50 Parcel 12	No data (D41)	PSS- shrub swamp, successional shrubland, very dense in spots	Lyons silt loam, nearly level	Yes	43.08623 78.39438	W50-1 through W50-18
Wetland 51 Parcel 18	No data (D41)	PFO/PEM hardwood swamp and reed canary grass marsh in hedgerow	Canandaigua silt loam, nearly level	No	43.08381 78.39728	W51-1 through W51-8
Wetland 52 Parcel 12	No data (D41)	PSS- shrub swamp, successional shrubland, very dense in spots	Lyons silt loam, nearly level	No	43.08753 78.39313	W52-1 through W52-21

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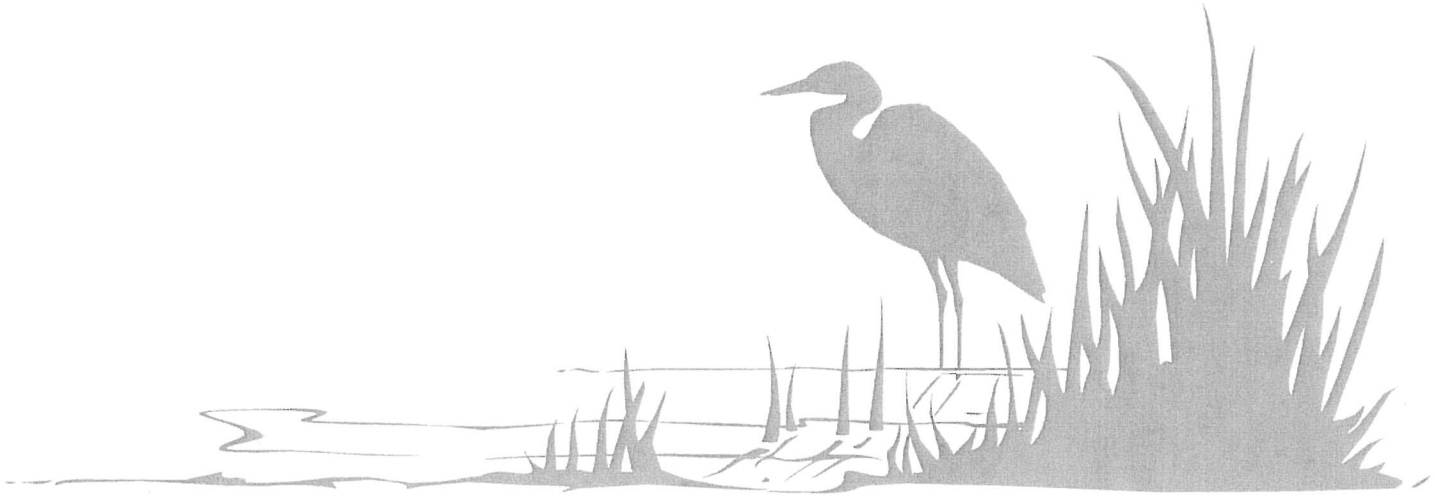

ATTACHMENT E
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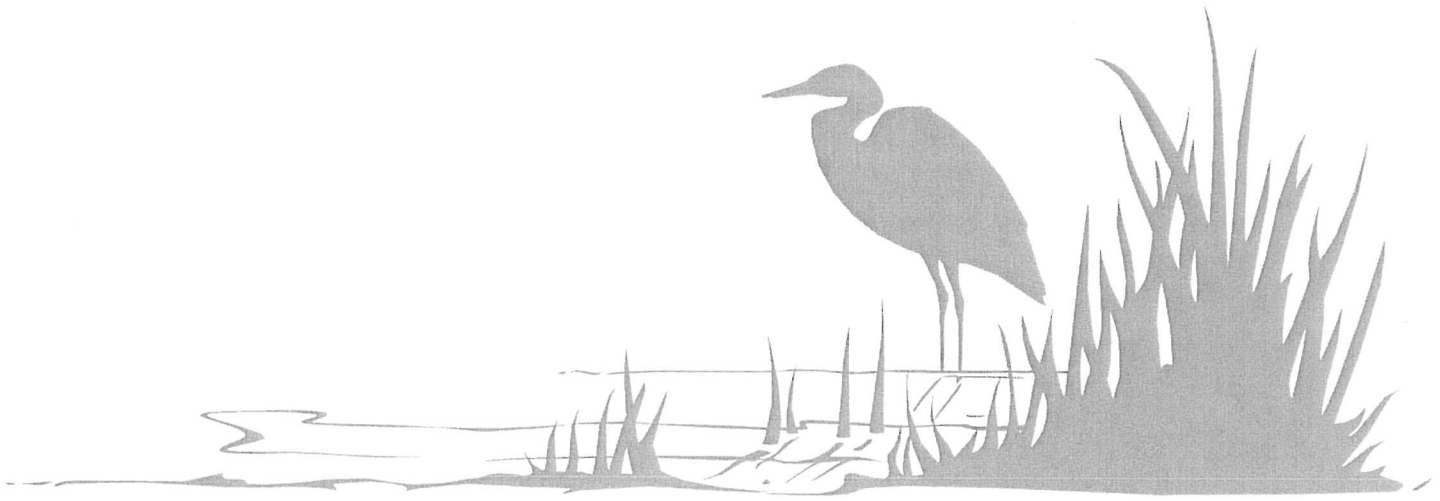

ATTACHMENT F
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