

Appendix F

Water Resources and Wetlands

Appendix F-1
Wetland Delineation Report

From 2006 CALP DGEIS

March 22, 200

Mr. George Nieves
US Army Corps of Engineers, NY District
Attn: Regulatory Branch – Room 1937
26 Federal Plaza
New York, New York 10278-0990

Re: The Concord Resort
219 Concord Road, Kiamesha, NY 12751

Dear Mr. Nieves:

William Kenny Associates LLC investigated the referenced project site in Kiamesha Lake, New York to identify and delineate wetlands and other Waters of the United States. On behalf of Concord Associates, LP, we respectfully request a jurisdictional determination by the New York District regarding the referenced property and completed wetland and watercourse investigation. Enclosed for your review and consideration are the following documents related to the completed investigation. The basis of the investigation and a brief description of existing site conditions follow the list of attached documents.

Attached Documents

1. Project Location (map)
2. Federal Wetland and Watercourse Delineation Map
3. Wetland Delineation Data Sheets
4. Wetland and Watercourse Photos
5. Wetland Jurisdiction and Mapping (drawing)
6. Wetland Classifications and Functions (drawing)

Basis of Investigation

Wetlands were identified and delineated in accordance with the Routine Method of 1987 *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (87 Manual). According to the 87 Manual, a wetland is an area in which a minimum of one positive indicator is identified for each of the following: wetland hydrology, hydric soils, and hydrophytic vegetation. Areas that are wetlands according to the 87 Manual were identified and delineated and are shown on the attached Federal Wetland and Watercourse Delineation Map. However, isolated wetlands are not regulated by the ACOE and as such have been identified accordingly on the map. Isolated wetlands are wetlands

separated from Waters of the United States by natural upland features other than river berms and beach dunes. Non-wetland Waters of the United States (e.g. ponds and streams, including intermittent watercourses) were identified based on the presence or absence of an ordinary high water mark or bed and bank.

Existing Site Conditions

The Project Site consists of approximately 1,750 acres within the Town of Thompson, in Sullivan County New York. Sullivan County and the site are within the Catskills region of New York.

A 36-hole golf course is present at the property. Golf course improvements include a maintenance facility and hotel. Much of the improvements are in the central portion of the property. Areas of broadleaved deciduous and needleleaved coniferous forest surround most of the golf course areas. Also located within the property area are various abandoned improvements; such as cottages, a small ski slope, a stable, and a large hotel and auditorium. A number of public roads run along and within the property.

The landscape of the site is characterized by two large rounded (drumlin) hills that are oriented north to south and located in the western and eastern portions of the property. The slopes of these hills are fairly regular (not undulating) and not strongly controlled by underlying bedrock, which is primarily a red sandstone.

The major drainage feature on the project site is Kiamesha Creek and numerous associated ponds and lakes. Beginning in the northwest portion of the site, at Kiamesha Lake, the Creek discharges to the south and flows along the western boundary of the site. At the southwestern portion of the site the Creek converges with two other watercourses (Tannery Brook and an unnamed watercourse). From there, the creek flows north through the central portion of the site and the primary golf course area. The two major hills are located east and west of this segment of the Creek. At the northeastern portion of the site, Kiamesha Creek turns east and then south where it flows along the eastern boundary of the project area.

The soils throughout the site are primarily red sandstone with compacted subsoil. The vegetative cover-type consist of some meadow, lawns with other ornamentals, golf course turf, and broadleaved deciduous and needleleaved evergreen forest areas.

A complete study of the wetlands and watercourses can be found in the Functional Assessment and the HGM data sheets summary table.

Mr. George Nieves
Re: The Concord Resort, Kiamesha, NY

March 22, 2006
Page 3

Conclusions

William Kenny Associates investigated the subject property and delineated wetlands and other Waters of the United States. We respectfully request jurisdictional determination by the New York District for the property. Please do not hesitate to contact me if you should have question, comments or require additional information. Thank you for your attention to this matter.

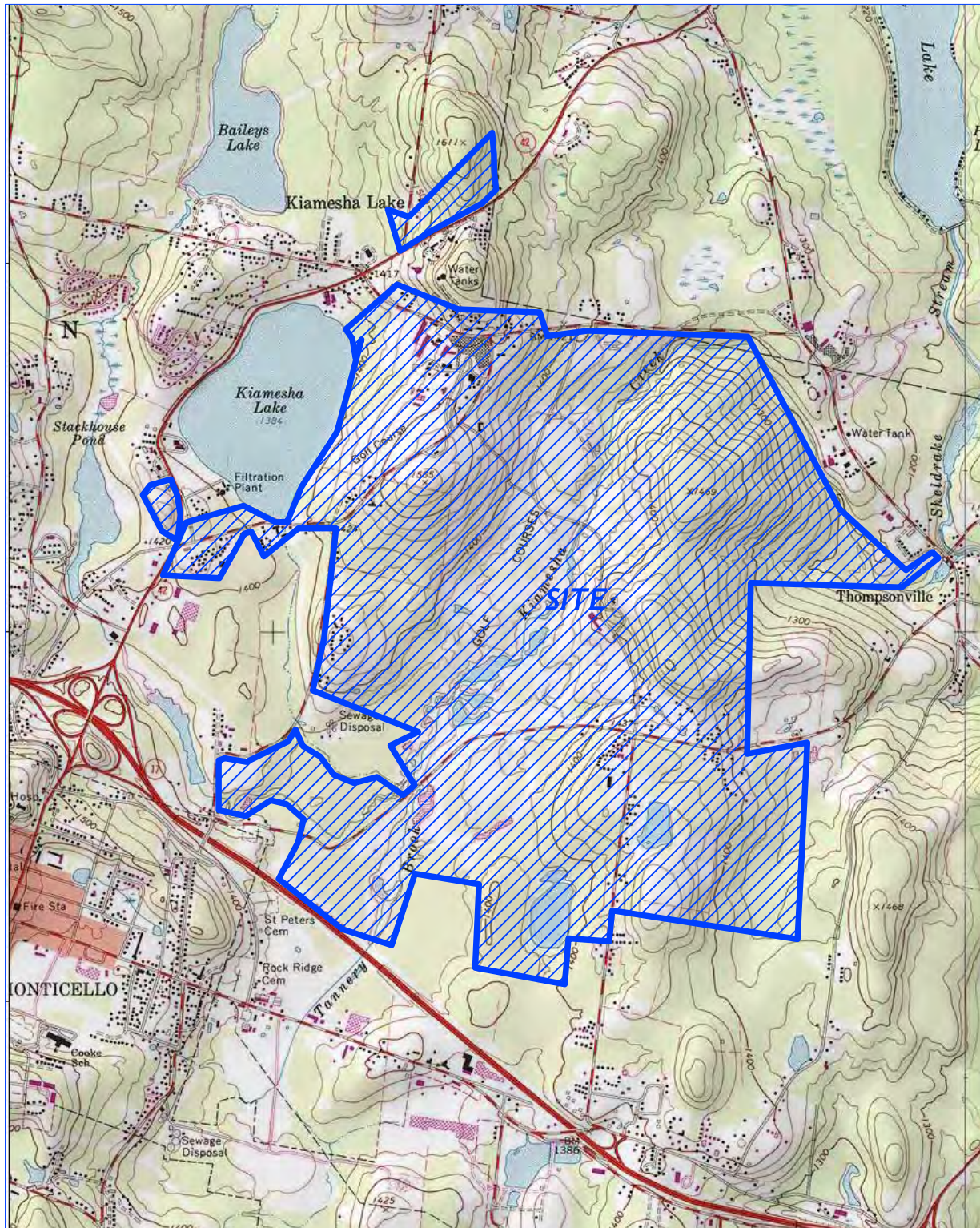
Sincerely,

A handwritten signature in cursive script, reading "William L. Kenny". The signature is written in dark ink and is positioned above the printed name.

William L. Kenny, CPWS, ASLA

Copy: Henry Zabatta, Concord Associates, LP

Ref. No. 100309R02



WILLIAM KENNY ASSOCIATES LLC

SOIL SCIENCE
ECOLOGICAL SERVICES
LAND USE PLANNING
LANDSCAPE ARCHITECTURE

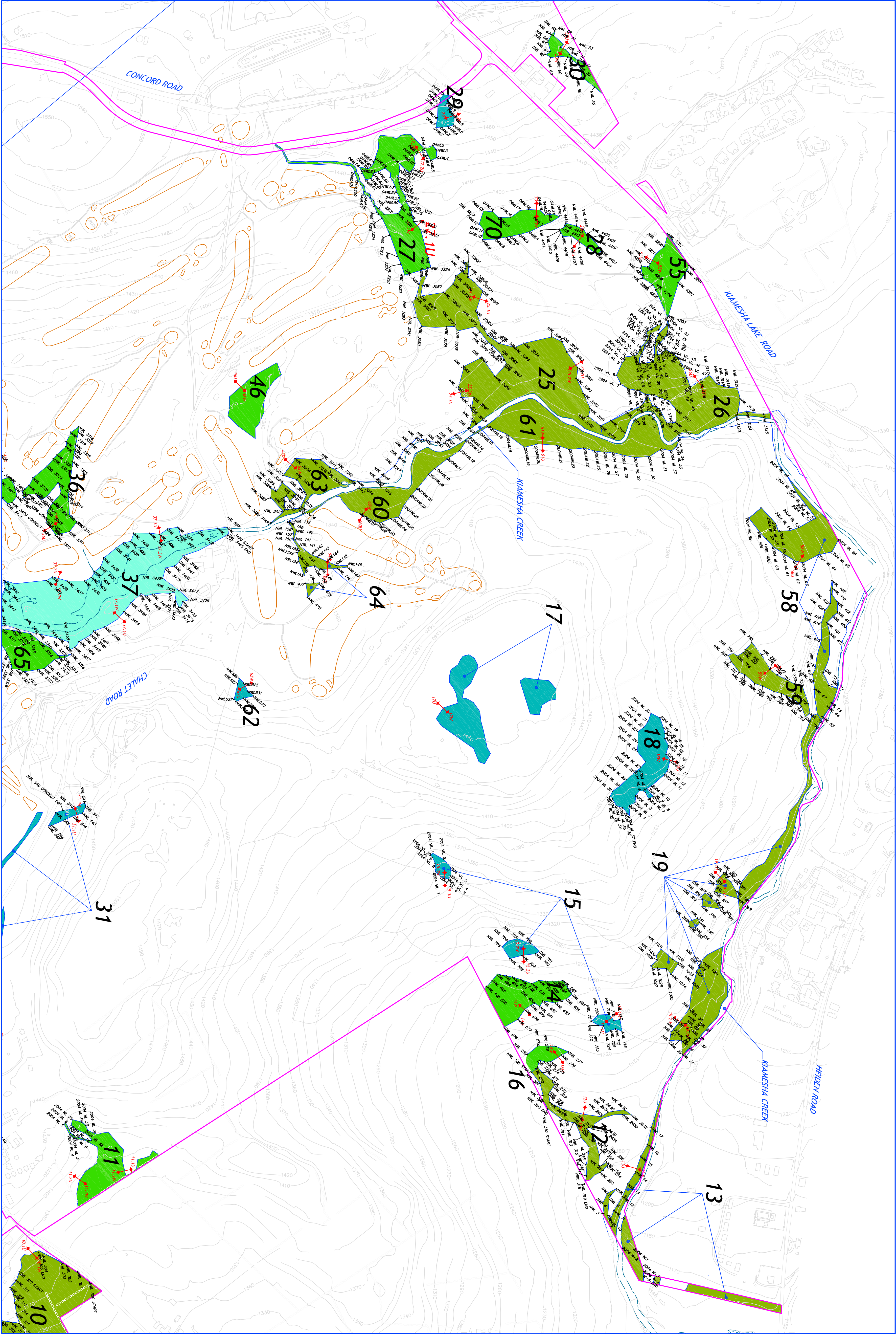
217 WEBB ROAD
FAIRFIELD, CT 06825
PHONE: 203 366 0588
FAX: 203 366 0067
www.wkassociates.net

PROJECT LOCATION THE CONCORD RESORT KIAMESHA LAKE, NEW YORK

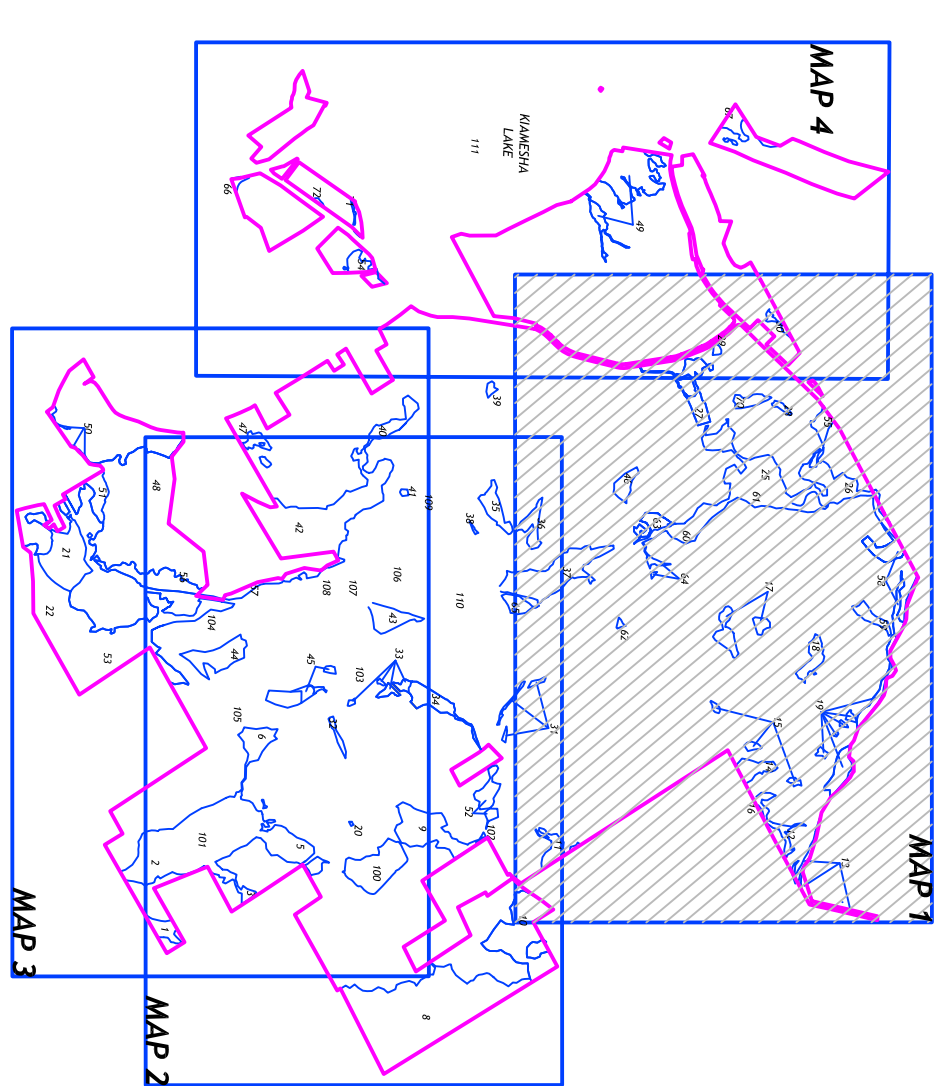
DATE: MARCH 22, 2006
NOT TO SCALE

WKA REF. NO. 100309D03





MAP REFERENCE



LEGEND	
SULLIVAN COUNTY/ NYSDEC/ACOE WETLANDS	71 WETLAND No. 101 POND/LAKE No.
ACOE WETLANDS	STREAM OR BROOK
NON-REGULATED ISOLATED WETLANDS	PROJECT BOUNDARY
POND/LAKE	TRANSECT NUMBER
	WETLAND BOUNDARY AND FLAG NUMBER
	GOLF COURSE FEATURE

- NOTES**
- WETLANDS FLAGGED (FIELD MARKED) BY WILLIAM KENNY ASSOCIATES, LLC AND SURVEYED BY CONTRACTORS' LINE & GRADE.
 - TOPOGRAPHIC AND ASSOCIATED FEATURES INFORMATION PROVIDED BY ROBINSON AERIAL SURVEYS, INC.
 - NYSDEC WETLAND JURISDICTION BASED ON FIELD REVIEWS BY DOUGLAS GUAGLER OF THE NYSDEC.
 - WETLAND JURISDICTION AND MAPPING SUBJECT TO CHANGE UNTIL FORMALLY ADOPTED BY REGULATORY AGENCIES.

FEDERAL WETLAND AND WATERCOURSE
DELINEATION MAP

OWNER:

CONCORD ASSOCIATES, LP

LOCATION:

THE CONCORD RESORT
KIAMESHA LAKE, NEW YORK

DATE: MARCH 22, 2006

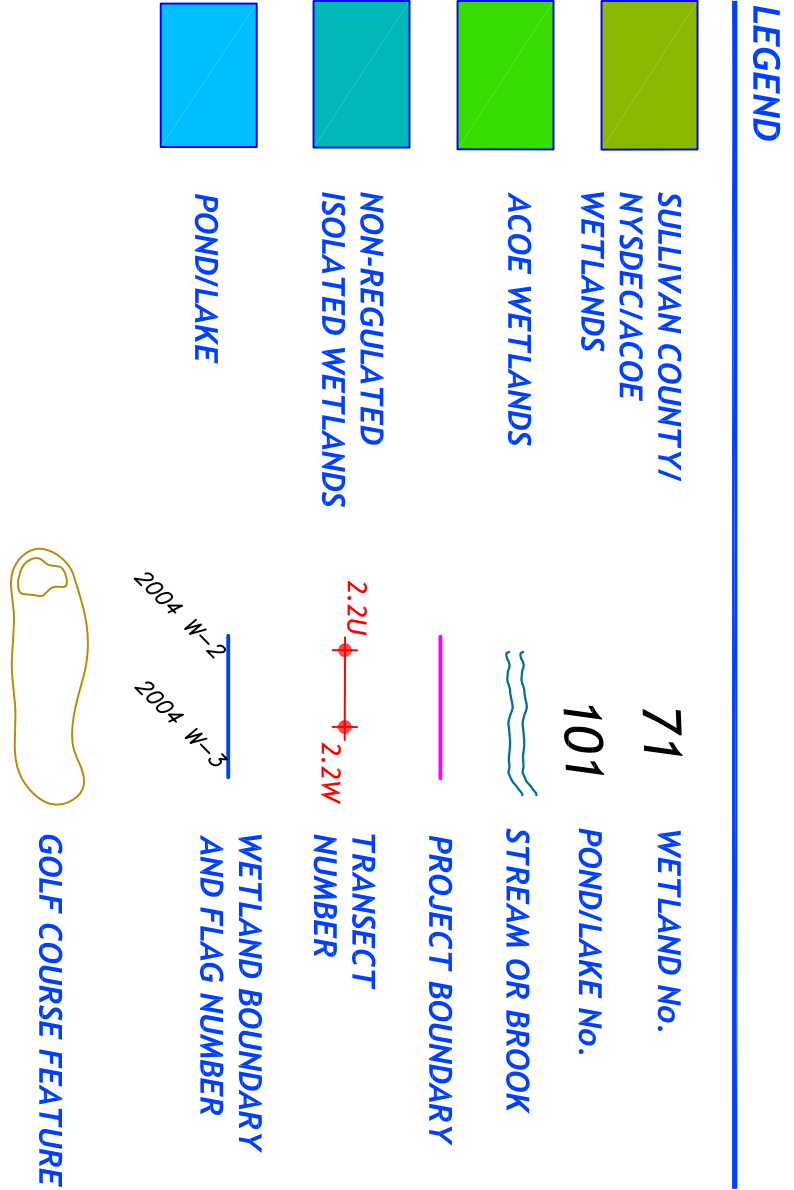
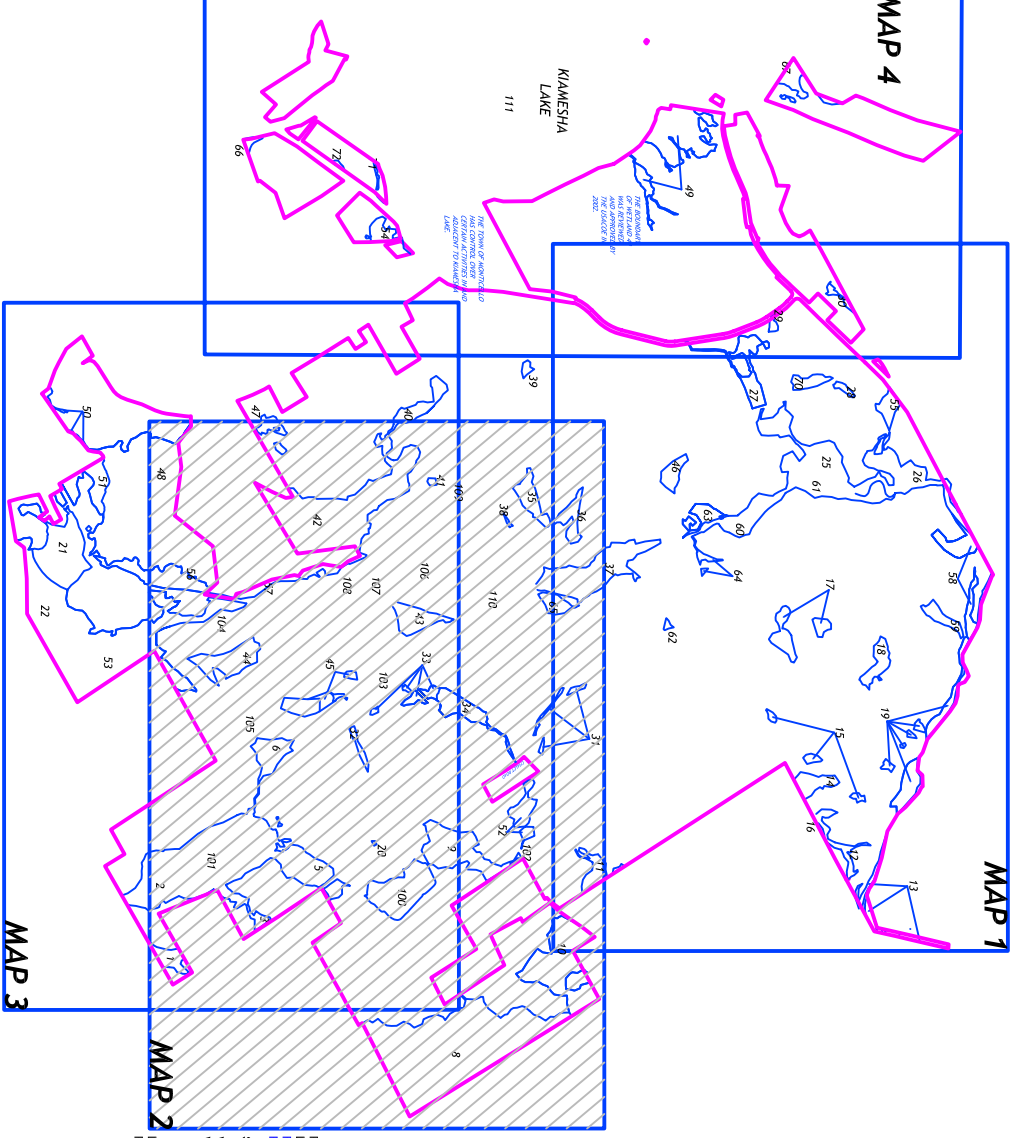
SCALE: 1" = 300'-0"



WKA REF. NO. 100309001-1



MAP REFERENCE



- NOTES
- WETLANDS FLAGGED (FIELD MARKED) BY WILLIAM KENNY ASSOCIATES, LLC AND SURVEYED BY CONTRACTORS' LINE & GRADE.
 - TOPOGRAPHIC AND ASSOCIATED FEATURES INFORMATION PROVIDED BY ROBINSON AERIAL SURVEYS, INC.
 - NYSD/EGACOE WETLAND JURISDICTION BASED ON FIELD REVIEWS BY DOUGLAS GIGER OF THE AGENCIES SUBJECT TO CHANGE WITHOUT NOTICE AND ARE SUBJECT TO CHANGE UNTIL FORMALLY ADOPTED BY REGULATORY AGENCIES.

FEDERAL WETLAND AND WATERCOURSE DELINEATION MAP

OWNER:

CONCORD ASSOCIATES, LP

LOCATION:

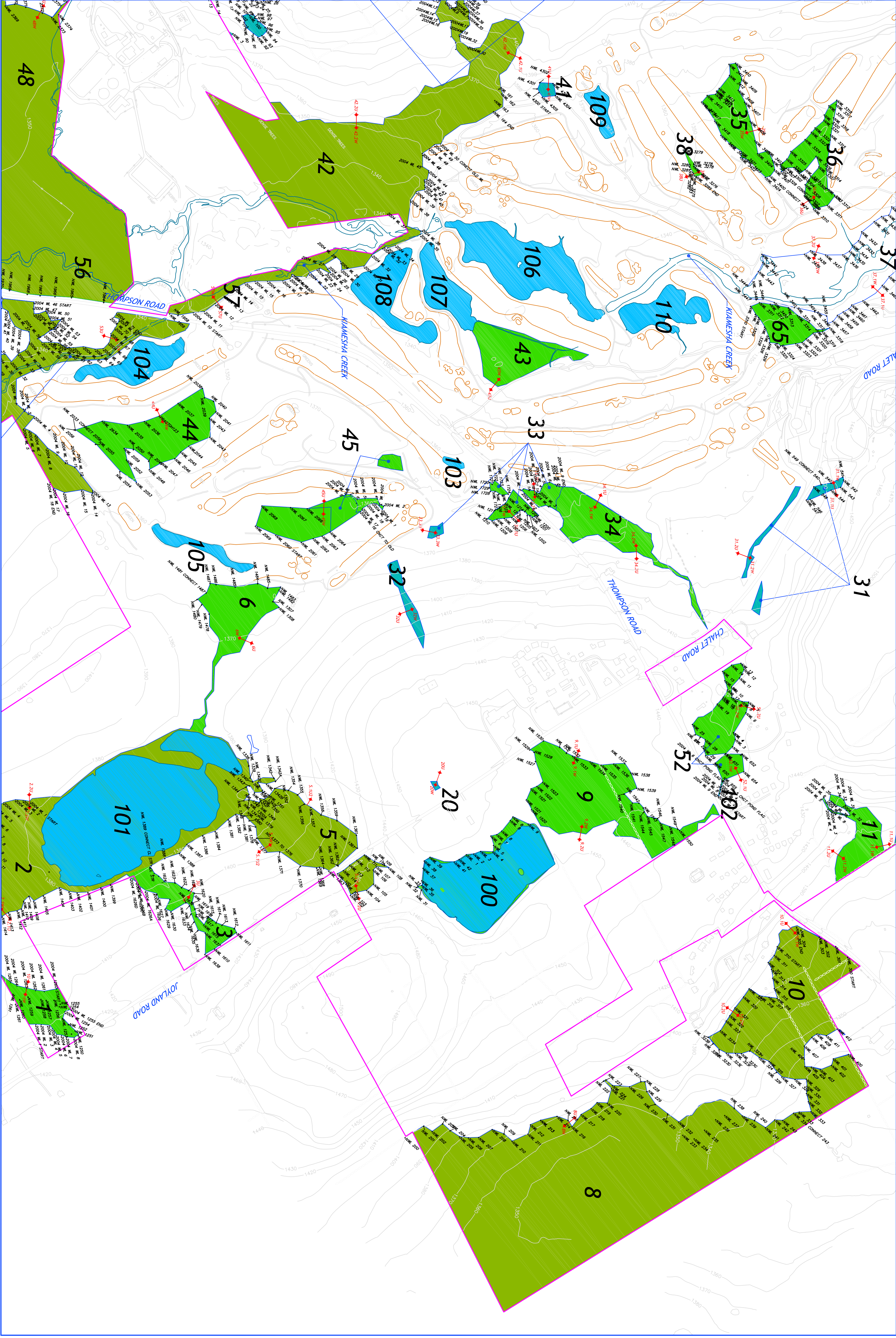
THE CONCORD RESORT
KIAMESHA LAKE, NEW YORK

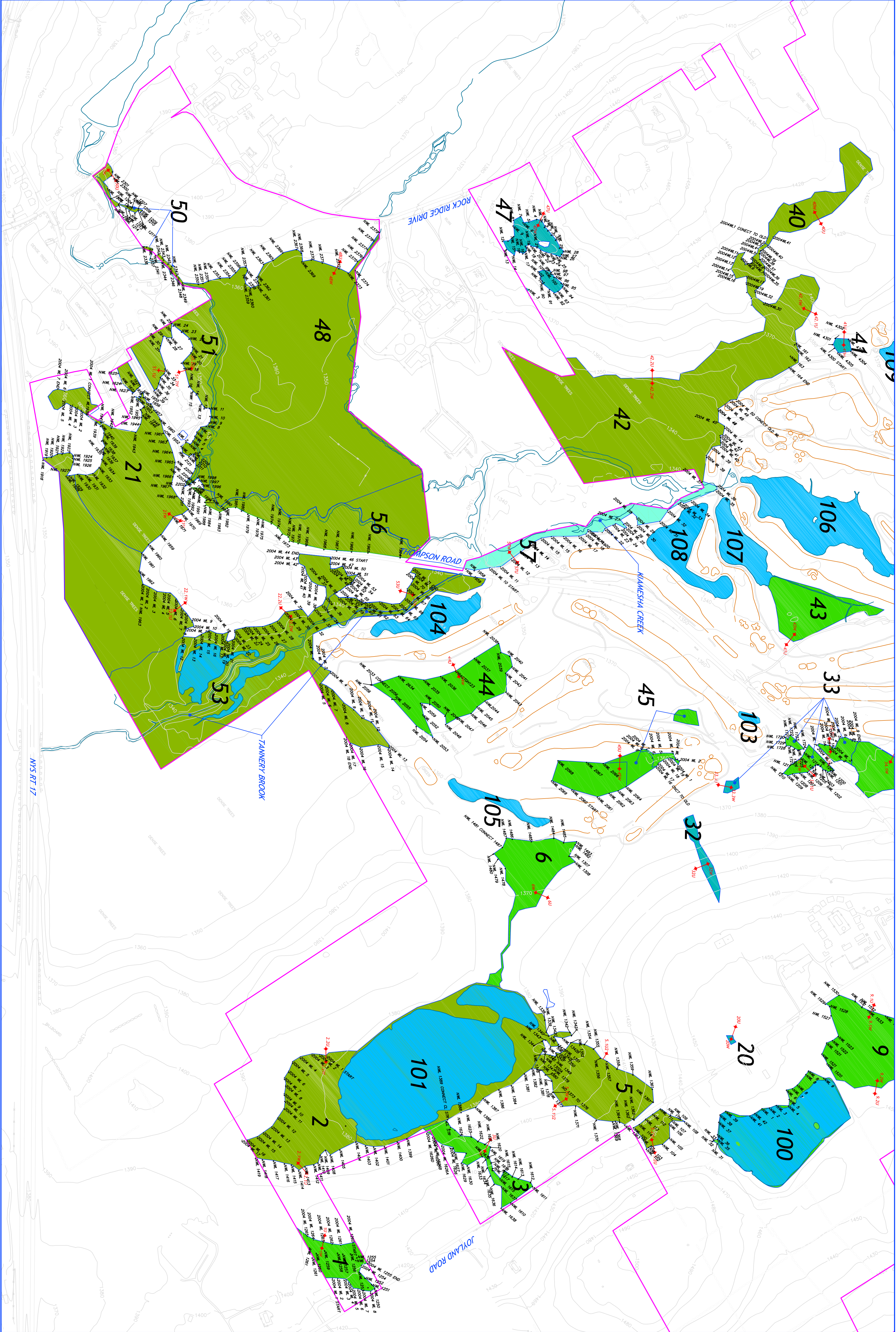
DATE: MARCH 22, 2006

SCALE: 1" = 300'-0"

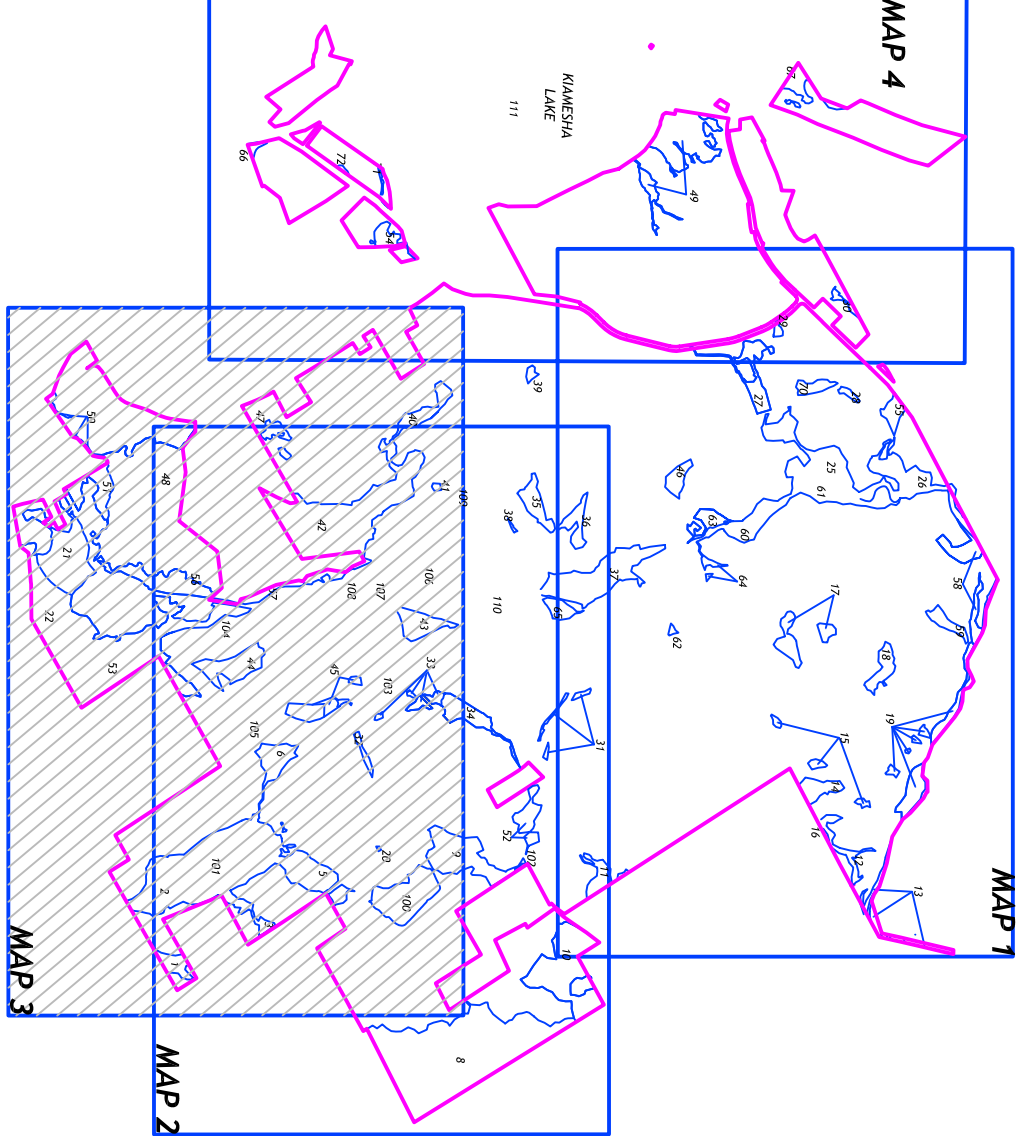


NAD 83 REF. NO. 100309001-2





MAP REFERENCE



LEGEND	
SULLIVAN COUNTY/	71 WETLAND NO.
MYSDERACOE	101 POND/LAKE NO.
WETLANDS	STREAM OR BROOK
ACOE WETLANDS	PROJECT BOUNDARY
NON-REGULATED	TRANSECT
ISOLATED WETLANDS	WETLAND BOUNDARY AND FLAG NUMBER
POND/LAKE	GOLF COURSE FEATURE

NOTES

- WETLANDS FLAGGED (FIELD MARKED) BY WILLIAM KENNY ASSOCIATES, LLC AND SURVEYED BY CONTRACTORS' LINE & GRADE.
- TOPOGRAPHIC AND ASSOCIATED FEATURES INFORMATION PROVIDED BY ROBINSON MENUL SURVEYS, INC.
- MYSDERACOE AND SULLIVAN COUNTY FIELD REVIEWS BY DOUGLAS GUNGLER OF THE NYDEC
- WETLAND JURISDICTION AND MAPPING SUBJECT TO CHANGE UNTIL FORMALLY ADOPTED BY REGULATORY AGENCIES.

FEDERAL WETLAND AND WATERCOURSE DELINEATION MAP

OWNER:

CONCORD ASSOCIATES, LP

LOCATION:

THE CONCORD RESORT
KIAMESHA LAKE, NEW YORK

DATE: MARCH 22, 2006

SCALE: 1" = 300'-0"



NADA REF. NO. 100390001-3



Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W15**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W15**
Station ID: **Transect 15.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X <i>Thelypteris noveboracensis</i> <i>sphagnum, sp.</i>	Fern, New York		FAC
Tree			
X <i>Fagus grandifolia</i>	Beech, American		FACU
<i>Acer rubrum</i>	Maple, Red		FAC
<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-2	A	2.5YR 3/3	2.5YR 2.5/1	few		Silt Loam
2-12	B	7.5YR 4/6	7.5YR 4/2	few		Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W15 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W15**
Station ID: **Transect 15.1**
Plot ID: **Wetland (east)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<i>Polystichum</i>	moss		
<i>Osmunda x ruggii</i>	Fern		NI
<i>sphagnum, sp.</i>			
<u>Tree</u>			
X <i>Fagus grandifolia</i>	Beech		FAC+
<i>Carpinus caroliniana</i>	Hornbeam, American		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **2**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLE Y2 2.5/5PB				
0-4	A	GLE Y1 4/N	7.5YR 6/8			Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Hard Pan 6"

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W15**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W15**
Station ID: **Transect 15.2**
Plot ID: **Upland (central)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Fagus grandifolia</i>	Beech	FAC+
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-6	A	2.5YR 5/4	2.5YR 4/1	common		Sandy Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present

☐ This Data Point is a Wetland

Remarks

Upland-no soils or hydrology

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W15 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W15**
Station ID: **Transect 15.2**
Plot ID: **Wetland (central)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLEY2 2.5/5PB				
0-2	A	GLEY1 5/N				Silt Loam
2-15	B	GLEY1 6/N	GLEY1 4/N 5YR 5/8			Sandy Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W1 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W1**
Station ID: **Transect 1.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): 5		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-5	A	2.5YR 5/1				Silt
5-12	B	2.5YR 5/2	5YR 5/8 2.5YR 4/2	few common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W3**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W3**
Station ID: **Transect 3.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<i>Osmunda x ruggii</i>	Fern	2	NI
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Acer rubrum</i>	Maple, Red		FAC
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-3	A	2.5YR 4/3				Silt Loam
3-14	B	2.5YR 5/4				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W14**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W14**
Station ID: **Transect 14.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Sphagnum sp.</i>			
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-2	A	5YR 3/2	5YR 2.5/1	few		Silt
2-12	B	7.5YR 4/4	10YR 4/3	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W14 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W14**
Station ID: **Transect 14.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Dryopteris atropalustris</i>	Woodfern	OBL
	<i>Juniper Polytrichum moss</i>		
	<i>Sphagnum sp.</i>		
	<i>Thelypteris noveboracensis</i>	Fern,New York	FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock,Eastern	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Betula alba</i>	Birch,White	FAC+
% Species that are OBL, FACW, or FAC (except FAC-):		50	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 4		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
4-0	O	GLE Y1 2.5/5PB				decomposed leaves
0-12	A	10YR 3/1	5YR 5/8	few		Silt
			5YR 5/1	common		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks
Hard Pan

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks
☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W16**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W16**
Station ID: **Transect 16.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
	<i>Sphagnum sp.</i>		
Tree			
X	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-5	A	5YR 3/2				Silt Loam
5-12	B	5YR 4/4	5YR 5/4	few		Silt Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Hard Pan

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W16 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W16**
Station ID: **Transect 16.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
<i>Juniper Polytrichum</i>	Moss		
<i>Sphagnum sp.</i>			
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **2**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-14	O	GLE Y2 2.5/5PB				decomposed leaves
14-24	A/B	7.5YR 5/3	7.5YR 5/6	few		Silt Loam
			7.5YR 6/8	few		

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input checked="" type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W12**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W12**
Station ID: **Transect 12.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Carpinus caroliniana</i>	Hornbeam, American		FAC
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

No Red Maple in Upland Area

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-5	A	5YR 4/3	5YR 3/3	few		Silt
5-18	B	5YR 4/4	5YR 4/6	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Redish Soil

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W12 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W12**
Station ID: **Transect 12.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Lycopodium obscurum</i>	Clubmoss, Tree		FACU
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Betula alleghaniensis</i>	Birch, Yellow		FAC
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **6**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-8	A	5YR 4/4	5YR 3/4	common		Silt
8-18	B	5YR 4/6	5YR 5/8	common		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W13**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W13**
Station ID: **Transect 13.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Dryopteris intermedia</i>	Woodfern, Evergreen	FACU
	<i>Athyrium pycnocarpon</i>	Fern, Narrow-Leaf Lady	FAC
Tree			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Carpinus caroliniana</i>	Hornbeam, American	FAC
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-16	A/B	5YR 4/4	5YR 3/2	few		Loamy Sand

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

No change to B horizon

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W13 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W13**
Station ID: **Transect 13.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Dryopteris intermedia</i>	Woodfern, Evergreen	FACU
	<i>Athyrium pycnocarpon</i>	Fern, Narrow-Leaf Lady	FAC
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Carpinus caroliniana</i>	Hornbeam, American	FAC
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Riverine Area

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	GLEY2 2.5/5PB				decomposed leaves
0-14	A	7.5YR 4/3	7.5YR 4/6	common	distinct	Fine Sand

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Probable Aquatic Moist Regime
☒ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☒ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Very Sandy

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W17**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W17**
Station ID: **Transect 17.1**
Plot ID: **Upland (north)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
	<i>Sphagnum sp.</i>		
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-6	A	5YR 2.5/2	5YR 2.5/1	few		Silt
6-14	B	7.5YR 4/4	7.5YR 3/2	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W17**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W17**
Station ID: **Transect 17.2**
Plot ID: **Upland (south)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
	<i>Sphagnum sp.</i>		
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-3	A	2.5YR 4/3				Silt
3-15	B	5YR 4/6	5YR 3/3	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W17 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 14, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W17**
Station ID: **Transect 17**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
	<i>Sphagnum sp.</i>		
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Vegetation assumed wetland, as hydric soils and wetland hydrology are present and in this region hemlock and white pine are known to grow on hummocks in wetlands.

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): NA	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): NA		
Depth to Saturated Soils(in.): 4		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
4-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-1	E	10YR 6/1				Sand
1-12	A/B	5YR 5/1	5YR 6/8 5YR 4/1	many few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W8**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W8**
Station ID: **Transect 8.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Shrub</u>				
X	<i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>				
X	<i>Pinus strobus</i>	Pine, Eastern White		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+
	<i>Fraxinus americana</i>	Ash, White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-4	A	5YR 3/3				Silt
4-15	B	7.5YR 4/6	7.5YR 4/4 7.5YR 5/6	common few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☐ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☐ This Data Point is a Wetland

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W8 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W8**
Station ID: **Transect 8.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Dryopteris intermedia</i>	Woodfern, Evergreen	FACU
	<i>Sphagnum sp.</i>		
Shrub			
	<i>Rhododendron maximum</i>	Rhododendron, Rosebay	FAC
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC
	<i>Fraxinus americana</i>	Ash, White	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLEY2 2.5/5PB				decomposed leaves
0-8	A	2.5YR 3/1	2.5YR 4/3 2.5YR 4/4	few few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks
Hard Pan

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W10**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W10**
Station ID: **Transect 10.1**
Plot ID: **Upland (north)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Pinus strobus</i>	Pine, Eastern White		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-6	A	2.5YR 3/3	2.5YR 3/6	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Hard pan

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W10 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W10**
Station ID: **Transect 10.1**
Plot ID: **Wetland (north)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Fragaria virginiana</i>	Strawberry, Virginia	FACU
<u>Shrub</u>			
	<i>Ilex verticillata</i>	Winterberry, Common	FACW+
	<i>Vaccinium amoenum</i>	Blueberry, Highbush	FACW
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input checked="" type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 4		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-8	A	5YR 3/2	5YR 4/6	few		Silt
8-16	B	5YR 4/3	5YR 3/1	few		Silt
			7.5YR 6/6	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W10 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W10**
Station ID: **Transect 10.2**
Plot ID: **Wetland (south)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Thelypteris thelypteroides</i>	Fern, Marsh	FACW+
	<i>Athyrium pycnocarpon</i>	Fern, Narrow-Leaf Lady	FAC
Shrub			
X	<i>Rhododendron maximum</i>	Rhododendron, Rosebay	FAC
	<i>Hamamelis virginiana</i>	Witch-Hazel, American	FAC-
Tree			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **10**
Depth to Saturated Soils(in.): **0**

Remarks

Seeps and slope wetland

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLEY2 2.5/5PB				decomposed leaves
0-1	A	5YR 3/2	5YR 4/6	few		Silt
1-12	B	5YR 4/3	5YR 4/6	few		Silt
			5YR 4/2			

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Sloped wetland-shallow rock

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W9**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W9**
Station ID: **Transect 9.1**
Plot ID: **Upland (west)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Pinus strobus</i>	Pine, Eastern White		FACU
	<i>Acer rubrum</i>	Maple, Red		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): NA	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): NA		
Depth to Saturated Soils(in.): NA		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-5	A	5YR 4/4				Silt
5-12	B	2.5YR 5/4	2.5YR 5/6 2.5YR 3/4	common few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W9 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W9**
Station ID: **Transect 9.1**
Plot ID: **Wetland (west)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Carex alopecoidea</i>	Sedge,Foxtail	5	FACW
<i>Sphagnum sp.</i>		5	
<u>Shrub</u>			
<i>Vaccinium corymbosum</i>	Blueberry,Highbush	25	FACW-
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple,Red	35	FAC
<i>Pinus strobus</i>	Pine,Eastern White	30	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☒ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **1**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-3	A	7.5YR 3/2				Silt
3-14	B	10YR 6/1	7.5YR 5/5GY 7.5YR 7/1	few few		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W9**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W9**
Station ID: **Transect 9.2**
Plot ID: **Upland (east)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): NA	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-4	A	5YR 4/4				Silt
4-16	B	5YR 4/3	5YR 5/4	few		Silt
			5YR 3/3	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W9 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W9**
Station ID: **Transect 9.2**
Plot ID: **Wetland (east)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Juniper Polytrichum</i>	Moss	
	<i>Sphagnum sp.</i>		
Shrub			
	<i>Vaccinium corymbosum</i>	Blueberry, Highbush	FACW-
Tree			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☒ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**

Depth to Free Water in Pit(in.): **10**

Depth to Saturated Soils(in.): **6**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-5	A	5YR 5/2	5YR 5/6	many		Silt
5-16	B	5YR 5/1	2.5YR 5/4 2.5YR 5/3	many many		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input checked="" type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W22**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W22**
Station ID: **Transect 22.1**
Plot ID: **Upland (south)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
Tree				
X	<i>Acer rubrum</i>	Maple,Red		FAC
X	<i>Pinus strobus</i>	Pine,Eastern White		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+
	<i>Betula alleghaniensis</i>	Birch,Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): NA	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	o	5YR 3/1				decomposed leaves
0-5	A	5YR 3/3				Silt
5-16	B	7.5YR 4/4	10YR 4/2	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W22 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W22**
Station ID: **Transect 22.1**
Plot ID: **Wetland (south)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Acer rubrum</i>	Maple, Red		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-4	A	5YR 5/2	5YR 4/6	common		Silt
4-16	B	5YR 4/4	5YR 6/4	common		Silt
			5YR 3/1	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W22**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W22**
Station ID: **Transect 22.2**
Plot ID: **Upland (north)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Carex amphibola</i>	Sedge, Narrow-Leaf		FAC
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Pinus strobus</i>	Pine, Eastern White		FACU
<i>Betula alleghaniensis</i>	Birch, Yellow		FAC
<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-5	A	5YR 3/2				Silt
5-14	B	5YR 4/3	5YR 3/2 5YR 4/2	few common		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W22 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W22**
Station ID: **Transect 22.2**
Plot ID: **Wetland (north)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Athyrium pycnocarpon</i>	Fern, Narrow-Leaf Lady		FAC
<i>Spiraea alba</i>	Meadow-Sweet, Narrow-Leaf		FACW+
<u>Shrub</u>			
<i>Vaccinium corymbosum</i>	Blueberry, Highbush		FACW-
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Pinus strobus</i>	Pine, Eastern White		FACU
<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **moist**

Depth to Free Water in Pit(in.): **NA**

Depth to Saturated Soils(in.): **8**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	GLEY2 2.5/5PB				decomposed leaves
0-16	A/B	GLEY1 6/N	5YR 5/8 5YR 6/6	common common		Silty Clay Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W21**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W21**
Station ID: **Transect 21.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): NA	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc. decomposed leaves
			Color	Abundance	Contrast	
3-0	O	5YR 3/1				
0-5	A	2.5YR 5/3				
5-16	B	5YR 4/6	5YR 4/4 5YR 5/6	few few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present

Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W21 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W21**
Station ID: **Transect 21.1**
Plot ID: **Wetland**

Vegetation

Vegetation		Dominant	Species	Common Name	% Cover	Indicator
	X		<i>Athyrium distentifolium</i> <i>Thelypteris noveboracensis</i>	Fern,Alpine Lady Fern,New York		NI FAC
	<u>Herbaceous</u>					
	X		<i>Sphagnum sp.</i> <i>Lycopodium obscurum</i>	Clubmoss,Tree		FACU
	<u>Tree</u>					
	X		<i>Acer rubrum</i> <i>Tsuga canadensis</i>	Maple,Red Hemlock,Eastern		FAC FACU
% Species that are OBL, FACW, or FAC (except FAC-):				33	Cowardin Classification:	
Remarks						

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5BG				decomposed leaves
0-3	A	7.5YR 3/2				Silt
3-14	A	7.5YR 4/1	5YR 4/1 GLE Y1 7/N	common common		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W2**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 15, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W2**
Station ID: **Transect 2.1**
Plot ID: **Upland (south)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Acer rubrum</i>	Maple, Red		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): NA	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-3	A	2.5YR 2.5/1				Silt
3-12	B	5YR 5/3	5YR 6/4 5YR 5/1	common common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present

Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W2 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 15, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W2**
Station ID: **Transect 2.1**
Plot ID: **Wetland (south)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-3	A	7.5YR 2.5/1				Silt
3-10	B	GLE Y1 4/N	GLE Y1 5/N	few		Loamy Fine Sand

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W2**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 15, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W2**
Station ID: **Transect 2.2**
Plot ID: **Upland (north)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
	<i>Lycopodium obscurum</i>	Clubmoss, Tree		FACU
	<i>Fagus grandifolia</i>	Beech, American		FACU
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **NA**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-5	A	5YR 4/3				Silt
5-6	B	5YR 5/6				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W2 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 15, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W2**
Station ID: **Transect 2.2**
Plot ID: **Wetland (north)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Betula alleghaniensis</i>	Birch, Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Vegetation assumed wetland, as hydric soils and wetland hydrology are present and in this region hemlock and white pine are known to grow on hummocks in wetlands.

Hydrology

Primary Wetland Hydrology Indicators		Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 6		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-5	A	5YR 5/1				Silt
5-14	B	7.5YR 5/3	7.5YR 5/2 7.5YR 5/6	common few		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W1**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W1**
Station ID: **Transect 1.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-2	A	2.5YR 3/2				Silt
2-12	B	5YR 4/3				Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W3 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W3**
Station ID: **Transect 3.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Panicum rigidulum</i>	Grass, Red-Top Panic	FACW+
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC
	<i>Carpinus caroliniana</i>	Hornbeam, American	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	GLEY2 2.5/5PB				decomposed leaves
0-3	A	5YR 3/1				
3-18	B	5YR 4/3	5YR 4/1 5YR 5/6	common few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W20**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W20**
Station ID: **Transect 20.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Fagus grandifolia</i>	Beech, American		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-3	A	5YR 5/4				Silt
3-18	B	2.5YR 5/4				Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W20 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W20**
Station ID: **Transect 20.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Spiraea alba</i>	Meadow-Sweet,Narrow-Leaf	FACW+
	<i>Carex granularis</i>	Sedge,Meadow	FACW+
	<i>Iris pseudacorus</i>	Iris,Yellow	OBL
<u>Shrub</u>			
	<i>Vaccinium corymbosum</i>	Blueberry,Highbush	FACW-
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple,Red	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input checked="" type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >20		
Depth to Saturated Soils(in.): >20		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				
0-1	A	2.5YR 5/1				Silt
1-14	B	2.5YR 5/2	5YR 5/6 2.5YR 4/1	common few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W6**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W6**
Station ID: **Transect 6.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow		FAC
	<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**
Remarks

Cowardin Classification:

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-4	A	5YR 4/4				Silt
4-14	B	7.5YR 4/3	7.5YR 5/6 7.5YR 4/2	common few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W6 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W6**
Station ID: **Transect 6.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Vegetation assumed wetland, as hydric soils and wetland hydrology are present and in this region hemlock and white pine are known to grow on hummocks in wetlands.

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-4	A	5YR 5/4	5YR 4/2			Silt
4-14	B	5YR 5/3	5YR 5/2	few		Silt
			5YR 5/8	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W52**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W52**
Station ID: **Transect 52.1**
Plot ID: **Upland (west)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Carex blanda</i>	Sedge, Woodland	FAC
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fagus grandifolia</i>	Beech, American	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-4	A	2.5YR 3/3	2.5YR 2.5/1	few		Silt
4-12	B	5YR 4/4				

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W52 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W52**
Station ID: **Transect 52.1**
Plot ID: **Wetland (west)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Carex granularis</i>	Sedge, Meadow	FACW+
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
	<i>Solidago austrina</i>	Golden-Rod	OBL
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Betula alba</i>	Birch, White	FAC+
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
% Species that are OBL, FACW, or FAC (except FAC-): 100			
Cowardin Classification:			
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 2		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-14	Ag	5YR 4/1	5YR 5/8	many	distinct	Silty Clay
<hr/>						
<i>Hydric Soils Indicators</i>						
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic % in Surface Layer			
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking			
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime			<input type="checkbox"/> Listed on Local Hydric Soils List			
<input checked="" type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (explain in remarks)			
Unit Name:			Taxonomy:			
Drainage Class:			<input type="checkbox"/> Field Observations match map			
Remarks						

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W52**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W52**
Station ID: **Transect 52.2**
Plot ID: **Upland (east)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>	<i>Pinus strobus</i>	Pine, Eastern White	100	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**
Remarks

Cowardin Classification:

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-12	A	10R 4/4				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Rock at 12"

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W52 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W52**
Station ID: **Transect 52.2**
Plot ID: **Wetland (east)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Carex granularis</i>	Sedge, Meadow	FACW+
	<i>Solidago austrina</i>	Golden-Rod	OBL
<u>Shrub</u>			
	<i>Vaccinium corymbosum</i>	Blueberry, Highbush	FACW-
<u>Tree</u>			
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 3		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-4	A	2.5YR 4/3				Silt
4-16	B	2.5YR 4/3	2.5YR 4/1 2.5YR 4/8	common few		Silty Clay

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W53**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W53**
Station ID: **Transect 53.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Carex novae-angliae</i>	Sedge, New England	FACU*
	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Fagus grandifolia</i>	Beech, American	FACU
	<i>Acer saccharum</i>	Maple, Sugar	FACU-
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	5YR 3/1				decomposed leaves
0-6	A	5YR 3/1				Silt
6-12	B	5YR 4/1	7.5YR 5/6 7.5YR 4/1	common few		Sandy Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W53 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W53**
Station ID: **Transect 53.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Phragmites australis</i>	Reed, Common	FACW
	<i>Carex granularis</i>	Sedge, Meadow	FACW+
	<i>Lycopodium obscurum</i>	Clubmoss, Tree	FACU
	<i>Sphagnum sp.</i>		
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
<u>Shrub</u>			
	<i>Vaccinium corymbosum</i>	Blueberry, Highbush	FACW-
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
X	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Betula alba</i>	Birch, White	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **66** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input checked="" type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input checked="" type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >16		
Depth to Saturated Soils(in.): >16		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-12	A	5YR 5/1	5YR 4/1	common		Sandy Loam
12-16	B	10YR 6/2	10YR 6/4	common		Sandy Loam
			10YR 5/2	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input checked="" type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W44**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W44**
Station ID: **Transect 44.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse Greens</i>			
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple,Red		FAC
<i>Betula alba</i>	Birch,White		FAC+
<i>Tsuga canadensis</i>	Hemlock,Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-4	A	5YR 3/2	5YR 3/1	common		Silt
4-14	B	5YR 4/3	7.5YR 4/2	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Filled Area

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W44 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W44**
Station ID: **Transect 44.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Fragaria virginiana</i>	Strawberry, Virginia	FACU
	<i>Carex laxiflora</i>	Sedge, Loose-Flowered	FACU*
	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Athyrium pycnocarpon</i>	Fern, Narrow-Leaf Lady	FAC
	<i>Sphagnum</i> sp.		
<u>Shrub</u>			
X	<i>Ilex verticillata</i>	Winterberry, Common	FACW+
	<i>Rhododendron maximum</i>	Rhododendron, Rosebay	FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Betula alba</i>	Birch, White	FAC+
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **33**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
12-0	O	GLEY2 2.5/5PB				decomposed leaves
0-3	A	7.5YR 3/1	7.5YR 2.5/1	common		Silty Clay Loam
3-9	B	GLEY1 5/N	7.5YR 6/6	many		Sandy Loam

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☒ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors

- ☐ Concretions
☒ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W44 (wetland)**

Wetland Determination

☒ Hydrophytic Vegetation Present

☒ This Data Point is a Wetland

☒ Hydric Soils Present

☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W11**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W11**
Station ID: **Transect 11.1**
Plot ID: **Upland (north)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Sphagnum sp.</i>			
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple,Red		FAC
<i>Fagus grandifolia</i>	Beech,American		FACU
<i>Pinus strobus</i>	Pine,Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-12	A	5YR 5/4	5YR 3/1	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W11 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W11**
Station ID: **Transect 11.1**
Plot ID: **Wetland (north)**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Athyrium thelypteroides</i> <i>Sphagnum sp.</i>	Fern, Silvery Lady		FAC
<u>Shrub</u>				
	<i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>				
X	<i>Pinus strobus</i>	Pine, Eastern White		FACU
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Fraxinus americana</i>	Ash, White		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **66**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **1**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
4-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-8	A	2.5YR 5/4	5YR 6/8 2.5YR 4/4	many common		Loamy Fine Sand

Hydric Soils Indicators

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Odor
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime
<input checked="" type="checkbox"/> Reducing Conditions
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (explain in remarks) |
|---|--|

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W11**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W11**
Station ID: **Transect 11.2**
Plot ID: **Upland (south)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
<i>Sphagnum sp.</i>			
Shrub			
<i>Vaccinium angustifolium</i>	Blueberry,Lowbush		FACU-
Tree			
X	<i>Acer rubrum</i>	Maple,Red	FAC
	<i>Acer saccharum</i>	Maple,Sugar	FACU-
	<i>Fagus grandifolia</i>	Beech,American	FACU
	<i>Fraxinus americana</i>	Ash,White	FACU
	<i>Pinus strobus</i>	Pine,Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-10	A	2.5YR 4/6				Silt pebbles

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks
Rock at 10"

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W11 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 22, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W11**
Station ID: **Transect 11.2**
Plot ID: **Wetland (south)**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Sphagnum sp.</i>		
<u>Shrub</u>			
X	<i>Vaccinium corymbosum</i>	Blueberry, Highbush	FACW-
	<i>Prunus virginiana</i>	Cherry, Choke	FACU
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
X	<i>Fagus grandifolia</i>	Beech	FAC+
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 1	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-2	A	2.5YR 4/1				Silty Clay
2-6	B	2.5YR 5/4	5YR 6/8 GLE Y2 6/10BG	many few		Sandy Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: _____ Taxonomy: _____
Drainage Class: _____ ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W43**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W43**
Station ID: **Transect 43.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse</i>			
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-4	A	5YR 5/1	5YR 4/1	few		Silt
4-6	B	2.5YR 4/3	2.5YR 4/2	few		Silt Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock 6"

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W43 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W43**
Station ID: **Transect 43.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Thelypteris noveboracensis</i>	Fern,New York		FAC
	<i>Sphagnum sp.</i>			
	<i>Athyrium thelypteroides</i>	Fern,Silvery Lady		FAC
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple,Red		FAC
	<i>Tsuga canadensis</i>	Hemlock,Eastern		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+
<u>Vine</u>				
X	<i>Rubus wheeleri</i>	Dewberry		FACW
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:	
Remarks				

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 14		
Depth to Saturated Soils(in.): 14		
Remarks		
Altered hydrology is probable.		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
16-0	O	2.5YR 2.5/1				Silt decomposed leaves
0-6	Ag	10YR 6/1	GLE Y1 6/N	common		Sand

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W42**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W42**
Station ID: **Transect 42.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Acer rubrum</i>	Maple, Red		FAC
<i>Fagus grandifolia</i>	Beech, American		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	5YR 5/1				decomposed leaves
0-6	A	7.5YR 4/2				Silt
6-12	B	7.5YR 3/2				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock 6"

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W42(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W42**
Station ID: **Transect 42.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Sphagnum sp.</i>			
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks
Slope

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-10	A	7.5YR 4/2	7.5YR 5/3	common		Silt
10-18	B	7.5YR 5/3	7.5YR 5/6	common		Fine Sandy Loam
			7.5YR 6/1	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W41**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W41**
Station ID: **Transect 41.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Atyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Tree</u>			
X <i>Pinus strobus</i>	Pine, Eastern White		FACU
X <i>Acer saccharum</i>	Maple, Sugar		FACU-
<i>Fagus grandifolia</i>	Beech, American		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-8	A	5YR 4/3	5YR 5/3	few		Loam
8-13	B	7.5YR 5/6	7.5YR 5/4	few		Sandy Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W41(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 26, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W41**
Station ID: **Transect 41.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<i>Sphagnum</i> sp.			
<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Shrub</u>			
<i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				decomposed leaves
0-3	A	5YR 4/2	5YR 5/1	few		Sandy Loam
3-12	B	2.5YR 4/3	5YR 5/6	common		Sandy Loam
			2.5YR 5/4	common		

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W42**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W42**
Station ID: **Transect 42.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Sphagnum sp.</i>			
<i>Athyrium thelypteroides</i>	Fern,Silvery Lady		FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock,Eastern	FACU
	<i>Fagus grandifolia</i>	Beech,American	FACU
% Species that are OBL, FACW, or FAC (except FAC-): 0		Cowardin Classification:	
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-12	A	5YR 4/3	5YR 5/3	few		Silt Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock at 12"

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W42(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W42**
Station ID: **Transect 42.2**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Sphagnum sp.</i>		
Shrub			
	<i>Rhododendron maximum</i>	Rhododendron, Rosebay	FAC
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☒ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
4-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-3	A	10YR 4/1	10YR 6/1	common		Silt
3-12	Bg	10YR 6/1	5YR 6/4 7.5YR 6/6	common common		Silt

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☒ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W40**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W40**
Station ID: **Transect 40.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Sphagnum sp.</i>			
<i>Juniperus virginiana</i>	Cedar, Eastern Red		FACU
<u>Tree</u>			
X <i>Pinus strobus</i>	Pine, Eastern White		FACU
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-7	A	5YR 4/4	5YR 4/3	common		Silt
7-12	B	5YR 5/6	5YR 5/3	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W40(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W40**
Station ID: **Transect 40.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Thelypteris noveboracensis</i>		FAC
	<i>Sphagnum sp.</i>		
	<i>Juniperus virginiana</i>		FACU
	<i>Lycopodium obscurum</i>		FACU
<u>Shrub</u>			
X	<i>Rhododendron maximum</i>		FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	75	FACU
	<i>Pinus strobus</i>		FACU
	<i>Betula alleghaniensis</i>		FAC
	<i>Fagus grandifolia</i>	3	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **66** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input checked="" type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-8	Ag	GLE Y1 3/N	GLE Y1 4/N	few		Silt
8-14	B	GLE Y1 5/N	5YR 5/8	many		Sandy Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W39**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W39**
Station ID: **Transect 39.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
<i>Sphagnum sp.</i>			
Tree			
X	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-8	A	5YR 4/4	5YR 5/3	few		Silt
8-11	B	5YR 4/3				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock at 12"

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W39(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W39**
Station ID: **Transect 39.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
	<i>Juniperus virginiana</i>	Cedar, Eastern Red		FACU
	<i>Lycopodium obscurum</i>	Clubmoss, Tree		FACU
	<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
	<i>Sphagnum sp.</i>			
<u>Shrub</u>				
X	<i>Vaccinium amoenum</i>	Blueberry, Highbush		FACW
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Fagus grandifolia</i>	Beech		FAC+
	<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-14	A	5YR 5/3	5YR 5/2 5YR 6/4	common few		Silty Clay

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W38**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W38**
Station ID: **Transect 38.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse</i>			
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech, American		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-6	A	7.5YR 4/2	7.5YR 6/4	common		Silt Loam
6-14	B	7.5YR 7/1	5YR 5/8	common		Silt
			5YR 4/3	common		
14-16	C	7.5YR 6/8	7.5YR 4/2	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W38(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W38**
Station ID: **Transect 38.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
	<i>Sphagnum sp.</i>		
Tree			
X	<i>Pinus strobus</i>	Pine, Eastern White	FACU
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **4**
Depth to Free Water in Pit(in.): **3**
Depth to Saturated Soils(in.): **2**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
6-0	O	GLE2 2.5/5PB				decomposed leaves
0-8	A	5YR 4/2	5YR 4/4	common		Silt Loam
8-16	B	5YR 5/2	5YR 6/4 5YR 7/6	common common		Silt Loam

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Probable Aquatic Moist Regime
☒ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☒ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W5**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 26, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W5**
Station ID: **Transect 5.1 (south)**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Juniperus virginiana</i>	Cedar, Eastern Red	FACU
	<i>Lycopodium obscurum</i>	Clubmoss, Tree	FACU
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
X	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Carpinus caroliniana</i>	Hornbeam, American	FAC
	<i>Fagus grandifolia</i>	Beech, American	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-3	A	2.5YR 4/3	2.5YR 6/4	few		Silt
			5YR 5/8	few		
3-15	B	5YR 5/4	5YR 5/8	few		Silt
			5YR 4/2	few		

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W5**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W5**
Station ID: **Transect 5.1 (north)**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Juniperus virginiana</i>	Cedar, Eastern Red	FACU
	<i>Sphagnum sp.</i>		
	<i>Carex novae-angliae</i>	Sedge, New England	FACU*
	<i>Lycopodium obscurum</i>	Clubmoss, Tree	FACU
Tree			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-3	A	5YR 5/3				Silt
3-14	B	2.5YR 4/4				Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	
Remarks	
Upland	

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W5 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W5**
Station ID: **Transect 5.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Sphagnum sp.</i>		
	<i>Carex capillaris</i>	Sedge, Hair-Like	FACW
	<i>Juniperus virginiana</i>	Cedar, Eastern Red	FACU
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **6**
Depth to Saturated Soils(in.): **4**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-3	A	2.5YR 4/3				Silt
3-12	B	5YR 4/3	2.5YR 5/4	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W5**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W5**
Station ID: **Transect 5.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Juniperus virginiana</i>	Cedar, Eastern Red	FACU
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-3	A	2.5YR 5/4				Silt
3-12	B	2.5YR 5/4	2.5YR 6/4 10YR 4/6	common few		Silty Clay Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W5 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 12, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W5**
Station ID: **Transect 5.2**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Impatiens capensis</i>	Touch-Me-Not,Spotted		FACW
	<i>Aster umbellatus</i>	Aster,Flat-Top White		FACW
	<i>Euonymus americanus</i>	Strawberry-Bush,American		FAC
	<i>Sphagnum sp.</i>			
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple,Red		FAC
	<i>Acer saccharum</i>	Maple,Sugar		FACU-
	<i>Fraxinus pennsylvanica</i>	Ash,Green		FACW
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:	
Remarks				

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 2	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-3	A	5YR 5/3				Silt
3-14	B	2.5YR 4/4				Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: _____ Taxonomy: _____
Drainage Class: _____ ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W37**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W37**
Station ID: **Transect 37.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Carex scabrata</i>	Sedge, Rough		OBL
<u>Shrub</u>			
X <i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **66** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-5	A	2.5YR 5/3	2.5YR 4/2	few		Silt Loam
5-11	B	5YR 4/6	7.5YR 5/4	common		Sandy Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W37(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W37**
Station ID: **Transect 37.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
	<i>Aster simplex</i>	Aster, Panicked	FACW
	<i>Sphagnum sp.</i>		
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
<u>Shrub</u>			
X	<i>Rhododendron maximum</i>	Rhododendron, Rosebay	FAC
<u>Tree</u>			
X	<i>Fagus grandifolia</i>	Beech	FAC+
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **75**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-14	AB	2.5YR 5/4	7.5YR 5/8 7.5YR 6/2	many	many	Silt Loam

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Redox Features

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W37**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W37**
Station ID: **Transect 37.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	Golf Coarse		

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Golf coarse/manacured lawn

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-7	A	7.5YR 4/1	7.5YR 4/4	common		Silt
7-14	B	GLE Y1 7/10Y	7.5YR 6/8 7.5YR 7/6	many few		Silty Clay

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Golf coarse soil

Wetland Determination

- | | |
|--|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W37(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W37**
Station ID: **Transect 37.2**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Panicum capillare</i>	Witchgrass	FAC-
	<i>Vahlodea atropurpurea</i>	Hairgrass, Mountain	FACW
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **3**
Depth to Saturated Soils(in.): **3**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-9	A	10R 5/1	5YR 5/8	many		Silt Loam
			5YR 7/1	many		
9-11	AB	7.5YR 5/1	7.5YR 6/8	many		Silt Loam
11-14	B	10R 6/4	5YR 6/8	many		Silt Loam

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W37**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
[X] Do normal circumstances exist on the site?
[X] Have vegetation, soils, or hydrology been disturbed?
[X] Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W37**
Station ID: **Transect 37.3**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse Grass</i>			
<u>Tree</u>			
X <i>Juniperus virginiana</i>	Cedar, Eastern Red		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
[] Recorded Data (describe in remarks)	[] Inundated	[] Oxidized root channels
[] Stream, Lake, or Tide Gage	[] Saturated in upper 12 inches	[] Water-stained leaves
[] Aerial Photograph	[] Water marks	[] Local soil survey data
[] Other (describe in remarks)	[] Drift lines	[] FAC-Neutral test
Field Observations:	[] Sediment deposits	[] Other (explain in remarks)
Depth of Surface Water(in.): 0	[] Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-6	A	7.5YR 3/1	7.5YR 4/6	common		Silt
6-8	B	5YR 3/4	5YR 5/8	common		Silt Loam
8-9	O	5YR 2.5/1				Silt
9-14	Ag	10R 4/1	2.5YR 2.5/1	few		Silt
			2.5YR 5/2	few		

Hydric Soils Indicators

[] Histosol	[] Concretions
[] Histic Epipedon	[] High Organic % in Surface Layer
[] Sulfidic Odor	[] Organic Streaking
[] Probable Aquatic Moist Regime	[] Listed on Local Hydric Soils List
[] Reducing Conditions	[] Listed on National Hydric Soils List
[] Gleyed or Low-Chroma Colors	[] Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
[] Field Observations match map

Remarks

Buried O and Ag

Wetland Determination

[] Hydrophytic Vegetation Present [] This Data Point is a Wetland
[] Hydric Soils Present
[] Wetland Hydrology Present

Remarks

Filled Area

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W37(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 20, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W37**
Station ID: **Transect 37.3**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Carex capillaris</i>		FACW
	<i>Carex disperma</i>		FACW+
	<i>Athyrium thelypteroides</i>		FAC
	<i>Thelypteris noveboracensis</i>		FAC
<u>Shrub</u>			
X	<i>Vaccinium corymbosum</i>		FACW-
<u>Tree</u>			
X	<i>Acer rubrum</i>		FAC
	<i>Betula alleghaniensis</i>		FAC
	<i>Fagus grandifolia</i>		FAC+
	<i>Tsuga canadensis</i>		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
4-0	O	GLE Y2 2.5/5PB				decomposed leaves
0-12	A	5YR 2.5/1	5YR 3/1	common		Sandy Loam
12-16	B	7.5YR 3/1	7.5YR 5/1	few		Sandy Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W46**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W46**
Station ID: **Transect 46.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	Golf Coarse-grass		

% Species that are OBL, FACW, or FAC (except FAC-): **0**
Remarks

Cowardin Classification:

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-8	A	7.5YR 3/2	7.5YR 4/1	few	Silt Loam	
			7.5YR 5/8	few		

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Roch at 8"

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W46(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W46**
Station ID: **Transect 46.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Carex granularis</i>	Sedge, Meadow		FACW+
	<i>Sphagnum sp.</i>			
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
	<i>Solidago austrina</i>	Golden-Rod		OBL
	<i>Geum macrophyllum</i>	Avens, Large-Leaf		FACW
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Acer saccharum</i>	Maple, Sugar		FACU-
	<i>Fagus grandifolia</i>	Beech		FAC+
	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **2**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	GLEY2 2.5/5PB				
0-3	A	7.5YR 3/2	7.5YR 2.5/1	few		Silt Loam
3-9	B	GLEY2 5/5PB	GLEY2 5/5PB 2.5YR 3/4	many few		Sand

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W45**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W45**
Station ID: **Transect 45.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse</i>			
<u>Tree</u>			
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-8	A	2.5YR 2.5/2	2.5YR 2.5/1	few		Silt
8-12	B	5YR 4/2	7.5YR 5/6	common		Silt
			7.5YR 4/1	common		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W45(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W45**
Station ID: **Transect 45.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Geum macrophyllum</i>	Avens, Large-Leaf		FACW
	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
	<i>Carex granularis</i>	Sedge, Meadow		FACW+
	<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
<u>Shrub</u>				
	<i>Solidago austrina</i>	Golden-Rod		OBL
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Pinus strobus</i>	Pine, Eastern White		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **1**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	GLE2 2.5/5PB				
0-4	A	2.5Y 4/1	10YR 3/1	common		Silt
4-12	B	10YR 3/1	10YR 5/1	common		Silt Loam
			10YR 6/6	common		

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W33**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W33**
Station ID: **Transect 33.3**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X Golf Coarse-grass Sphagnum sp.			
<u>Tree</u>			
X Acer rubrum Pinus strobus	Maple, Red Pine, Eastern White		FAC FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-16	AB	7.5YR 4/1	7.5YR 5/1	common		Sandy Loam
			7.5YR 4/4	common		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Filled Area

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W33(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W33**
Station ID: **Transect 33.3**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Carex granularis</i>	Sedge, Meadow		FACW+
<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Shrub</u>			
X <i>Ilex verticillata</i>	Winterberry, Common		FACW+
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Pinus strobus</i>	Pine, Eastern White		FACU
<i>Acer rubrum</i>	Maple, Red		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **66**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **2**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLE Y2 2.5/5PB				
0-5	A	5YR 3/1	2.5YR 3/2	common		Silt
5-14	B	5YR 4/1	5YR 5/2 5YR 6/8	common common		Silt

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W51**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W51**
Station ID: **Transect 51.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-6	A	10R 4/4				Coarse Sand cobbles

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W51(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W51**
Station ID: **Transect 51.1 (north)**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Ilex verticillata</i>	Winterberry, Common	FACW+
	<i>Solidago austrina</i>	Golden-Rod	OBL
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
	<i>Sphagnum sp.</i>		
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 2		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	GLEY2 2.5/5PB				decomposed leaves
0-4	A	7.5YR 3/1	7.5YR 4/1	few		Silt
4-12	B	7.5YR 4/2	7.5YR 5/6	common		Silt Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W51(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W51**
Station ID: **Transect 51.2 (south)**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Solidago austrina</i>	Golden-Rod		OBL
	<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
	<i>Sphagnum sp.</i>			
	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<u>Shrub</u>				
X	<i>Ilex verticillata</i>	Winterberry, Common		FACW+
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Pinus strobus</i>	Pine, Eastern White		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE2 2.5/5PB				
0-3	A	7.5YR 4/2	7.5YR 4/4	common		Silt
3-12	B	7.5YR 4/3	7.5YR 5/4	common		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W50**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W50**
Station ID: **Transect 50.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Acer rubrum</i>	Maple, Red	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-16	AB	5YR 3/2				Silt Loam
16-18	A	GLE Y2 2.5/5PB				decomposed leaves

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
- ☐ This Data Point is a Wetland

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W71**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **December 02, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W71**
Station ID: **Transect 71.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
<u>Shrub</u>			
X	<i>Rhododendron maximum</i>		FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	2.5YR 2.5/1				decomposed leaves
0-10	A	2.5YR 5/3				Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W71(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **December 02, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W71**
Station ID: **Transect 71.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
<u>Shrub</u>			
X	<i>Rhododendron maximum</i>		FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>		FACU
	<i>Betula alba</i>		FAC+
	<i>Fagus grandifolia</i>		FAC+
	<i>Pinus strobus</i>		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **2**
Depth to Free Water in Pit(in.): **4**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-14	A	2.5YR 4/3	2.5YR 5/6	common		Loamy Sand
			2.5YR 5/2	common		

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W72**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **December 02, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W72**
Station ID: **Transect 72.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
	<i>Lycopodium dendroideum</i>	Clubmoss, Tree-Like	FACU
<u>Tree</u>			
X	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fraxinus americana</i>	Ash, White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	5YR 2.5/1				decomposed leaves
0-10	A	5YR 4/6				Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
- ☐ This Data Point is a Wetland

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W72(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **December 02, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W72**
Station ID: **Transect 72.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
	<i>Sphagnum sp.</i>			
	<i>Aster umbellatus</i>	Aster,Flat-Top White		FACW
	<i>Carex granularis</i>	Sedge,Meadow		FACW+
<u>Shrub</u>				
X	<i>Ilex verticillata</i>	Winterberry,Common		FACW+
	<i>Vaccinium amoenum</i>	Blueberry,Highbush		FACW
<u>Tree</u>				
X	<i>Pinus strobus</i>	Pine,Eastern White		FACU
% Species that are OBL, FACW, or FAC (except FAC-):			50	Cowardin Classification:
Remarks				

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 1	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 1		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle		Texture, Structure, etc.
			Color	Abundance	Contrast
6-0	O	2.5YR 2.5/1			
0-10	A	2.5YR 4/4	2.5YR 5/6	common	decomposed leaves
			2.5YR 4/1	few	Silt Loam
<hr/>					
<i>Hydric Soils Indicators</i>					
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic % in Surface Layer		
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking		
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime			<input type="checkbox"/> Listed on Local Hydric Soils List		
<input checked="" type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List		
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (explain in remarks)		
Unit Name:			Taxonomy:		
Drainage Class:			<input type="checkbox"/> Field Observations match map		
Remarks					

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W70**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **December 02, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W70**
Station ID: **Transect 70.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Sphagnum sp.</i>			
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	2.5YR 2.5/1				decomposed leaves
0-12	A	7.5YR 4/4				Loamy Sand

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W70(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **December 02, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W70**
Station ID: **Transect 70.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X Aster umbellatus Sphagnum sp.	Aster, Flat-Top White		FACW
<u>Tree</u>			
X Tsuga canadensis Fagus grandifolia	Hemlock, Eastern Beech		FACU FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **2**
Depth to Free Water in Pit(in.): **1**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	7.5YR 2.5/1				decomposed leaves
0-7	A	7.5YR 6/1				Silt Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **00x**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator:
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **January 19, 2005**
County: **Sullivan**
State: **New York**
Community ID:
Station ID:
Plot ID:

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
----------	---------	-------------	---------	-----------

X

% Species that are OBL, FACW, or FAC (except FAC-):
Remarks

Cowardin Classification:

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W50(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W50**
Station ID: **Transect 50.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
<u>Shrub</u>			
X	<i>Ilex verticillata</i>	Winterberry, Common	FACW+
	<i>Viburnum lentago</i>	Nannyberry	FAC
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-16	A	5YR 4/2	5YR 4/6	common		Sand

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Probable Aquatic Moist Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W48**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W48**
Station ID: **Transect 48.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<i>Sphagnum sp.</i>			
<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<u>Shrub</u>			
<i>Vaccinium marianum</i>	Blueberry, Highbush		FAC
<u>Tree</u>			
X <i>Fagus grandifolia</i>	Beech		FAC+
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Pinus strobus</i>	Pine, Eastern White		FACU
<i>Betula alleghaniensis</i>	Birch, Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-3	A	5YR 4/3	5YR 3/3	few		Silt
3-12	B	5YR 4/4	5YR 4/6	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W48(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W48**
Station ID: **Transect 48.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Sphagnum sp.</i>			
<i>Lycopodium obscurum</i>	Clubmoss, Tree		FACU
<u>Shrub</u>			
X <i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **33** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 6		
Depth to Saturated Soils(in.): 4		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
4-0	O	GLEY2 2.5/5PB				
0-12	A	5YR 4/2	5YR 5/8 5YR 3/1	common few		Sandy Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W47**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W47**
Station ID: **Transect 47.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Aster vimineus</i>	Aster, Small White		FAC
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
X <i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-3	A	5YR 3/3				Silt
3-8	B	5YR 5/3	7.5YR 5/3	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

rock at 8"

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W47(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 21, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W47**
Station ID: **Transect 47.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Diodia virginiana</i>	Button-Weed, Virginia	FACW
	<i>Fragaria virginiana</i>	Strawberry, Virginia	FACU
	<i>Typha angustifolia</i>	Cattail, Narrow-Leaf	OBL
<u>Shrub</u>			
	<i>Ilex verticillata</i>	Winterberry, Common	FACW+
<u>Tree</u>			
X	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input checked="" type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 1	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-3	A	5YR 4/2	7.5YR 5/8	common		Silt
3-12	B	5YR 5/3	7.5YR 5/8	common		Silt
<i>Hydric Soils Indicators</i>						
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic % in Surface Layer			
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking			
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime			<input type="checkbox"/> Listed on Local Hydric Soils List			
<input checked="" type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (explain in remarks)			
Unit Name:			Taxonomy:			
Drainage Class:			<input type="checkbox"/> Field Observations match map			
Remarks						

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W36**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W36**
Station ID: **Transect 36.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	Golf Coarse Grass		

% Species that are OBL, FACW, or FAC (except FAC-): **0**
Remarks

Cowardin Classification:

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-8	A	10YR 4/2	10YR 4/4 10YR 4/1	common few	Silt Loam	
8-12	A	10YR 2/1			Silt Loam	
12-14	E	GLE Y1 7/N			Silt	

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W36(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W36**
Station ID: **Transect 36.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Sphagnum sp.</i>		
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☒ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	GLEY2 2.5/5PB				decomposed leaves
3-7	A	2.5YR 2.5/1	2.5YR 3/1	common		Silt Loam
7-12	Bg	GLEY1 6/10Y	10YR 6/8 10YR 4/1	many common		Silty Clay

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W35**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W35**
Station ID: **Transect 35.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	Golf Coarse Grass		

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Golf Coarse Green

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-14	A	5YR 4/1	GLE Y2 6/ GLE Y1 4/N	common		Silt Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Filled Area

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W35(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W35**
Station ID: **Transect 35.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
	<i>Sphagnum sp.</i>			
	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Shrub</u>				
X	<i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
	<i>Vaccinium amoenum</i>	Blueberry, Highbush		FACW
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow		FAC
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC+): **75** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input checked="" type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/3				
0-16	A	GLE Y1 2.5/N	GLE Y1 4/N	common		Silt
16-20	O	GLE Y2 2.5/5PB				

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Buried O layer with fibric material

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W34**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W34**
Station ID: **Transect 34.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse Grass</i>			
<u>Tree</u>			
<i>Acer rubrum</i>	Maple, Red		FAC
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle		Texture, Structure, etc.
			Color	Abundance Contrast	
0-3	A	5YR 4/2	5YR 3/1	common	Sand
3-8	B	5YR 4/3	5YR 5/4	common	Loamy Sand

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W34(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W34**
Station ID: **Transect 34.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
	<i>Carex granularis</i>	Sedge, Meadow		FACW+
	<i>Sphagnum</i> sp.			
	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Shrub</u>				
X	<i>Vaccinium amoenum</i>	Blueberry, Highbush		FACW
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
X	<i>Pinus strobus</i>	Pine, Eastern White		FACU
	<i>Fraxinus pennsylvanica</i>	Ash, Green		FACW
	<i>Betula alleghaniensis</i>	Birch, Yellow		FAC
	<i>Acer rubrum</i>	Maple, Red		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **1**
Depth to Free Water in Pit(in.): **1**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	GLE Y2 2.5/5PB				
0-16	AB	5YR 3/2	10YR 5/6 10YR 4/1	common few		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

WILLIAM KENNY
ASSOCIATES LLC

FEDERAL WATERCOURSE AND WETLAND DELINEATION
THE CONCORD RESORT, KIAMESHA LAKE, NEW YORK

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W34**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W34**
Station ID: **Transect 34.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Juniperus virginiana</i>	Cedar, Eastern Red		FACU
X <i>Sphagnum sp.</i>			
<u>Tree</u>			
X <i>Pinus strobus</i>	Pine, Eastern White		FACU
X <i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-12	A	10R 4/6	10R 3/1	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W34(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W34**
Station ID: **Transect 34.2**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Aster vimineus</i>	Aster, Small White	FAC
	<i>Lycopodium dendroideum</i>	Clubmoss, Tree-Like	FACU
	<i>Juniperus virginiana</i>	Cedar, Eastern Red	FACU
	<i>Sphagnum sp.</i>		
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
Tree			
X	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fraxinus pennsylvanica</i>	Ash, Green	FACW
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 1		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLEY2 2.5/5PB				
0-12	AB	2.5YR 4/4	2.5YR 4/6 5YR 5/8	few few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W33**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W33**
Station ID: **Transect 33.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	5YR 3/1				decomposed leaves
0-4	A	10R 4/4	10R 3/1	common		Silt
4-16	B	2.5YR 4/4	2.5YR 4/3	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W33(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W33**
Station ID: **Transect 33.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Lycopodium dendroideum</i>	Clubmoss, Tree-Like	FACU
	<i>Sphagnum sp.</i>		
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
X	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	GLEY2 2.5/5PB				
0-3	A	2.5YR 3/2	2.5YR 3/1	common		Silt Loam
3-12	B	2.5YR 4/4	2.5YR 5/8	common		Silt Loam
			2.5YR 5/4	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W33**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W33**
Station ID: **Transect 33.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse</i>			
<u>Tree</u>			
<i>Pinus strobus</i>	Pine, Eastern White		FACU
<i>Acer rubrum</i>	Maple, Red		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-8	AB	5YR 3/3	5YR 3/1 5YR 4/6	few few		Sand

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Shallow Rock

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W33(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W33**
Station ID: **Transect 33.2**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Spirodela oligorrhiza</i>	Duckweed	OBL
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
	<i>Carex granularis</i>	Sedge, Meadow	FACW+
<u>Shrub</u>			
X	<i>Vaccinium amoenum</i>	Blueberry, Highbush	FACW
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **1**
Depth to Free Water in Pit(in.): **1**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-6	A	5YR 3/1	5YR 3/2	few		Silt
6-12	B	GLE Y1 5/N	10R 6/4	few		Silt
			2.5YR 4/1	common		

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Disturbed area

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W32**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W32**
Station ID: **Transect 32.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Lycopodium complanatum</i>	Clubmoss, Trailing	FACU-
	<i>Lycopodium dendroideum</i>	Clubmoss, Tree-Like	FACU
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	5YR 3/1				decomposed leaves
0-4	A	10R 4/4	10R 4/2			Silt
4-15	B	2.5YR 4/4	2.5YR 3/4	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W32(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 19, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W32**
Station ID: **Transect 32.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Sphagnum sp.</i>			
	<i>Juniperus virginiana</i>	Cedar, Eastern Red		FACU
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **2**
Depth to Free Water in Pit(in.): **1**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	5YR 3/1				decomposed leaves
0-16	AB	10R 4/3	10R 4/2 7.5YR 7/6	common few		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W31**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W31**
Station ID: **Transect 31.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
X	<i>Golf Coarse</i>			
<u>Herbaceous</u>				
X	<i>Euonymus americanus</i>	Strawberry-Bush,American		FAC
	<i>Juniperus virginiana</i>	Cedar,Eastern Red		FACU
<u>Shrub</u>				
	<i>Vaccinium angustifolium</i>	Blueberry,Lowbush		FACU-
<u>Tree</u>				
	<i>Pinus strobus</i>	Pine,Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-20	AB	5YR 5/3	5YR 5/8	common		Silt
			5YR 5/4	few		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks
Filled Area

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W31(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W31**
Station ID: **Transect 31.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
Shrub			
<i>Vaccinium amoenum</i>	Blueberry, Highbush		FACW
Tree			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Betula alba</i>	Birch, White	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLE Y2 2.5/5PB				
0-12	A	5YR 4/2				Silt
12-18	B	5YR 5/3	5YR 5/6 5YR 4/1	common few		Loamy Sand

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W31**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W31**
Station ID: **Transect 31.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Sphagnum sp.</i>			
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
4-0	O	5YR 3/1				
0-4	A	5YR 3/2	5YR 2.5/1	common		Silt
4-8	B	2.5YR 4/3	2.5YR 4/1	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present

Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W31(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W31**
Station ID: **Transect 31.2**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Sphagnum sp.</i>		
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	GLE Y2 2.5/5PB				
0-6	A	5YR 3/1				
6-12	B	10YR 6/2	10YR 7/4 10YR 8/8	many many		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W30**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W30**
Station ID: **Transect 30.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Acer rubrum</i>		FAC
	<i>Fagus grandifolia</i>		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-10	AB	5YR 3/2	5YR 2.5/1	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W30(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W31**
Station ID: **Transect 30.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Sphagnum sp.</i>		
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
Tree			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
6-0	O	GLE Y2 2.5/5PB				
0-8	A	2.5YR 5/1	7.5YR 6/8 7.5YR 6/1	common few		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W27**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W27**
Station ID: **Transect 27.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Acer rubrum</i> <i>Fagus grandifolia</i>	Maple, Red Beech		FAC FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	GLEY2 2.5/5PB				
0-6	A	2.5YR 4/3	2.5YR 3/1	few		Silt Loam
6-14	B	2.5YR 4/8	2.5YR 3/6	few		Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W27(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W27**
Station ID: **Transect 27.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Carex granularis</i>	Sedge, Meadow	FACW+
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **3**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-18	AB	5YR 3/2	5YR 4/1 2.5YR 5/8	few common		Silty Clay Loam

Hydric Soils Indicators

- | | |
|--|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (explain in remarks) |
|--|--|

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W27**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W27**
Station ID: **Transect 27.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Athyrium thelypteroides</i> <i>Sphagnum sp.</i>	Fern,Silvery Lady	FAC
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple,Red	FAC
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				
0-4	A	5YR 3/2	5YR 3/1	few		Silt
4-16	B	5YR 4/6	5YR 4/3	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

☐ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W27(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W27**
Station ID: **Transect 27.2**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Dichanthelium acuminatum</i>	Grass, Panic	FAC
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Calamagrostis neglecta</i>	Reedgrass, Slimstem	FACW
	<i>Sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 5		
Depth to Saturated Soils(in.): 3		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-12	A	5YR 3/1				Silt Loam
12-16	B	5YR 4/4	5YR 4/6	common		Silt Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks
☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W29**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W29**
Station ID: **Transect 29.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Acer saccharum</i>	Maple, Sugar		FACU-

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				
0-4	A	5YR 3/2	5YR 2.5/1	few		Silt
4-12	B	5YR 4/3				Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: _____ Taxonomy: _____
Drainage Class: _____ ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present

Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W29(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W29**
Station ID: **Transect 29.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	Carex capillaris	Sedge,Hair-Like	FACW
	Sphagnum sp.		
	Aster umbellatus	Aster,Flat-Top White	FACW
<u>Tree</u>			
X	Acer rubrum	Maple,Red	FAC
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 2	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 2		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	5YR 3/1				
0-5	A	GLE Y1 3/N				
5-18	B	2.5YR 4/3	10YR 6/6	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W28**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W28**
Station ID: **Transect 28.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
	<i>Sphagnum sp.</i>		
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	5YR 3/1				
0-5	A	5YR 3/3	7.5YR 4/3	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock 8"

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W28(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W28**
Station ID: **Transect 28.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Carex granularis</i>	Sedge, Meadow	FACW+
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Juniperus virginiana</i>	Cedar, Eastern Red	FACU
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+
% Species that are OBL, FACW, or FAC (except FAC-):		66	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 2	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 3		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
6-0	O	GLE Y2 2.5/5PB				
0-14	AB	GLE Y1 5/N	GLE Y1 4/N 5YR 6/8	few common		Silt Loam
<hr/>						
<i>Hydric Soils Indicators</i>						
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon			<input checked="" type="checkbox"/> High Organic % in Surface Layer			
<input checked="" type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking			
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime			<input type="checkbox"/> Listed on Local Hydric Soils List			
<input checked="" type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (explain in remarks)			
Unit Name:			Taxonomy:			
Drainage Class:			<input type="checkbox"/> Field Observations match map			
Remarks						

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W25**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W25**
Station ID: **Transect 25.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Lycopodium dendroideum</i>	Clubmoss, Tree-Like	FACU
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
<u>Tree</u>			
X	<i>Fagus grandifolia</i>	Beech	FAC+
X	<i>Acer rubrum</i>	Maple, Red	FAC
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	5YR 3/1				
0-5	A	7.5YR 4/3				Silt
5-18	B	5YR 4/6	5YR 4/3	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W25(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W25**
Station ID: **Transect 25.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady		FAC
<u>Tree</u>				
X	<i>Acer rubrum</i>	Maple, Red		FAC
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow		FAC
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **66** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-12	A	5YR 3/1				
12-18	AB	2.5YR 3/3	5YR 6/8 10R 3/2	common few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W25**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W25**
Station ID: **Transect 25.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Acer rubrum</i> <i>Fagus grandifolia</i>	Maple, Red Beech		FAC FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-4	A	2.5YR 3/3	5YR 3/1	few		Silt
4-12	B	5YR 4/4	5YR 4/3	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W25(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W25**
Station ID: **Transect 25.2**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Juniperus virginiana</i>	Cedar, Eastern Red	FACU
	<i>Sphagnum sp.</i>		
	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
<u>Shrub</u>			
	<i>Vaccinium amoenum</i>	Blueberry, Highbush	FACW
<u>Tree</u>			
X	<i>Fagus grandifolia</i>	Beech	FAC+
X	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Pinus strobus</i>	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:
Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **5**
Depth to Free Water in Pit(in.): **3**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☒ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	GLE Y2 2.5/5PB				
0-14	A	GLE Y1 5/N	5YR 5/8 5YR 6/2	many common		Silt Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W25**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
[X] Do normal circumstances exist on the site?
[X] Have vegetation, soils, or hydrology been disturbed?
[X] Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W25**
Station ID: **Transect 25.3**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Athyrium thelypteroides</i> <i>Sphagnum sp.</i>	Fern, Silvery Lady		FAC
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **66**

Cowardin Classification:

Remarks

Hydrology

- [] Recorded Data (describe in remarks)
[] Stream, Lake, or Tide Gage
[] Aerial Photograph
[] Other (describe in remarks)

Primary Wetland Hydrology Indicators

- [] Inundated
[] Saturated in upper 12 inches
[] Water marks
[] Drift lines
[] Sediment deposits
[] Drainage patterns in wetlands

Secondary Hydrology Indicators

- [] Oxidized root channels
[] Water-stained leaves
[] Local soil survey data
[] FAC-Neutral test
[] Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
5-0	O	5YR 3/1				
0-12	AB	5YR 4/4	5YR 5/3 5YR 4/6	many many		Silt

Hydric Soils Indicators

- | | |
|-----------------------------------|--|
| [] Histosol | [] Concretions |
| [] Histic Epipedon | [] High Organic % in Surface Layer |
| [] Sulfidic Odor | [] Organic Streaking |
| [] Probable Aquatic Moist Regime | [] Listed on Local Hydric Soils List |
| [] Reducing Conditions | [] Listed on National Hydric Soils List |
| [] Gleyed or Low-Chroma Colors | [] Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

[] Field Observations match map

Remarks

Wetland Determination

- | | |
|------------------------------------|----------------------------------|
| [] Hydrophytic Vegetation Present | [] This Data Point is a Wetland |
| [] Hydric Soils Present | |
| [] Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W25(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W25**
Station ID: **Transect 25.3**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Phragmites australis</i>	Reed, Common		FACW
<i>Typha angustifolia</i>	Cattail, Narrow-Leaf		OBL
<u>Shrub</u>			
<i>Vaccinium amoenum</i>	Blueberry, Highbush		FACW
<u>Tree</u>			
X <i>Pinus strobus</i>	Pine, Eastern White		FACU
X <i>Fagus grandifolia</i>	Beech		FAC+
<i>Betula alba</i>	Birch, White		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **66** Cowardin Classification:
Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **1**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
8-0	O	GLE Y2 2.5/5PB				
0-12	A	GLE Y1 6/N	5YR 5/8 5YR 6/3	common few		Loamy Fine Sand

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input checked="" type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W26**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W26**
Station ID: **Transect 26.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+
<i>Betula alleghaniensis</i>	Birch, Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				
0-14	A	5YR 3/3	5YR 4/2	few		Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Hard Pan

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W26(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 18, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W26**
Station ID: **Transect 26.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Sphagnum</i> sp.		
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
<u>Shrub</u>			
	<i>Vaccinium amoenum</i>	Blueberry, Highbush	FACW
<u>Tree</u>			
X	<i>Acer rubrum</i>	Maple, Red	FAC
X	<i>Fagus grandifolia</i>	Beech	FAC+
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input checked="" type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input checked="" type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-15	A	5YR 3/2	7.5YR 4/4	common		Silty Clay
			7.5YR 3/1	common		
<i>Hydric Soils Indicators</i>						
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic % in Surface Layer			
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking			
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime			<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (explain in remarks)			
Unit Name:			Taxonomy:			
Drainage Class:			<input type="checkbox"/> Field Observations match map			
Remarks						

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W27**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W27**
Station ID: **Transect 27.3**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i> <i>Fagus grandifolia</i>	Hemlock, Eastern Beech		FACU FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLEY2 2.5/5PB				
0-6	A	5YR 4/4	5YR 4/3	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock 8"

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W27(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W27**
Station ID: **Transect 27.3**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i> <i>Acer rubrum</i> <i>Fagus grandifolia</i>	Hemlock, Eastern Maple, Red Beech		FACU FAC FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **3**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
3-0	O	GLEY2 2.5/5PB				
0-2	A	2.5YR 2.5/1				Silt
2-6	Bg	7.5YR 6/1	7.5YR 5/1	common		Silt

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Rock

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W63**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W63**
Station ID: **Transect 63.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	Golf Coarse Grass		
<u>Tree</u>			
	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor. Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
-					

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks
No sample

Wetland Determination

☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

☐ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W63(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W63**
Station ID: **Transect 63.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i> <i>Fagus grandifolia</i>	Hemlock, Eastern Beech		FACU FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	GLEY2 2.5/5PB				
0-8	A	5YR 5/1				Silt
8-14	B	2.5YR 4/1	2.5YR 3/1	common		Sandy Loam

Hydric Soils Indicators

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime
<input checked="" type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (explain in remarks) |
|---|--|

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W62**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W63**
Station ID: **Transect 62.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i> <i>Fagus grandifolia</i>	Hemlock, Eastern Beech		FACU FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				decomposed leaves
0-3	A	7.5YR 4/4	7.5YR 3/2	common		Silt
3-12	B	7.5YR 5/4	7.5YR 4/3	common		Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W62(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W62**
Station ID: **Transect 62.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:

Remarks

Hydrology

☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

☐ Inundated
☒ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **3**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	5YR 3/1				decomposed leaves
0-12	A	7.5YR 5/2	7.5YR 4/1 7.5YR 4/4	common common		Sandy Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

☐ Field Observations match map

Remarks

Rock 12"

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W61**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W61**
Station ID: **Transect 61.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Sphagnum sp.</i>			
<u>Shrub</u>			
<i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	GLEY2 2.5/5PB				
0-2	A	2.5YR 4/3				Silt
2-5	B	5YR 4/6				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks
Rock 6"

Wetland Determination

- ☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
- ☐ This Data Point is a Wetland

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W61(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W61**
Station ID: **Transect 61.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Sphagnum sp.</i>			
<u>Shrub</u>			
X <i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+
<i>Betula alleghaniensis</i>	Birch, Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **33** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >6		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	GLE Y2 2.5/5PB				
0-5	A	2.5YR 2.5/1	2.5YR 3/1	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks
Rock 6"

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W64**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W64**
Station ID: **Transect 64.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse Grass</i>			
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Acer rubrum</i>	Maple, Red		FAC
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-7	A	2.5YR 3/1	2.5YR 2.5/1	common		Silt
7-14	B	7.5YR 4/4	7.5YR 3/4	common		Silt
			7.5YR 5/6	few		

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W64(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W64**
Station ID: **Transect 64.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Thelypteris noveboracensis</i>		FAC
	<i>Athyrium thelypteroides</i>		FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>		FACU
	<i>Acer rubrum</i>		FAC
	<i>Fagus grandifolia</i>		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **0**
Depth to Saturated Soils(in.): **0**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
6-0	O	GLEY2 2.5/5PB				
0-6	A	7.5YR 5/3	7.5YR 5/1	common		Sandy Loam
			7.5YR 6/8	common		

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input checked="" type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W18**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W18**
Station ID: **Transect 18.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
	<i>Sphagnum sp.</i>		
Tree			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**

Depth to Free Water in Pit(in.): **>24**

Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
3-0	O	5YR 3/1				decomposed leaves
0-4	A	2.5YR 4/3				Silt
4-8	B	5YR 4/6				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock

Wetland Determination

- ☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
- ☐ This Data Point is a Wetland

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W18(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W18**
Station ID: **Transect 18.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X <i>Thelypteris noveboracensis</i> <i>Sphagnum sp.</i>	Fern, New York		FAC
Tree			
X <i>Acer rubrum</i>	Maple, Red		FAC
X <i>Fagus grandifolia</i>	Beech		FAC+
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Betula alleghaniensis</i>	Birch, Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **75** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 1	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 4		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
4-0	O	GLE Y2 2.5/5PB				
0-6	A	7.5YR 5/1	7.5YR 4/1	common		Silty Clay
6-10	B	2.5YR 5/4	5YR 5/8 7.5YR 5/1	few common		Silty Clay

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W15**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W15**
Station ID: **Transect 15.3**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Thelypteris noveboracensis</i>	Fern,New York		FAC
	<i>Athyrium thelypteroides</i>	Fern,Silvery Lady		FAC
	<i>Sphagnum sp.</i>			
<u>Tree</u>				
X	<i>Fagus grandifolia</i>	Beech		FAC+
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:	
Remarks				

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	5YR 3/1				
0-4	A	5YR 3/3	5YR 4/4	few		Silt
4-10	B	5YR 4/4	5YR 4/3	few		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks
Rock

Wetland Determination

☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

☐ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W15(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W15**
Station ID: **Transect 15.3**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
	<i>Sphagnum sp.</i>		
	<i>Allium tricoccum</i>	Leek, Small White	FACU+
	<i>Polystichum acrostichoides</i>	Fern, Christmas	FACU-
Tree			
X	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **1**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
6-0	O	GLE Y2 2.5/5PB				
0-4	A	5YR 3/1				Silt
4-8	B	2.5YR 5/4	5YR 5/6 5YR 3/1	few few		Silty Clay

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W59**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W59**
Station ID: **Transect 59.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Lycopodium dendroideum</i> <i>Sphagnum</i> sp.	Clubmoss,Tree-Like		FACU
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock,Eastern		FACU
X <i>Fagus grandifolia</i>	Beech		FAC+
% Species that are OBL, FACW, or FAC (except FAC-): 33		Cowardin Classification:	
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
2-0	O	2.5YR 2.5/1				
0-12	A	7.5YR 4/4	7.5YR 4/3	common		Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W59(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W59**
Station ID: **Transect 59.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Panicum longifolium</i>	Grass,Panic	OBL
	<i>Sphagnum sp.</i>		
	<i>Thelypteris noveboracensis</i>	Fern,New York	FAC
	<i>Athyrium thelypteroides</i>	Fern,Silvery Lady	FAC
<u>Tree</u>			
X	<i>Fagus grandifolia</i>	Beech	FAC+
	<i>Betula alleghaniensis</i>	Birch,Yellow	FAC
	<i>Fraxinus pennsylvanica</i>	Ash,Green	FACW
	<i>Tsuga canadensis</i>	Hemlock,Eastern	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **1**
Depth to Free Water in Pit(in.): **2**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
4-0	O	2.5YR 3/1				Silt
0-12	A	5YR 4/2	5YR 5/8	common		Loamy Coarse Sand

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☒ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☒ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W58**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W58**
Station ID: **Transect 58.1**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Shrub</u>				
	<i>Rhododendron maximum</i>	Rhododendron,Rosebay		FAC
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock,Eastern		FACU
% Species that are OBL, FACW, or FAC (except FAC-):			0	Cowardin Classification:
Remarks				

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	GLE Y2 2.5/5PB				
0-3	A	2.5YR 4/3	2.5YR 5/3	common		
3-8	B	5YR 4/6				Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks
Rock 10"

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input type="checkbox"/> Hydric Soils Present	
<input type="checkbox"/> Wetland Hydrology Present	

Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W58(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W58**
Station ID: **Transect 58.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
	<i>Sphagnum sp.</i>			
<u>Herbaceous</u>				
X	<i>Thelypteris noveboracensis</i>	Fern,New York		FAC
<u>Shrub</u>				
	<i>Rhododendron maximum</i>	Rhododendron,Rosebay		FAC
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock,Eastern		FACU
	<i>Acer rubrum</i>	Maple,Red		FAC
% Species that are OBL, FACW, or FAC (except FAC-):		50	Cowardin Classification:	
Remarks				

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 4	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 4		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
10-0	O	7.5YR 3/1				decomposed leaves
0-8	Ag	5YR 4/1				Silt Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:
Drainage Class:

Taxonomy:
☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

☒ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W57**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W57**
Station ID: **Transect 57.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Golf Coarse Grass</i>			
<u>Tree</u>			
<i>Pinus strobus</i>	Pine, Eastern White		FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:
Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-12	A	5YR 5/1	5YR 5/4	common		Sandy Loam
			5YR 5/3	common		

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W57(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W57**
Station ID: **Transect 57.2**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Deschampsia cespitosa</i>	Hairgrass, Tufted		FACW
X	<i>Phragmites australis</i>	Reed, Common		FACW
	<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
	<i>Carex praticola</i>	Sedge, Northern Meadow		FAC
	<i>Carex laxiflora</i>	Sedge, Loose-Flowered		FACU*
	<i>Monolepis nuttalliana</i>	Poverty-Weed, Nuttall's		NI
	<i>Rubus acaulis</i>	Raspberry, Dwarf		NI
	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
<u>Shrub</u>				
X	<i>Ilex verticillata</i>	Winterberry, Common		FACW+
	<i>Vaccinium amoenum</i>	Blueberry, Highbush		FACW
<u>Tree</u>				
X	<i>Betula alba</i>	Birch, White		FAC+
X	<i>Acer rubrum</i>	Maple, Red		FAC
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **100** Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **1**
Depth to Saturated Soils(in.): **1**

Remarks

Primary Wetland Hydrology Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☒ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-6	A	7.5YR 4/1				Silty Clay
6-14	B	5YR 5/1	GLE Y2 6/5B	common		Sand

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present
- ☒ This Data Point is a Wetland

Remarks

WILLIAM KENNY
ASSOCIATES LLC

FEDERAL WATERCOURSE AND WETLAND DELINEATION
THE CONCORD RESORT, KIAMESHA LAKE, NEW YORK

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W57**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W57**
Station ID: **Transect 57.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	Golf Coarse Grass		
<u>Tree</u>			
	Pinus strobus	Pine, Eastern White	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 10		
Depth to Saturated Soils(in.): 3		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				Sand decomposed leaves
0-12	A	7.5YR 4/1	GLE Y1 5/5G	few		Sand

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

<input type="checkbox"/> Hydrophytic Vegetation Present	<input type="checkbox"/> This Data Point is a Wetland
<input checked="" type="checkbox"/> Hydric Soils Present	
<input checked="" type="checkbox"/> Wetland Hydrology Present	

Remarks

Golf Coarse Area

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W57(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W57**
Station ID: **Transect 57.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Monolepis nuttalliana</i>	Poverty-Weed, Nuttall's		NI
X <i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
<i>Carex laevivaginata</i>	Sedge, Smooth-Sheath		OBL
<i>Carex laxiflora</i>	Sedge, Loose-Flowered		FACU*
<i>Vahlodea atropurpurea</i>	Hairgrass, Mountain		FACW
<i>Rubus acaulis</i>	Raspberry, Dwarf		NI
<u>Shrub</u>			
X <i>Ilex verticillata</i>	Winterberry, Common		FACW+
<i>Vaccinium amoenum</i>	Blueberry, Highbush		FACW
<u>Tree</u>			
X <i>Betula alba</i>	Birch, White		FAC+
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **80**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **3**
Depth to Saturated Soils(in.): **1**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
1-0	O	GLE Y2 2.5/5PB				
0-4	A	10YR 4/1	10YR 6/1	few		Sand
4-10	B	10YR 4/1	10YR 6/1	few		Silty Clay

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- ☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

WILLIAM KENNY
ASSOCIATES LLC

FEDERAL WATERCOURSE AND WETLAND DELINEATION
THE CONCORD RESORT, KIAMESHA LAKE, NEW YORK

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W55**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W55**
Station ID: **Transect 55.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X	<i>Celastrus scandens</i>	Bitter-Sweet,American	FACU-
	<i>Juniperus virginiana</i>	Cedar,Eastern Red	FACU
	<i>Sphagnum sp.</i>		
Tree			
X	<i>Acer saccharum</i>	Maple,Sugar	FACU-
	<i>Pinus strobus</i>	Pine,Eastern White	FACU
	<i>Acer rubrum</i>	Maple,Red	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-2	A	5YR 3/1				Silt
2-6	B	7.5YR 3/2				Silt

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: Taxonomy:
Drainage Class: ☐ Field Observations match map

Remarks
Rock 8"

Wetland Determination

☐ Hydrophytic Vegetation Present ☐ This Data Point is a Wetland
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W55(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W55**
Station ID: **Transect 55.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Monolepis nuttalliana</i>	Poverty-Weed, Nuttall's	NI
X	<i>Aster umbellatus</i>	Aster, Flat-Top White	FACW
	<i>Plantago lanceolata</i>	Plantain, English	UPL
	<i>Juncus roemerianus</i>	Rush, Needlegrass	OBL
	<i>Vahlodea atropurpurea</i>	Hairgrass, Mountain	FACW
	<i>Solidago austrina</i>	Golden-Rod	OBL
	<i>Euonymus americanus</i>	Strawberry-Bush, American	FAC
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
<u>Shrub</u>			
X	<i>Rubus wheeleri</i>	Dewberry	FACW
X	<i>Ilex verticillata</i>	Winterberry, Common	FACW+
	<i>Vaccinium amoenum</i>	Blueberry, Highbush	FACW
<u>Tree</u>			
X	<i>Pinus strobus</i>	Pine, Eastern White	FACU
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **60** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 1	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 2		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-8	A	7.5YR 3/2				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|--|--|
| <input checked="" type="checkbox"/> Hydrophytic Vegetation Present | <input checked="" type="checkbox"/> This Data Point is a Wetland |
| <input checked="" type="checkbox"/> Hydric Soils Present | |
| <input checked="" type="checkbox"/> Wetland Hydrology Present | |

Remarks

WILLIAM KENNY
ASSOCIATES LLC

FEDERAL WATERCOURSE AND WETLAND DELINEATION
THE CONCORD RESORT, KIAMESHA LAKE, NEW YORK

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W54**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W54**
Station ID: **Transect 54.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Phalaris arundinacea</i>	Grass, Reed Canary	FACW+
X	<i>Carex albolutescens</i>	Sedge, Greenish-White	FACW
	<i>Solidago austrina</i>	Golden-Rod	OBL
	<i>Cynodon dactylon</i>	Grass, Bermuda	FACU
	<i>Carex laxiflora</i>	Sedge, Loose-Flowered	FACU*
	<i>Vahlodea atropurpurea</i>	Hairgrass, Mountain	FACW
<u>Tree</u>			
X	<i>Fraxinus pennsylvanica</i>	Ash, Green	FACW
% Species that are OBL, FACW, or FAC (except FAC-):		100	Cowardin Classification:
Remarks			

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input type="checkbox"/> Saturated in upper 12 inches	<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-3	A	5YR 3/3				Silt
3-8	B	2.5YR 3/3				Silt
<i>Hydric Soils Indicators</i>						
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic % in Surface Layer			
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking			
<input type="checkbox"/> Probable Aquatic Moist Regime			<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (explain in remarks)			
Unit Name:			Taxonomy:			
Drainage Class:			<input type="checkbox"/> Field Observations match map			
Remarks						
Rock 8"						

Wetland Determination

☐ Hydrophytic Vegetation Present
☐ Hydric Soils Present
☐ Wetland Hydrology Present
Remarks
Upland

☐ This Data Point is a Wetland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W54(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 27, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W54**
Station ID: **Transect 54.1**
Plot ID: **Wetland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Phalaris arundinacea</i>	Grass, Reed Canary		FACW+
<i>Poa alpigena</i>	Bluegrass, Low		FACW-
<i>Solidago austrina</i>	Golden-Rod		OBL
<i>Sparganium emersum</i>	Burreed, Narrow-Leaf		OBL
<i>Phragmites australis</i>	Reed, Common		FACW
<i>Carex laxiflora</i>	Sedge, Loose-Flowered		FACU*
<i>Dipsacus sylvestris</i>	Teasel		NI
<i>Vahlodea atropurpurea</i>	Hairgrass, Mountain		FACW
<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **4**
Depth to Saturated Soils(in.): **0**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-12	A	2.5YR 4/2	10R 5/2	common		Sandy Loam

Hydric Soils Indicators

- ☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☒ Probable Aquatic Moist Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic % in Surface Layer
☐ Organic Streaking
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (explain in remarks)

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W19**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W19**
Station ID: **Transect 19.2**
Plot ID: **Upland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Betula alba</i>	Birch, White		FAC+
	<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**
Remarks

Cowardin Classification:

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	2.5YR 2.5/1				decomposed leaves
0-4	A	2.5YR 5/4				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Rock 6"

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W19(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W19**
Station ID: **Transect 19.2**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Shrub</u>				
X	<i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Betula alleghaniensis</i>	Birch, Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **50** Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **4**
Depth to Saturated Soils(in.): **2**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches
☒ Water marks
☐ Drift lines
☐ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☒ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
4-0	O	GLE Y2 2.5/5PB				
0-6	A	7.5YR 4/1	7.5YR 5/1 7.5YR 5/6	few common		Sandy Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Drainage Class:

Taxonomy:

- ☐ Field Observations match map

Remarks

Wetland Determination

- ☒ Hydrophytic Vegetation Present
☒ Hydric Soils Present
☒ Wetland Hydrology Present

- ☒ This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W60**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☒ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W60**
Station ID: **Transect 60.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
<i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
<i>Fagus grandifolia</i>	Beech		FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **0**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
0-12	A	7.5YR 3/2	7.5YR 4/3	common		Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W60 (wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☐ Is the area a potential problem area?

Date: **October 29, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W60**
Station ID: **Transect 60.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Aster umbellatus</i>	Aster, Flat-Top White		FACW
	<i>Juniperus virginiana</i>	Cedar, Eastern Red		FACU
	<i>Carex capillaris</i>	Sedge, Hair-Like		FACW
	<i>Dichanthelium acuminatum</i>	Grass, Panic		FAC
	<i>Euonymus americanus</i>	Strawberry-Bush, American		FAC
<u>Shrub</u>				
X	<i>Rhododendron maximum</i>	Rhododendron, Rosebay		FAC
	<i>Vaccinium corymbosum</i>	Blueberry, Highbush		FACW-
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock, Eastern		FACU
	<i>Betula alba</i>	Birch, White		FAC+
	<i>Fagus grandifolia</i>	Beech		FAC+
	<i>Betula alleghaniensis</i>	Birch, Yellow		FAC

% Species that are OBL, FACW, or FAC (except FAC-): **66** Cowardin Classification:

Remarks

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 0	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 6		
Depth to Saturated Soils(in.): 0		

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-10	A	10YR 4/1	GLE Y2 5/5BG	few		Silt Loam

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W19**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W19**
Station ID: **Transect 19.1**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X	<i>Athyrium thelypteroides</i>	Fern, Silvery Lady	FAC
	<i>Thelypteris noveboracensis</i>	Fern, New York	FAC
<u>Tree</u>			
X	<i>Tsuga canadensis</i>	Hemlock, Eastern	FACU
	<i>Acer rubrum</i>	Maple, Red	FAC
	<i>Fagus grandifolia</i>	Beech	FAC+

% Species that are OBL, FACW, or FAC (except FAC-): **50**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
2-0	O	10YR 3/1				Silt
0-4	A	2.5YR 5/3				Silt
4-10	B	5YR 4/6				Silt

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Rock 12"

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W19(wetland)**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 28, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W19**
Station ID: **Transect 19.1**
Plot ID: **Wetland**

Vegetation

Dominant	Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>				
X	<i>Athyrium thelypteroides</i>	Fern,Silvery Lady		FAC
	<i>Sphagnum sp.</i>			
	<i>Thelypteris noveboracensis</i>	Fern,New York		FAC
<u>Shrub</u>				
X	<i>Rhododendron maximum</i>	Rhododendron,Rosebay		FAC
<u>Tree</u>				
X	<i>Tsuga canadensis</i>	Hemlock,Eastern		FACU
	<i>Acer rubrum</i>	Maple,Red		FAC
	<i>Fagus grandifolia</i>	Beech		FAC+
% Species that are OBL, FACW, or FAC (except FAC-):		66	Cowardin Classification:	
Remarks				

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
<input type="checkbox"/> Recorded Data (describe in remarks)	<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Stream, Lake, or Tide Gage	<input checked="" type="checkbox"/> Saturated in upper 12 inches	<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Aerial Photograph	<input checked="" type="checkbox"/> Water marks	<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> Other (describe in remarks)	<input checked="" type="checkbox"/> Drift lines	<input type="checkbox"/> FAC-Neutral test
Field Observations:	<input type="checkbox"/> Sediment deposits	<input type="checkbox"/> Other (explain in remarks)
Depth of Surface Water(in.): 1	<input checked="" type="checkbox"/> Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 3		
Depth to Saturated Soils(in.): 0		
Remarks		

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle			Texture, Structure, etc.
			Color	Abundance	Contrast	
8-0	O	10YR 4/1	10YR 2/1	few		decomposed leaves

Hydric Soils Indicators

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> High Organic % in Surface Layer
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking
<input checked="" type="checkbox"/> Probable Aquatic Moist Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (explain in remarks)

Unit Name: _____ Taxonomy: _____
Drainage Class: _____ ☐ Field Observations match map

Remarks

Wetland Determination

☒ Hydrophytic Vegetation Present ☒ This Data Point is a Wetland
☒ Hydric Soils Present
☒ Wetland Hydrology Present
Remarks

Data Form
Routine Wetland Determination

Job Number: **100309**
City: **Thompson**
Wetland Data Point: **W10**

Project/Site: **Concord Resort, Thompson, NY**
Applicant/Owner: **Concord Associates, LP**
Investigator: **Ethan Stewart**
☒ Do normal circumstances exist on the site?
☐ Have vegetation, soils, or hydrology been disturbed?
☒ Is the area a potential problem area?

Date: **October 13, 2004**
County: **Sullivan**
State: **New York**
Community ID: **W10**
Station ID: **Transect 10.2**
Plot ID: **Upland**

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Thelypteris noveboracensis</i>	Fern, New York		FAC
<u>Tree</u>			
X <i>Acer rubrum</i>	Maple, Red		FAC
<i>Fagus grandifolia</i>	Beech		FAC+
<i>Hamamelis virginiana</i>	Witch-Hazel, American		FAC-

% Species that are OBL, FACW, or FAC (except FAC-): **100**

Cowardin Classification:

Remarks

Hydrology

- ☐ Recorded Data (describe in remarks)
☐ Stream, Lake, or Tide Gage
☐ Aerial Photograph
☐ Other (describe in remarks)

Primary Wetland Hydrology Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Hydrology Indicators

- ☐ Oxidized root channels
☐ Water-stained leaves
☐ Local soil survey data
☐ FAC-Neutral test
☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): **0**
Depth to Free Water in Pit(in.): **>24**
Depth to Saturated Soils(in.): **>24**

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
1-0	O	5YR 3/1				decomposed leaves
0-14	A	5YR 3/3	5YR 4/4	common		Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

☐ Field Observations match map

Remarks

Hard pan

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Upland

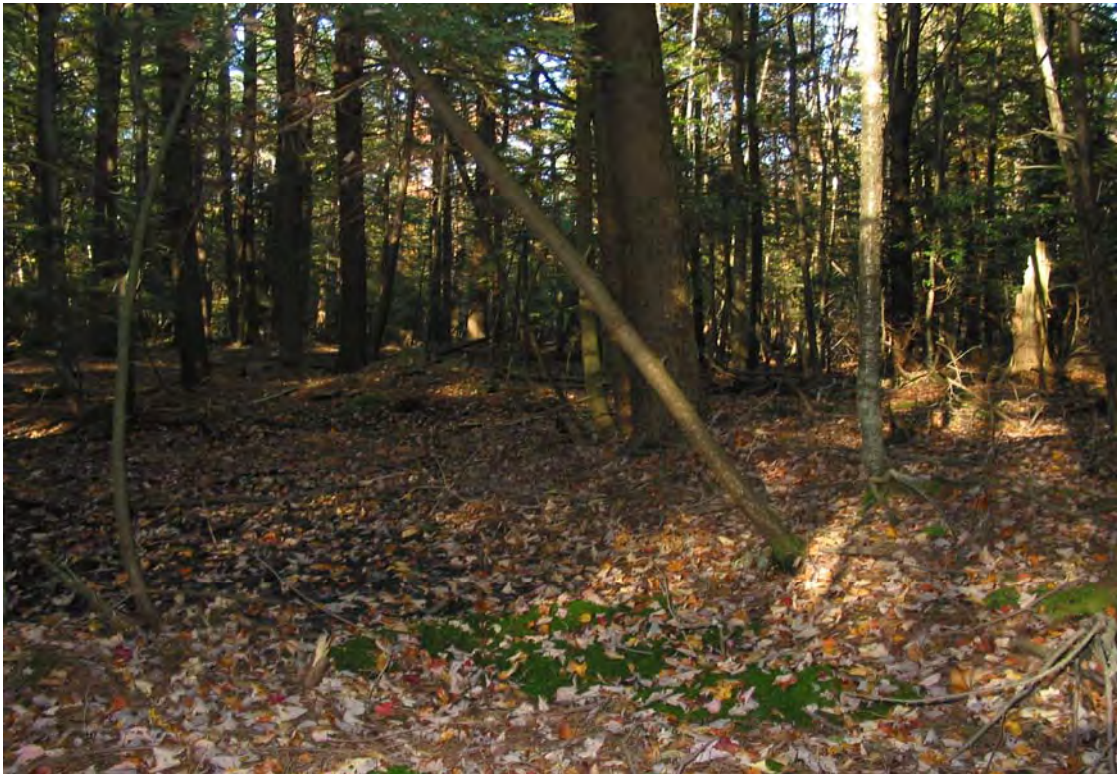
Transect 1.1-Wetland Plot



Transect .1.1-Upland Plot



Transect 2.1-Wetland Plot



Transect 2.1-Upland Plot



Transect 2.2-Wetland Plot



Transect 2.2-Upland Plot



Transect 3.1-Wetland



Transect 3.1-Upland Plot



Transect 5.1-Wetland Plot



Transect 5.1-North-Upland Plot



Transect 5.1-South-Wetland Plot



Transect 5.2-Wetland Plot



Transect 5.2-Upland Plot



Transect 6.1-Wetland Plot



Transect 6.1-Upland Plot



Transect 8.1-Wetland Plot



Transect 8.1-Upland Plot



Transect 9.1-Wetland Plot



Transect 9.1-Upland Plot



Transect 9.2-Wetland Plot



Transect 9.2-Upland Plot



Transect 10.1-Wetland Plot



Transect 10.1-Upland Plot



Transect 10.2-Wetland Plot



Transect 10.2-Upland Plot



Transect 11.1-Wetland Plot



Transect 11.1-Upland Plot



Transect 11.2-Wetland Plot



Transect 11.2-Upland Plot



Transect 12.1-Wetland Plot



Transect 12.1-Upland Plot



Transect 13.1-Wetland Plot



Transect 13.1-Upland Plot



Transect 14.1-Wetland Plot



Transect 14.1-Upland Plot



Transect 15.1-Wetland Plot



Transect 15.1-Upland Plot



Transect 15.2-Wetland Plot



Transect 15.2-Upland Plot



Transect 15.3-Wetland Plot



Transect 15.3-Upland Plot



Transect 16.1-Wetland Plot



Transect 16.1-Upland Plot



Transect 17.1-Wetland Plot



Transect 17.1 North-Upland Plot



Transect 17.2 South-Upland Plot



Transect 18.1-Wetland Plot



Transect 18.1-Upland Plot



Transect 19.1-Wetland Plot



Transect 19.1-Upland Plot



Transect 19.2-Wetland Plot



Transect 19.2-Upland Plot



Transect 20.1-Wetland Plot



Transect 20.1-Upland Plot



Transect 21.1-Wetland Plot



Transect 21.1-Upland Plot



Transect 22.1-Wetland Plot



Transect 22.1-Upland Plot



Transect 22.2-Wetland Plot



Transect 22.2-Upland Plot



Transect 25.1-Wetland Plot



Transect 25.1-Upland Plot



Transect 25.2-Wetland Plot



Transect 25.2-Upland Plot



Transect 25.3-Wetland Plot



Transect 25.3-Upland Plot



Transect 26.1-Wetland Plot



Transect 26.1-Upland Plot



Transect 27.1-Wetland Plot



Transect 27.1-Upland Plot



Transect 27.2-Wetland Plot



Transect 27.2-Upland Plot



Transect 28.1-Wetland Plot



Transect 28.1-Upland Plot



Transect 29.1-Wetland Plot



Transect 29.1-Upland Plot



Transect 30.1-Wetland Plot



Transect 30.1-Upland Plot



Transect 31.1-Wetland Plot



Transect 31.1-Upland Plot



Transect 31.2-Wetland Plot



Transect 31.2-Upland Plot



Transect 32.1-Wetland Plot



Transect 32.1-Upland Plot



Transect 33.1-Wetland Plot



Transect 33.1-Upland Plot



Transect 33.2-Wetland Plot



Transect 33.2-Upland Plot



Transect 33.3-Wetland Plot



Transect 33.3-Upland Plot



Transect 34.1-Wetland Plot



Transect 34.1-Upland Plot



Transect 34.2-Wetland Plot



Transect 34.2-Upland Plot



Transect 35.1-Wetland Plot



Transect 35.1-Upland Plot



Transect 36.1-Wetland Plot



Transect 36.1-Upland Plot



Transect 37.1-Wetland Plot



Transect 37.1-Upland Plot



Transect 37.2-Wetland Plot



Transect 37.2-Upland Plot



Transect 37.3-Wetland Plot



Transect 37.3-Upland Plot



Transect 38.1-Wetland Plot



Transect 38.1-Upland Plot



Transect 39.1-Wetland Plot



Transect 39.1-Upland Plot



Transect 40.1-Wetland Plot



Transect 40.1-Upland Plot



Transect 41.1-Wetland Plot



Transect 41.1-Upland Plot



Transect 42.1-Wetland Plot



Transect 42.1-Upland Plot



Transect 42.2-Wetland Plot



Transect 42.2-Upland Plot



Transect 43.1-Wetland Plot



Transect 43.1-Upland Plot



Transect 44.1-Wetland Plot



Transect 44.1-Upland Plot



Transect 45.1-Wetland Plot



Transect 45.1-Wetland Plot



Transect 45.1-Upland Plot



Transect 46.1-Wetland Plot



Transect 46.1-Upland Plot



Transect 47.1-Wetland Plot



Transect 47.1-Upland Plot



Transect 48.1-Wetland Plot



Transect 48.1-Upland Plot



Transect 50.1-Wetland Plot



Transect 50.1-Upland Plot



Transect 51.1 North-Wetland Plot



Transect 51.1-Upland Plot



Transect 51.2 South-Wetland Plot



Transect 52.1-Wetland Plot



Transect 52.1-Upland Plot



Transect 52.2-Wetland Plot



Transect 52.2-Upland Plot



Transect 53.1-Wetland Plot



Transect 53.1-Upland Plot



Transect 54.1-Wetland Plot



Transect 54.1-Upland Plot



Transect 55.1-Wetland Plot



Transect 55.1-Upland Plot



Transect 57.1-Wetland Plot



Transect 57.1-Upland Plot



Transect 57.2-Wetland Plot



Transect 57.2-Upland Plot



Transect 58.1-Wetland Plot



Transect 58.1-Upland Plot



Transect 59.1-Wetland Plot



Transect 59.1-Upland Plot



Transect 60.1-Wetland Plot



Transect 60.1-Upland Plot



Transect 62.1-Wetland Plot



Transect 62.1-Upland Plot



Transect 63.1-Wetland Plot



Transect 63.1-Upland Plot



Transect 64.1-Wetland Plot



Transect 64.1-Upland Plot



Transect 70.1-Wetland Plot



Transect 70.1-Upland Plot



Transect 71.1-Wetland Plot



Transect 71.1-Upland Plot



Transect 72.1-Wetland Plot



Transect 72.1-Wetland Plot

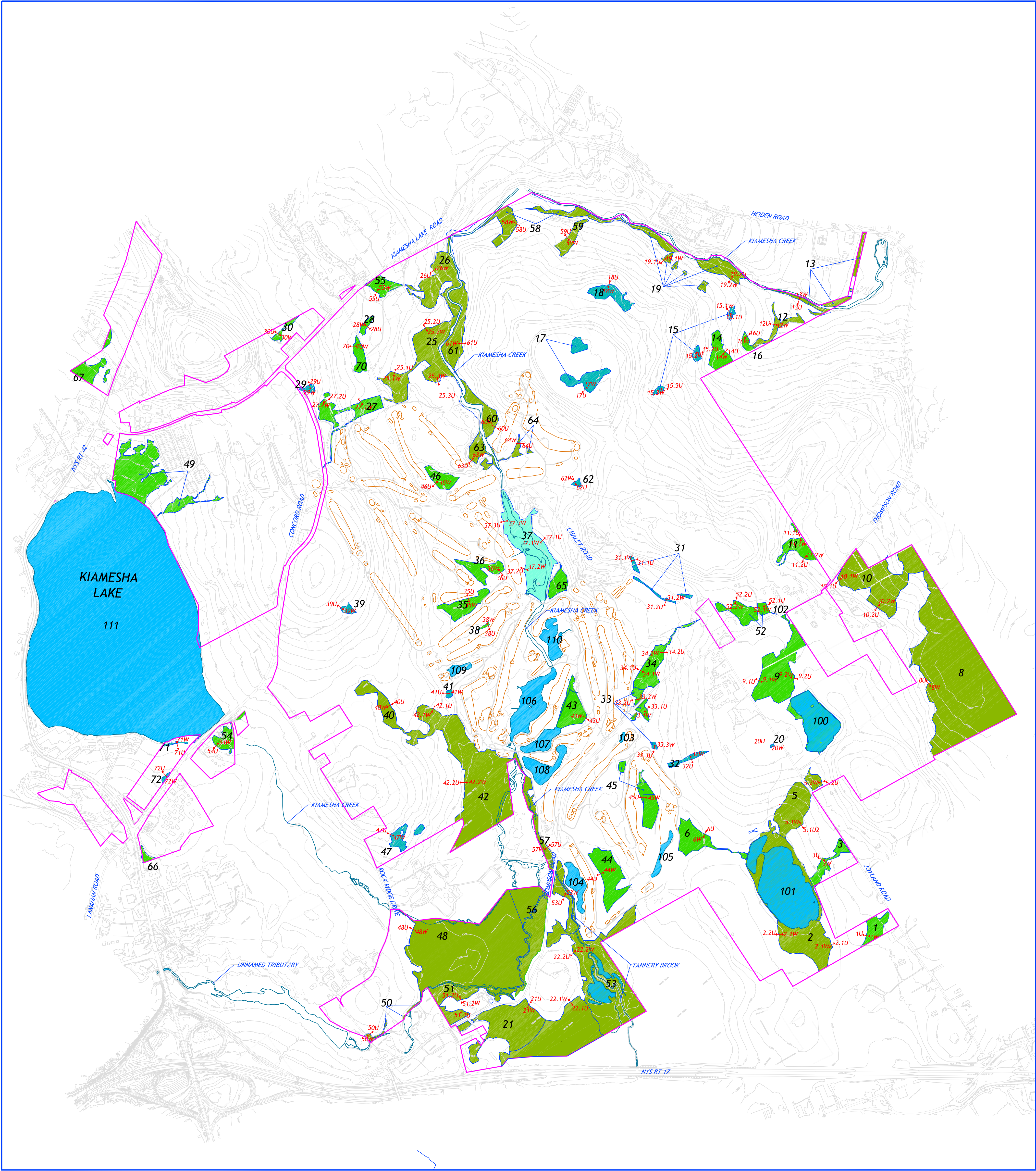


Transect 61.1-Wetland Plot



Transect 61.1-Upland Plot





SULLIVAN COUNTY/
NYSDEC/ACOE
WETLANDS

ACOE WETLANDS

NON-REGULATED
ISOLATED WETLANDS

POND/LAKE

71

101

WETLAND No.

POND/LAKE No.

STREAM OR BROOK

PROJECT BOUNDARY

TRANSECT
NUMBER

GOLF COURSE FEATURE

- NOTES**
- WETLANDS FLAGGED (FIELD MARKED) BY WILLIAM KENNY ASSOCIATES, LLC AND SURVEYED BY CONTRACTORS' LINE & GRADE.
 - TOPOGRAPHIC AND ASSOCIATED FEATURES INFORMATION PROVIDED BY ROBINSON AERIAL SURVEYS, INC.
 - NYSDEC WETLAND JURISDICTION BASED ON FIELD REVIEWS BY DOUGLAS GUAGLER OF THE NYSDEC.
 - WETLAND JURISDICTION AND MAPPING SUBJECT TO CHANGE UNTIL FORMALLY ADOPTED BY REGULATORY AGENCIES.

**WILLIAM KENNY
ASSOCIATES LLC**
SOIL SCIENCE
ECOLOGICAL SERVICES
LAND USE PLANNING
LANDSCAPE ARCHITECTURE

217 WEBB ROAD
FAIRFIELD, CT 06825
PHONE: 203 366 0588
FAX: 203 366 0067
WWW.WKASSOCIATES.NET

**WETLAND JURISDICTION
AND MAPPING**

OWNER:
CONCORD ASSOCIATES, LP

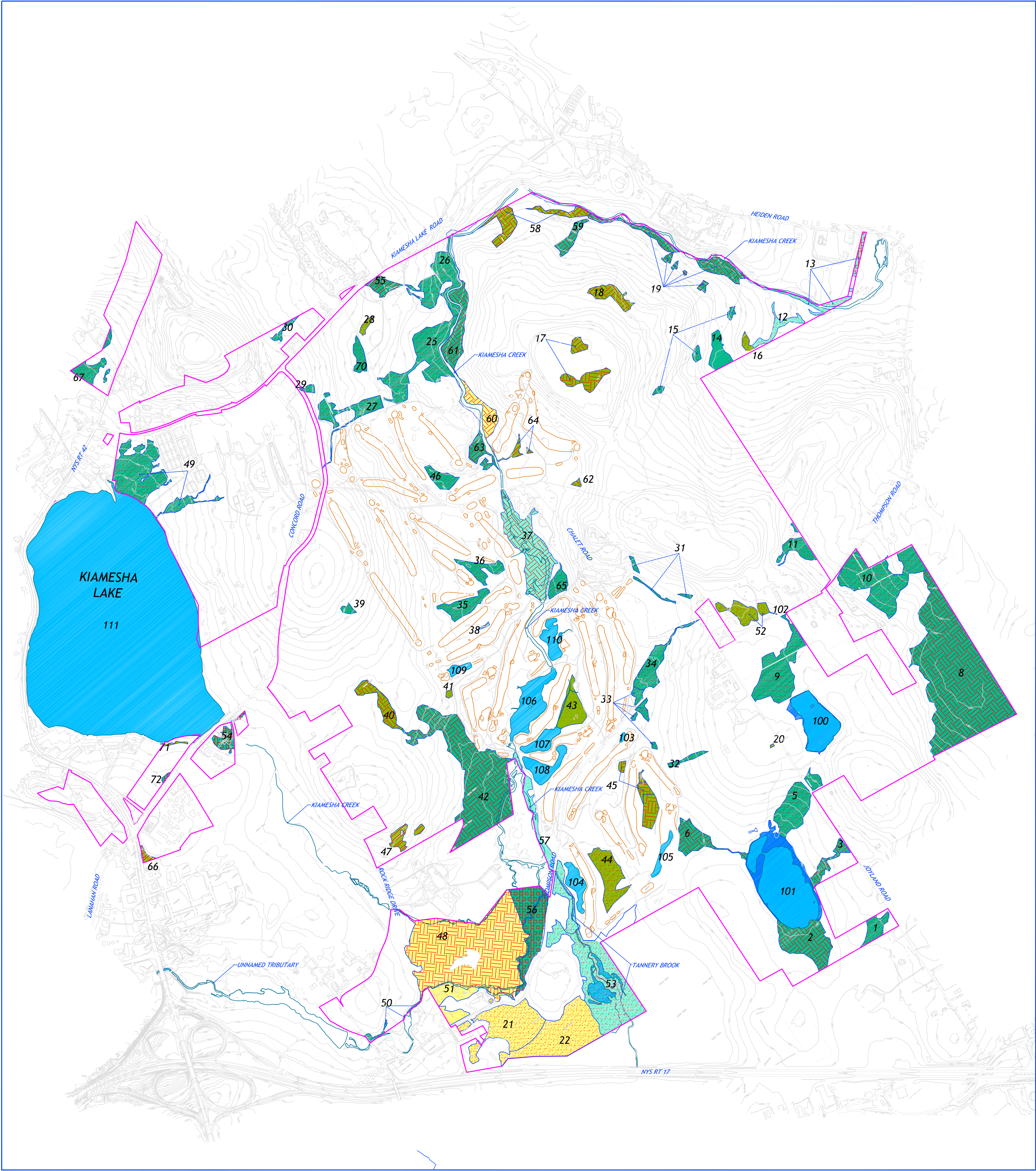
LOCATION:
**THE CONCORD RESORT
KIAMESHA LAKE, NEW YORK**

DATE: MARCH 22, 2006
SCALE: 1" = 600'-0"

0' 300' 600' 1200'

WKA REF. NO. 100309D04





LEGEND

	SLOPED FORESTED RED MAPLE		SLOPED FORESTED HEMLOCK
	LOW GRADIENT SLOPE FORESTED RED MAPLE		LOW GRADIENT SLOPED FORESTED HEMLOCK
	RIVERINE FORESTED RED MAPLE		RIVERINE FORESTED HEMLOCK
	DEPRESSIONAL FORESTED RED MAPLE		DEPRESSIONAL FORESTED HEMLOCK
	DEPRESSIONAL SCRUB/SHRUB		SLOPED WET MEADOW
	POND/LAKE		LACUSTINE FRINGE SCRUB/SHRUB
	PROJECT BOUNDARY		WETLAND NO. 71
			POND/LAKE NO. 101
			STREAM OR BROOK
			GOLF COURSE FEATURE

WILLIAM KENNY ASSOCIATES LLC
SOIL SCIENCE
ECOLOGICAL SERVICES
LAND USE PLANNING
LANDSCAPE ARCHITECTURE

217 WEBB ROAD
FAIRFIELD, CT 06825
PHONE: 203 366 0588
FAX: 203 366 0067
WWW.WKASSOCIATES.NET

CAPACITY TO PERFORM TYPICAL WETLAND FUNCTIONS

WETLAND FUNCTION ¹	1	2	3	4	5	6	7	8	9	10	11
MODIFICATION OF GROUNDWATER DISCHARGE	H	H	H	H	H	H	H	H	H	H	M
MODIFICATION OF GROUNDWATER RECHARGE	L	L	L	H	L	L	L	H	L	H	M
STORM AND FLOODWATER STORAGE	L	M	H	H	L	M	H	H	L	H	M/H
MODIFICATION OF STREAM FLOW	H	M	H	L	H	M	H	L	H	L	H
MODIFICATION OF WATER QUALITY	L	M	H	H	L	M	H	H	L	H	H
EXPORT OF DETRITUS	H	M	H	L	H	M	H	L	H	L	M
CONTRIBUTION TO THE ABUNDANCE AND DIVERSITY OF WETLAND VEGETATION	H	H	H	H	L	L	L	M	H	H	M/H
CONTRIBUTION TO THE ABUNDANCE AND DIVERSITY OF WETLAND FAUNA	H	H	H	H	L	L	L	M	H	H	M/H

¹ HGM METHOD

NOTES

- WETLANDS FLAGGED (FIELD MARKED) BY WILLIAM KENNY ASSOCIATES, LLC AND SURVEYED BY CONTRACTORS' LINE & GRADE.
- TOPOGRAPHIC AND ASSOCIATED STRUCTURE INFORMATION PROVIDED BY ROBINSON AERIAL SURVEYS, INC.
- CLASSIFICATIONS INDICATED ARE PRIMARY CLASSIFICATIONS. MOST WETLAND AREAS HAVE ONE OR MORE INCLUSIONS OF OTHER WETLAND CLASSES THAT IN TOTAL GENERALLY ACCOUNT FOR LESS THAN 50 PERCENT OF THE TOTAL WETLAND AREA.

WETLAND CLASSIFICATION

WETLAND TYPE	QUANTITY
1. SLOPED FORESTED RED MAPLE	27
2. LOW GRADIENT SLOPE FORESTED RED MAPLE	2
3. RIVERINE FORESTED RED MAPLE	4
4. DEPRESSIONAL FORESTED RED MAPLE	6
5. SLOPED FORESTED HEMLOCK	10
6. LOW GRADIENT SLOPE FORESTED HEMLOCK	2
7. RIVERINE FORESTED HEMLOCK	2
8. DEPRESSIONAL FORESTED HEMLOCK	7
9. SLOPED WET MEADOW	4
10. DEPRESSIONAL SCRUB/SHRUB	3
11. LACUSTINE FRINGE	4
TOTAL	71

WETLAND CLASSIFICATIONS AND FUNCTIONS

OWNER:
CONCORD ASSOCIATES, LP

LOCATION:
THE CONCORD RESORT
KIAMESHA LAKE, NEW YORK

DATE: MARCH 22, 2006
SCALE: 1" = 600'-0"

0' 300' 600' 1200'

WKA REF. NO. 100309D05



Appendix F-2
Wetland and Watercourse Assessment Report

From 2006 CALP DGEIS

THE CONCORD RESORT
KIAMESHA LAKE, NY

WETLAND AND WATERCOURSE ASSESSMENT REPORT

PREPARED FOR:

Concord Associates LP
219 Concord Road
Kiamesha Lake, NY 12751

PREPARED BY:

**WILLIAM KENNY
ASSOCIATES LLC**
217 WEBB ROAD
FAIRFIELD, CT 06825

March 22, 2006

Ref. No. 100309R01

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	iv
1.0 WETLAND IDENTIFICATION, DELINEATION AND REGULATORY JURISDICTION	1
1.1 Federal Requirements	1
1.2 State Requirements	3
2.0 WETLAND CLASSIFICATION	6
2.1 Forested Red Maple Slope Wetland Systems	8
2.2 Forested Red Maple Low Gradient Slope Wetland Systems	9
2.3 Forested Red Maple Riverine Wetland Systems	9
2.4 Forested Red Maple Depressional Wetland Systems	9
2.5 Forested Hemlock Slope Wetland Systems	10
2.6 Forested Hemlock Low Gradient Slope Wetland Systems	11
2.7 Forested Hemlock Riverine Wetland Systems	11
2.8 Forested Hemlock Depressional Wetland Systems	11
2.9 Wet Meadow Slope Wetland Systems.....	12
2.10 Scrub Shrub Slope Wetland Systems	12
3.0 WETLAND FUNCTIONAL ASSESSMENT	12
3.1 HGM Functional Capacity Assessment Method	12
3.2 HGM Functional Capacity Results	17
4.0 STREAM AND LACUSTRINE HABITAT ASSESSMENT	18
4.1 Stream Assessment	18
4.2 Lacustrine Assessment.....	20
5.0 REFERENCES.....	23

TABLES

Table 1: Corps Permitting Thresholds	3
Table 2: Summary of Wetland and Surface Water Regulations.....	5
Table 3: Wetland Classification Groupings.....	7

APPENDICES

Appendix A	Project Drawings
	Project Location
	Wetland Classifications and Functions
	Wetland Jurisdiction and Mapping
Appendix B	Hydrogeomorphic (HGM) Wetland Assessment Datasheets
	(128 pages)
Appendix C	Stream Assessment Datasheets (12 pages)
Appendix D	Lacustrine HGM Datasheets (24 pages)

Executive Summary

The following report describes the wetland and watercourse systems identified on the approximately 1,735-acre Concord Resort property in the Town of Thompson, NY (Figure 1). This report is the result of extensive fieldwork that identified over 60 wetland ecosystems, 12 lacustrine systems, and three primary stream corridors on the subject site. Individual datasheets¹ and photographs document the vegetation, soils and hydrology of each wetland, watercourse and waterbody identified during the site evaluation.

The delineated wetlands and watercourses on the subject site trigger some regulatory jurisdiction at a federal and state level². However, based on a number of criteria, the protection is variable between wetlands. The delineated wetlands may be protected by both federal and state regulations, solely federally regulations, or not afforded protection by either body. The regulatory status of each of the identified wetlands has been assessed and compiled for this report.

Following the identification and delineation of the wetlands and watercourses onsite, standard classification systems were applied to group the over 60 wetland systems into discrete categories based on the vegetation and landscape position of the area. The standard hydrogeomorphic (HGM) approach (Magee 1998) was utilized, and 11 wetland groups resulted from this classification. The physical composition and associated functionality of each of the wetland areas are described and tabulated, per the HGM method. For the most part, the onsite wetlands demonstrate the potential to contribute moderately to highly to each of the eight recognized wetland functions of the HGM approach.

Three primary stream corridors were evaluated during the field assessment: Kiamesha Creek, an unnamed tributary to Kiamesha Creek, and Tannery Brook. The site is located within a subwatershed of a major tributary, the Neversink River, to the Delaware River. The onsite stream habitat displays variability that is reflective of adjacent land use, and provides marginal to optimal habitat as a result.

The twelve lacustrine systems were located on the existing golf course and in the forested portions of the site. Eight systems were on the golf course, and four were primarily vegetated pond systems. Seven of the watercourse areas fostered a wetland fringe in some portions around the perimeter of the waterbody. Kiamesha Lake was included in this assessment. Similar to the stream ecosystems, the lacustrine areas displayed variability reflective of adjacent land use patterns.

¹ Army Corps of Engineers (ACOE) and hydrogeomorphic (HGM) datasheets were completed for each wetland and waterbody onsite.

² The Town of Thompson does not have a wetland protection bylaw.

1.0 Wetland Identification, Delineation and Regulatory Jurisdiction

The Project Investigation Area (Appendix A) was studied to determine the presence and extent of jurisdictional wetlands, watercourses and waterbodies in accordance with the requirements of applicable regulatory agencies. According to the completed investigation, the Project Investigation Area includes both federally regulated and state regulated wetlands and watercourse types, as well as wetland areas that are not afforded protection by either federal or state regulatory agencies. All of the jurisdictional wetlands on the subject parcel are federally protected by the Army Corps of Engineers (Corps), but as state jurisdiction by the New York State Department of Environmental Conservation (DEC) is determined by the area of the wetland systems, not all of the onsite wetlands are afforded both state and federal protection. As described below, a primary difference in the jurisdiction of state and federal wetlands is that federal wetlands do not have an associated upland review area, while activities within 100-feet of the boundary on DEC wetlands are within the purview of state regulators. The Town of Thompson does not have any inland wetland regulations written into the Town Code, as a result, there is no local jurisdiction of wetland areas on the subject parcel. However, Kiamesha Lake is a public water supply and resultantly local health department regulations pertaining to activities within the lake and adjacent areas exist.

The uplands, wetlands and watercourse areas are depicted the *Wetland Classification and Functions* (Appendix A) and the *Wetland Jurisdiction and Mapping* (Appendix A) site plans. Detailed information (e.g. data sheets and photos) regarding the completed wetland delineation is provided in a separate wetland delineation document. The location of delineated wetland boundaries and the jurisdiction of each wetland area is subject to change until formally adopted by applicable regulatory agencies. The following text summarizes the applicable regulatory definitions of wetlands and watercourse and was the basis for the completed wetlands and watercourse delineations.

1.1 Federal Requirements

Section 404 of the Clean Water Act authorizes the Corps to regulate certain activities within the Waters of the United States (WUS). Waters of the United States include wetlands, streams, ponds and other surface waterbodies. The Corps define wetlands

based on a three-parameter approach; wetland (hydric) soils, wetland (hydrophytic) vegetation, and wetland hydrology as presented in the 1987 *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (Federal Manual). In order for an area to be identified as a wetland under the Corps approach, all three criteria must be met. The Corps regulate any wetland that meets the three criteria, regardless of size, so long as it is connected to the “waters of the United States”, i.e. associated with running water of some kind: the Corps does not routinely regulate isolated wetlands, neither do they regulate wetlands that were created for stormwater management purposes in formerly nonwetland areas. Isolated wetlands are wetlands separated from WUS by natural upland features other than river berms and beach dunes.

The Corps use the presence or absence of an ordinary high water mark or bed and bank to determine surface waters (e.g. ponds and streams), including intermittent watercourses. Wetland vegetation need not be present to complete a waterbody determination. The Corps’ jurisdiction ends at the boundaries of Waters of the United States. It does not extend to upland (nonwetland or watercourse) areas regardless of the juxtaposition to other wetlands or watercourses. Federally regulated wetland/watercourse areas were identified and delineated at the site, in accordance with the Federal Manual. Delineation data sheets and photos are provided in Appendices B and F, respectively. The Corps have not yet reviewed the wetland delineation. However, wetland areas that are likely regulated by the Corps are identified on the “*Wetland Jurisdiction and Mapping*” site plan (Appendix A).

Section 404 authorizes the Corps to regulate the discharge of dredged or fill material into WUS. The Corps uses two types of permits (Individual and Nationwide General) to authorize regulated activities in New York. Nationwide General permits are for minor activities and require less or no review by the Corps than Individual Permits. The Individual permitting process is more involved and includes a public notice and comment period. Generally, the need for an Individual Permit or the need for Corps review and approval is based on the following thresholds of alteration:

Table 1: Corps Permitting Thresholds

<i>Permanent Loss of WUS</i>	<i>Permit and Action Required</i>
>0.5 acres of non-tidal waters, including wetlands > 300 Linear feet of streambed	Individual Permit: Submit application documents to Corps and participate in public notice and comment period.
0.1-0.5 acres of non-tidal waters, including wetlands ≤ 300 Linear feet of streambed	Nationwide General Permit: Comply with appropriate Nationwide General Permit. Submit application documents to Corps for review.
≤ 0.1 acres of non-tidal waters, including wetlands	Nationwide General Permit: Comply with appropriate Nationwide General Permit and <u>do not</u> submit application documents to Corps for review.

1.2 State Requirements

The New York State Department of Conservation (DEC) under Article 24 of the Environmental Conservation Law protects freshwater wetlands in the State of New York. The Act defines wetlands “as lands and submerged lands commonly known as swamps, sloughs, bogs and flats which support wetland vegetation.” Based on the New York State Wetlands Delineation manual, the primary criteria for wetland delineation is determined by the presence of hydrophytic vegetation. In some cases, field verification of wetlands may be supported by the presence of hydric soils and wetland hydrology. Under Title 3 of the Act, freshwater wetlands with an area of 12.4 acres or more are regulated by the DEC. Wetlands less than 12.4 acres may also be regulated, if they are determined to be of unusual importance.

The DEC protects watercourses under Article 15, Title 5 of the Environmental Conservation Law. According to Part 608 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, certain activities affecting watercourses are regulated and require a permit. These activities include the modification or disturbance of the bed or banks of protected streams that are classified C(t) and above (including the removal of sand or gravel) and filling or dredging in navigable waters. The watercourses on the subject parcel are classified as “C” type watercourses, and activities within these areas are therefore not regulated by the DEC.

In addition to wetlands and watercourses, the DEC regulates certain activities occurring within Adjacent Areas (land within 100 feet horizontally of DEC wetlands). A permit is required regardless of the size of wetland or Adjacent Area disturbance.

The regulated DEC wetlands have been preliminarily identified on the subject parcel through site walks with DEC personnel in Fall 2004. These wetlands areas are identified on the site map entitled "*Wetland Jurisdiction and Mapping*" (Appendix A) prepared by William Kenny Associates LLC (WKA).

1.3 Local Requirements

The Town of Thompson does not have a wetland protection bylaw. However, Kiamesha Lake is a public drinking water supply and resultantly local regulations, the *Rules and Regulations for Protection from Contamination of the Public Drinking Water Supply of the Village of Monticello*, regulate and prohibit certain activities within and adjacent to the lake. These regulations govern and restrict the use of pesticide and herbicide within the lake watershed, the use of road salt within 500' of the lake, land clearing within 75' of the lake and mandates the installation of sediment basins prior to the commencement of construction activities.

In addition to the regulations specific to Kiamesha Creek, Sullivan County, at Part II Chapter 131 of the County Code, cites the protection of Freshwater Wetland as per DEC guidelines. This Chapter of the County Code does not result in a separate wetland permitting process, as the County defers to the DEC for the wetland permits.

1.4 Regulation Summary

In an effort to simplify the information presented above, a permitting matrix was generated (Table 2). The matrix provides information as to the local, county, state and federal permitting process that are in place relative to land use and wetland areas.

TABLE 2: Summary of Wetland and Surface Water Regulations

REGULATORY AGENCY	Kiamesha Lake	REGULATED ACTIVITIES Wetlands/Watercourses	Buffers
Health Department/ Monticello Village Water Supply Regulatory Reference: Rules and Regulations for Protection from Contamination of the Public Water Supply of the Village of Monticello, Sullivan County	<ul style="list-style-type: none"> No herbicides or Pesticides shall be stored, discharged, applied, or allowed to enter the reservoir (d)(3) No bathing, wading, or Swimming (d)(6)(i) No fossil fueled power Boats (d)(6)(ii) Boats designed to hold more than four people are not permitted (d)(6)(ii) Sailboats that do not have a containment are for passengers/operator s are prohibited (d)(6)(ii) No docks, floats, or rafts permitted (d)(6)(iii, iv) Boating Permits required (d)(6) Structures are not permitted on the water or ice (d)(9)(i) 	<ul style="list-style-type: none"> No herbicides or pesticides shall be stored, discharged, applied, or allowed to enter the watercourse (d)(3) 	<ul style="list-style-type: none"> No road salt within 500 feet of the reservoir or watercourse (d)(2) Land stripping of sod, rock, brush, or trees is not allowed within 75 feet of the reservoir (d)(9)(vi) Install sedimentation basins prior to construction activities at least 100 feet from the reservoir (d)(9)(vi)
New York State Department of Environmental Conservation Regulatory Reference: 6 NYCRR Part 663 Article 15, Title 5 December 18, 1994	<ul style="list-style-type: none"> The regulation deals with wetlands not considered navigable under Part 608 	<ul style="list-style-type: none"> Wetland boundaries are required to be verified by State after completion of survey. This is based on State mapped wetlands with in the project limits as well as unmapped state wetlands that we estimate are larger than 12.4 acres 	<ul style="list-style-type: none"> Wetland buffer regulations include jurisdiction over a 100-foot Adjacent Area zone.
New York State Department of Environmental Conservation Regulatory Reference:	<ul style="list-style-type: none"> Docks and moorings require a permit¹ (608.4) Excavation or placement of fill in navigable waters requires a permit 	<ul style="list-style-type: none"> Excavation or placement of fill in navigable waters, Including marshes that adjacent and contiguous to any point of navigable 	<ul style="list-style-type: none"> No wetland buffer identified for this Part.

REGULATORY AGENCY	Kiamesha Lake	REGULATED ACTIVITIES	Wetlands/Watercourses	Buffers
6 NYCRR Part 608 Article 15, Title 5 December 18, 1994	(608.5)	waters to mean high water level requires a permit (608.5)		
New York State Department of Environmental Conservation Article 17 Title 8 ECR and 6NYCRR part 750-757	State Pollutant Elimination Discharge System (SPEDES) Permit for Construction Activities. This requirement is to protect surface and ground water resources of the state, by requiring discharges of storm water or wastewater into surface or ground waters or construction of a sewage treatment plant.			
Sullivan County County Code Part II Ch. 131	Provisions in the NY DEC law provides for the County to undertake and exercise full jurisdiction under NYDEC 6NYCRR Part 663.			
Army Corps of Engineers Regulatory Reference: Section 404 of the Clean Water Act General Permits: Nationwide 18 Nationwide 39 Individual Permit	<ul style="list-style-type: none"> Discharge for dredge or fill material, removal of debris or sediment, and placement of new rip-rap into navigable waters of the United States (examples include: road constructions, bank stabilization, and outfall construction and maintenance) 	<ul style="list-style-type: none"> Discharge of dredge or fill material, removal of debris or sediment, and placement of new rip-rap into navigable waters of the United States (examples include: road construction, bank stabilization, and outfall construction and maintenance) 	<ul style="list-style-type: none"> No buffers from wetlands or watercourses 	
Notes: ¹ Refer to 608.4(c) for exceptions				

2.0 Wetland Classification

Classifications are recognized definitions that are based on consistent standards. As such, their use allows for the presentation of information in a clear and brief format. Following extensive field evaluations, the onsite wetlands and watercourse systems were organized into over 60 discrete wetland areas, and then grouped by hydrogeomorphic (HGM) class and vegetative structure. The HGM classification is an evaluation methodology that uses the geomorphic setting, the water source, and the transport and hydrodynamics of the evaluated wetland to infer information regarding the functional capacity of the each system (Magee 1998). In wetlands where the vegetative structure was equivalent, i.e. forested wetlands, distinctions were drawn based on vegetative composition. Eleven

wetland groups resulted from this organization technique (Table 3), and descriptions of each of the systems are presented. These wetland areas occupy more than 324 acres of land, or 19 percent, on the approximately 1,735-acre property. The classification of the onsite wetlands into the 10 primary groups allows for a clear evaluation of the functional capacity of each of these systems to perform basic wetland functions. The resulting functional capacity analysis is presented in Section 3.

Table 3: Wetland Classification

Wetland Type	Number of Onsite Wetlands
<i>S - Forested Red Maple</i>	25
<i>LGS - Forested Red Maple</i>	2
<i>R - Forested Red Maple</i>	4
<i>D - Forested Red Maple</i>	7
<i>S - Forested Hemlock</i>	10
<i>LGS - Forested Hemlock</i>	2
<i>R - Forested Hemlock</i>	2
<i>D - Forested Hemlock</i>	7
<i>S - Wet Meadow</i>	3
<i>D - Scrub/Shrub</i>	4
<i>LF - Ponds</i>	11
<i>S = slope</i> <i>D = depressional</i> <i>LGS = low-gradient slope</i> <i>LF = lac. fringe</i> <i>R = riverine</i>	

The descriptors that precede each of the vegetative communities relates to the HGM class of the wetland. Of the six HGM classes presented by Magee, the onsite wetlands represent four of these classes: slope, riverine, depression, and lacustrine fringe³. The HGM classification method has designated the six classes based on geomorphic setting, i.e. how was the wetland created, water source, i.e. how is the wetland supported, and transport and hydrodynamics, i.e. how does the wetland function. Slope wetlands are wetlands on a hillside of any gradient, and are typically supported by groundwater. Depressional wetlands are found within an area of lower elevation than the surrounding land, and may be hydrologically supported by surface flow, groundwater, and direct precipitation. Riverine wetlands occur adjacent to a river or stream system, and are

³ The lacustrine fringe wetlands are associated with larger pond and lake ecosystems for which independent assessments were conducted. As a result, the lacustrine fringe wetlands are discussed within the lake/pond section of this report (Section 4.2).

supported exclusively by overbank flooding from the adjacent riverine system.

Lacustrine fringe wetlands are directly attached to or border a lacustrine system, and are supported by surface water flow.

2.1 Forested Red Maple Slope Wetland Systems

Red maple dominated forested wetlands are present throughout the project site, and are the most represented wetland type onsite, with 25 of the 60 plus evaluated wetlands systems comprised of a red maple slope system. This wetland ecosystem may be found occupying broad areas with shallow slopes, at the heads of subwatersheds or bordering small feeder streams to Kiamesha Creek, bordering larger stream systems, and in isolated, depressional areas, although the dominant HGM class of this wetland on-site is the slope. The red maple wetlands, in general, display a mature canopy, and may contain scattered individuals of yellow birch, white pine or Eastern hemlock in the canopy layer. In some wetland systems, white pine may be a co-dominant canopy tree with red maple, while in others Eastern hemlock may occupy a co-dominant position. The transitions between a red maple dominated wetland system and an Eastern hemlock dominated wetland system are the areas where the red maple shares a co-dominant position with the hemlock. In contrast, as white pine is not a true wetland species, it is typically found in a co-dominant or sub-dominant position within the vegetative assemblage of the wetland (it may, however, dominate the shrub layer). As well, in some areas of the property, particularly in the northeastern portion of the site, American beech displays a strong subdominant, and in one area co-dominant, position with the red maple canopy. The shrub layer within the red maple wetlands is variable: it can be absent, moderately dense, or thick depending upon location on the property. Shrub species are generally comprised of highbush blueberry, white pine, arrowwood, iron wood, winterberry, American beech, yellow birch, and gray birch. Groundcover displays a similar variability, depending upon location, and it is comprised of species such as cinnamon fern, sensitive fern, and sphagnum moss.

The topography within this class of red maple wetlands is sloped, with water flows predominantly unidirectional in line with, or parallel to, the slope vector. The water source of these wetland systems is generally seasonally high groundwater, though

precipitation may contribute to seasonally wetted areas. In some areas, characteristic “pit and mound” wetland topography is present, with vegetation taking root on the mounds and open areas comprising the pits, but this topography may be considered a subset within the larger sloped wetland system.

2.2 *Forested Red Maple Low-Gradient Slope Wetland Systems*

A distinction is made between the slope wetland systems and wetland systems with a lesser slope gradient. This distinction is necessary as the gradient of the slope may affect the capacity of the wetland to perform the characteristic wetland functions. The vegetative assemblage within the low-gradient slope wetland is similar to that of the slope wetland system. The hydrodynamics of the low-gradient slope wetland appears to differ slightly from the slope wetland, as the hydrology of the low-gradient slope wetland system is driven exclusively by groundwater. In contrast, the hydrology of the slope wetland system, though dominated by groundwater, is also periodically influenced by both surface water and precipitation.

2.3 *Forested Red Maple Riverine Wetland Systems*

The characteristic red maple ecosystem is found in four locations bordering portions of the watercourses present on the subject parcel. The watercourses are both the small first-order feeder streams, in addition to the larger watercourse systems, such as Kiamesha Creek or Tannery Brook, which meander through the property. As with the other red maple dominated wetlands, the composition of vegetation is similar, but the hydrology and landscape position is distinct. The riverine red maple wetland does display individuals and clumps of Rosebay rhododendron in the shrub layer, which is dissimilar to the sloped red maple systems. The hydrology of these systems are driven by overbank flooding from the watercourse proper, as opposed to a groundwater source.

2.4 *Forested Red Maple Depressional Systems*

Seven depressional red maple ecosystems are observed on the subject parcel. These systems are characterized by their topography, where they occupy a closed contour surrounded by upland areas. The upland boundary that surrounds the perimeter of a depression is a distinguishing feature of this HGM class, as the upper boundary of the

other HGM classes described typically about one another, e.g. riverine wetland abutting a slope wetland. The majority of the depressions observed on the subject parcel contain a permanent or ephemeral inlet and/or an outlet, and as a result are not necessarily isolated systems. Adjacent to the golf course links, these ephemeral outlets and subsurface. The hydrology of depressional systems is dominated by groundwater, with, in general, the presence of a perennial inlet and no outlet indicating a groundwater recharge area, and the presence of a perennial outlet with no inlet demonstrative of a groundwater discharge area.

2.5 Forested Eastern Hemlock Slope Wetland Systems

Similar to the red maple forested wetlands, Eastern hemlock dominated forested slope wetlands are present throughout the site. In general, these wetlands are found flanking a watercourse within the base of a stream valley, though overflow from the adjacent watercourse is not driving the hydrology in these systems: groundwater is. The dense and persistent canopy cover within the hemlock wetlands limits the extent and diversity of vegetation in the remainder of the forest strata, with little to no groundcover or shrub layer being the most common condition. The characteristic understory shrub within the hemlock forest is a native rhododendron: Rosebay rhododendron. The Rosebay is present in areas with canopy gaps, and comprise such dense thickets that passage is impossible except on hand and foot. As described above, in those areas where the canopy is transitioning from red maple to Eastern hemlock dominated, the hemlock may share a co-dominant position with the red maple. There are a few locations on site where a canopy comprised of red maple, white pine and Eastern hemlock is observed. One of the most visible qualities within a forested hemlock wetland is the homogeneity of the system. Generally, there is a limited diversity of vegetation, and these systems may occupy a large amount of land area. For example, while the Eastern hemlock dominated slope wetlands onsite are noted in 10 wetland groups, compared to 25 slope red maple wetlands, the land area occupied by the hemlock slope wetlands occupies 108 acres of land, compared with 78 acres of the red maple.

As described above, these systems are found most often in sloped wetland regimes, where groundwater controls the hydrology and water flow is parallel to the slope vector.

As such, the ground surface within these sloped wetlands is pitched towards the adjacent watercourse or riverine system. The characteristic topography within the larger sloped systems is the “pit and mound” topography previously described. However, the pit and mound topography observed within the hemlock system is more deeply defined, with, in areas, an approximate three-foot difference between the elevations in the pits versus the elevation in the mounds. These areas are also identified for the shallow depth to bedrock, with a scant amount organic material (fibric and hemic) comprising the interface between the forest floor and the underlying bedrock. Additionally, compared to the red maple dominated wetland systems, the slopes within the slope wetland class with hemlock dominance are generally shallower than that of the red maple dominated slope systems.

2.6 Forested Eastern Hemlock Low-Gradient Slope Wetland Systems

As with the red maple ecosystems, the differences between the slope and low-gradient slope hemlock systems are as the description implies: the extent of the slope. The purpose of identifying these differences pertains to the impact of slope gradient on wetland function. There two large wetlands that is subject to this description located in the southwestern portion of the site. In this wetland, an overall low-gradient exists with the characteristic pit and mound comprising the dominant microtopography. The understory is moderately dense to absent, and where present is comprised almost exclusively of the Rosebay rhododendron. Groundcover is generally absent.

2.7 Forested Eastern Hemlock Riverine Systems

As described above, hemlock dominated wetland systems are found bordering larger watercourse system and small feeder streams throughout the property. The hydrology in these systems is controlled by overflow from the watercourse, with the upper limits of these wetlands generally transitioning to another wetland system, as opposed to an upland environment. Though there are large areas of hemlock located adjacent to riverine systems on the property, there are only a few riverine controlled hemlock wetlands. The reason for this is the hydrology of majority of the hemlock wetlands is controlled by groundwater flow from an upgradient slope, as opposed to riverbank overflow.

2.8 Forested Eastern Hemlock Depressional Systems

Wetland depressions dominated by Eastern hemlock are located throughout the subject parcel. These areas are typically limited in size, and often contain a higher diversity of vegetation than the larger, slope systems. Typically within the depressional wetlands, red maple and/or white pine are a strong sub-dominant canopy tree to the Eastern hemlock. A moderately dense shrub layer is comprised of saplings from the canopy, and fruit bearing shrubs, such as highbush blueberry. Groundcover is occupied by species such as cinnamon fern, and in wetter areas, sphagnum moss.

2.9 Slope Wet Meadow Systems

Four sloped wet meadow ecosystems are located on the subject parcel, and cover a limited land area. These meadows are dominated by herbaceous vegetation such as soft rush, wool grass, various goldenrods, narrow-leaved cattail, sensitive fern, and purple loosestrife. The slope meadow wetlands transition to forested slope wetlands or to riverine ecosystems.

2.10 Depressional Scrub/Shrub

Two depressional successional scrub/shrub wetland are located on the subject parcel. This area appears to have been used at one time as a borrow pit, and had since been abandoned. This area is occupied in wetter areas by narrow-leaved cattail, sphagnum moss, common reed, wool grass and sensitive fern, while in the drier portions of the wetland shrub species such as highbush blueberry and sapling gray birch dominate. Forested upland surrounds this depressional system.

3.0 Wetland Functional Assessment

Following the establishment of the eleven primary wetland groups on the subject parcel, the functional capacity of each of these systems was analyzed using the hydrogeomorphic assessment methodology (HGM). As described below, the procedure based on the HGM classification assigns wetlands to one of six hydrogeomorphic classes based on the geomorphic setting, the water source, and the transport and hydrodynamics of the evaluated wetland. Once the hydrogeomorphic class is determined, the capacity of the subject wetland to perform eight functions is qualitatively assessed. A discussion of each

of the wetland groups and their capacity to perform the eight wetland functions recognized in the HGM methodology is presented below.

3.1 HGM Functional Capacity Assessment Method

The biophysical elements (e.g. landscape position, geology, hydrology, substrate, and vegetation) of wetlands determine their functions and to what capacity they are performed. The functions they provide and the capacity of those functions vary from wetland to wetland. To better understand these differences as they relate to the onsite wetlands, a functional evaluation was completed for the wetlands identified. Each onsite wetland was assessed to determine its capacity to provide eight wetland functions:

1. Modification of groundwater discharge
2. Modification of groundwater recharge
3. Storm and floodwater storage
4. Modification of stream flow
5. Modification of water quality
6. Export of detritus
7. Contribution to abundance and diversity of wetland vegetation
8. Contribution to abundance and diversity of wetland fauna

This method assesses the relative importance of the wetlands for performing functions and provides a logical framework for observations, a structure for standardizing results, and a basis for achieving repeatable results among users. The completed wetland functional assessment was based on the author's professional judgment and the numeric theories, rules, and functional indicators included in the procedure. Detailed modeling, as provided for in the procedure, was not completed. The capacity for the onsite wetlands to perform the wetland functions varies from wetland to wetland and from function to function. The differences are due to natural (hydrogeomorphic) and human (e.g. past and current land use activities) conditions. However, as described below, with the exception of the diversity of vegetation and associated wildlife habitat functions, the capacity of the wetlands to perform the characteristic functions are fairly consistent within each HGM class. This observation indicates that, again with the exception of the vegetation and wildlife components, the physical construct of wetland drives the performance of the

majority of the HGM functions. The results of the completed assessment are provided on the *Wetland Classification and Mapping* site plan (Appendix A), prepared by WKA.

The following is a general description of each function and its potential societal value. In addition to the descriptions and summary provided below, hydrogeomorphic datasheets were completed in the field at each of the over 60 of the wetland areas (Appendix B).

The datasheet transects are identified on the *Wetland Jurisdiction and Mapping* site plan, prepared by WKA

Modification of Groundwater Discharge:

Modification of groundwater discharge is the capacity of a wetland to influence the amount of water moving from the ground to the surface. Typically, a perennial inlet and outlet indicates that a wetland is directly linked with the regional water table and has a high capacity to perform this function. This can affect groundwater and surface water supplies and recreational activities.

Modification of Groundwater Recharge:

Modification of groundwater recharge is the capacity of a wetland to influence the amount of surface water moving to groundwater aquifers and thereby affecting public and private groundwater supplies. The subsoil and location of a site play a significant role in ability for wetlands to modify groundwater recharge. With the exception of slope wetlands, all wetlands have some capacity to contribute to this function. Poorly developed or no microrelief is an indication that the water table is below the substrate of a wetland for most of the growing season and that groundwater recharge is occurring. Wetlands with perennial outlets are discharge areas and cannot be recharge areas, even seasonally.

Storm and Floodwaters Storage:

Storm and floodwater storage is the capacity of a wetland to detain or retain stormwater on its surface. This benefits society by preventing storm damage and the loss of life and property. All wetlands, except slope wetlands, have some capacity to contribute to this function. Depressional wetlands have the highest potential for providing this function.

Modification of Stream Flow:

Modification of stream flow is the capacity of a wetland to produce or affect the hydrology of a downgrade stream. This function may affect societal values related to recreation, public water supply, flood control, and prevention of storm damage.

Wetlands that have a high capacity to store storm and floodwater and to modify groundwater discharge have a high capacity to modify stream flow. All wetlands except those with no outlet contribute to the modification of stream flow.

Modification of Water Quality:

Modification of water quality is the removal of suspended and dissolved solids from surface water and dissolved solids from groundwater and conversion into other forms, plant or animal biomass or gases. This function may contribute to societal values related to public water supply, recreation, and aesthetics. The primary mechanisms for the removal of suspended solids are sedimentation and filtration. Dissolved constituents can be removed or made unavailable for downstream plant use via adsorption and absorption by soil particles, uptake by vegetation, loss to the atmosphere by microbiological processes, or combination of the three. Flow characteristics and residence time are the primary wetland characteristics affecting the ability of a wetland to perform this function. Generally, depression, lacustrine fringe and flat wetlands have the highest potential for performing this function because typically the residence time of water is maximized. Conversely, slope wetlands have the least potential. However, the capacity to perform this function is directly related to the slope of the wetland system. For instance, the low-gradient slope wetlands would allow a higher residence time of water than a typical slope wetland, and therefore would have a higher potential to perform this function.

Export of Detritus:

Export of detritus refers to the ability of the wetland to produce and export dissolved and particulate organic particles to downstream aquatic ecosystems to serve as an energy source and support their food chain. Society may value this function as it relates to food web support, recreation (e.g. hunting and fishing), and the type and density of fauna supported by the wetland. The structure and composition of the wetland's vegetation

affects the production of detritus and the degree of the wetland's surface water connection with a stream, river or lake affects the transport of detritus. An increase in the productivity and diversity of an ecological community generally equates to a greater capacity to perform this function. Based on hydrogeomorphic conditions, riverine wetlands have the greatest potential for export of detritus due to an unrestricted outlet. Depressional and flat wetlands have the least potential because of their greater potential to retain suspended sediments.

Contribution to Abundance and Diversity of Wetland Vegetation:

Contribution to abundance and diversity of wetland vegetation is related to the number and type of hydrophytic plants that a wetland can produce and support. Society may value this function as it relates to environmental research and education, recreation, the type and density of fauna supported by the wetland, and production of harvestable goods. Because wetlands support plant species that occur in wetter and dryer (upland) habitats and species that grow only in wetland habitats (poorly drained and very poorly drained soils), most wetlands have a high capacity to contribute to the abundance and diversity of a landscape's vegetation. The primary variables affecting a wetland's capacity to perform this function are its plant species diversity, its vegetation density and dominance, its water regime diversity, and its juxtaposition to other wetlands.

Contribution to Abundance and Diversity of Wetland Fauna:

Contribution to abundance and diversity of wetland vegetation is the capacity of a wetland to support large and/or diverse populations of animal species that spend part or all of their life cycle in wetlands: either an individual wetland or a system or network of wetlands. Society may value this function as it relates to environmental research and education, recreation, aesthetics, and providing a source of food. A wetland's water regime is the primary factor affecting this function, as it largely controls the dominant vegetation type present and influences the animal movement to and within the wetland to food, cover and breeding areas. Other factors affecting the capacity of a wetland to contribute to the abundance and diversity of wetland fauna are the structure and

composition of the vegetation community and the juxtaposition of the wetland to other habitat types (e.g., another wetland, upland forest, farm field, surface waterbody, etc.).

3.2 HGM Functional Capacity Results

The majority of the on-site wetland groups demonstrate a medium-high capacity to perform the majority of the eight characteristic wetland functions of the HGM system. For the most part, the functional capacity of each of the on-site wetlands is consistent amongst hydrogeomorphic types regardless of vegetative cover type. The exception to this observation relates to the functions of “*contribution to the abundance and diversity of wetland vegetation*” and “*contribution to the diversity of wetland fauna*”. Both of these functions are directly related to the type of vegetation found within the wetland, and as a result, differences between the potential of red maple wetlands and hemlock wetlands to contribute to these functions is distinct. Due to the relatively homogenous nature of the hemlock wetlands, and the lack of structural heterogeneity of the vegetation in the wetlands, the ability of these types of ecosystems to contribute to both the abundance and diversity of wetland vegetation and wetland fauna was considered to be low. In contrast, as the red maple wetland systems are structurally and vegetatively diverse, the ability of these wetlands to provide these functions was assessed at a high capacity. The depressional forested hemlock systems, however, exhibited a slightly higher diversity of vegetation than either the slope or riverine hemlock wetlands, and as a result, were evaluated at a moderate capacity for both vegetation and wildlife functions.

The remaining trends on the functional capacity table may be explained by the functional capacity of each of the different HGM classes. Slope wetlands, due to the comparatively low-residence time of water within these systems, provide low degrees of modification of groundwater recharge, storm and floodwater storage, and modification of water quality. The lower gradient slope wetlands allow for a slightly higher residence time of water and, concurrently, less export and more storage, and as a result, contribute moderately towards storm and floodwater storage, modification of stream flow, modification of water quality, and export of detritus. Riverine wetlands in this part of the country do not function as groundwater recharge areas, but contribute to each of the other functions at a high

capacity. In general, depressional wetlands are not associated with consistent surface flows, and resultantly, these wetland types do not contribute significantly towards the modification of stream flow or the export of detritus functions. The vegetation assemblage within the wet meadow and scrub shrub wetlands are diverse, and the functions of these two wetland groups mimic that of their larger geomorphic classes.

4.0 Lacustrine and Stream Habitat Assessments

As a component of the existing conditions survey, baseline surveys of the on-site lacustrine and stream habitats were conducted. Completed datasheets for each of these areas (6 stream surveys and 12 lacustrine) are attached in Appendices C and D, respectively. A synopsis of the results of these assessments follows.

4.1 Stream Assessments

Six characteristic stream reaches were assessed on the project site: four sections of Kiamesha Creek, one section of Tannery Brook, and one section of an unnamed tributary to Kiamesha Creek that enters the site from the west (refer to USGS quad). The on-site watercourses are classified as "C" type streams per the DEC. The site contains an abundance of stream habitat: Kiamesha Creek flows in a sine curve from Kiamesha Lake through the property. The Creek flows in a southerly direction from the Lake, turns to the north adjacent to Thompson Road to flow through the golf course, and then turns again to the south in the northeastern portion of the property. The main-stems of two other streams discharge into Kiamesha Creek within a few hundred feet of each other adjacent to the southwest portion of the property, adjacent to Thompson Road: Tannery Brook and an unnamed tributary to Kiamesha Creek. Kiamesha Creek eventually discharges into Sheldrake Stream, which then flows to the south to empty into the Neversink River, which is a major tributary to the Delaware River. The abundance of stream systems, and variability in stream reach dynamics on the site provide a number of opportunities for wildlife utilization.

Stream assessments were completed using datasheets provided in the Center for Watershed Protection's Unified Stream Assessment: A User's Manual publication.

Evaluated criteria of the stream assessments included dominant substrate of the bed, channel dimensions and dynamics, instream wildlife habitat, surrounding land use, bank erosion, and components of the buffer and floodplain, including vegetation, wildlife habitat and dynamics. The completed reach data sheets generated a score based on the condition of both the stream and the buffer/floodplain areas. The datasheet allows for a total score of 160, with 80 points allotted for the stream condition and 80 points for the floodplain and buffer condition. The four primary grades of each of the categories are optimal, sub-optimal, marginal and poor. In general, each of the stream reaches displayed optimal qualities, but floodplain and buffer zone fragmentation reduced the overall score of these stream systems, as described below.

The direct observations of the stream reaches and data yielded by the datasheet's quantitative component revealed the condition of the onsite streams ranged from optimal to marginal depending upon site location. For instance, the section of Kiamesha Creek adjacent to the northern property boundary is a forested bedrock controlled stream corridor that contains a number of water features including riffles, falls, and pools. This stream section displays a balance of shaded and daylighted areas, and contains variable bank topography and soil structure: features that all contribute to providing potential wildlife habitat. Further, this portion of Kiamesha Creek is connected to its floodplain and wide buffers are present between the banks of the stream and adjacent land development and/or disturbance. Resultantly, this portion of the stream provides optimal habitat to a variety of wildlife species, terrestrial and aquatic, and serves an important function in the larger surrounding ecosystem.

Kiamesha Creek, due to differing land uses, displayed variability along its flowpath through the property. In contrast to the northern section, the portion of the stream that flows through the golf course provides suboptimal to marginal habitat due to the lack of vegetation on and adjacent to the bank, and the absence of a buffer zone between the stream and human activities. This section of the stream does provide some function and ecological attributes, specifically, floodplain connectivity, earthen banks and stream bed, and larger canopy trees in the upper reaches of the floodplain that allow for perching sites

for angling avian species. Balancing the positives and negatives of this portion of the Creek resulted in a sub-optimal/marginal quality ranking for this system.

The aforementioned stream sections bookend the four other evaluated stream sections, which, in general, rank in the optimal/suboptimal range. The remainder of the stream sections demonstrated quality stream conditions, but factors such as fragmentation or obstruction of the floodplain or buffer zone with features such as roads, buildings, driveways, and dredge spoils reduced the quality of the floodplain and buffer zone condition for these systems.

4.2 Lacustrine Assessments

Twelve lacustrine ecosystems were identified on the subject parcel ranging from the over 100-acre Kiamesha Lake⁴, to a few thousand square feet wetland ponds, to constructed water hazards on the golf course (Appendix D). The ponded systems are numbered 100 through 111 on the site plan. Similar to the stream reach surveys, the ponds display variability in their water quality, extent or lack of lacustrine fringe wetland systems, wildlife habitat potential, recreational capacities and physical composition. The field observations of the lacustrine systems resulted in the establishment of two distinct pond groups: golf course ponds and vegetated pond or lake systems. The golf course ponds are more prevalent than the vegetated pond systems, with golf course ponds representing eight of the twelve (67%) observed ecosystems. A description of the types of systems observed within each group is provided below.

4.2.1 Golf Course Ponds

Eight constructed water features are located within the playing boundaries of the golf course, and are identified as ponds 4 through 11 on the completed datasheets. These ponds range in size from approximately 0.8 to 5.0 acres in size, but display a similarity in water depth. The maximum water depth in each of these ponds is approximately 5 feet with an average depth of approximately 4 feet. The majority of these ponded systems are connected, either through surficially expressed ditches or subsurface culverts, to the

⁴ An outlying parcel contains X feet of linear frontage on the southwestern shoreline of Kiamesha Lake.

main-stem of Kiamesha Creek, which flows in a northerly direction through the golf course. All of these ponds were created by man, through the widening of the Kiamesha Creek channel into a pond shape, enlarging a smaller water feature, or excavating an upland or wetland to create persistent standing water. Resultantly, dredge spoils may be found in mounds or shaped into berms adjacent to a number of these lacustrine areas.

Shoreline vegetation of the ponds is limited almost exclusively to manicured lawn, or herbaceous wetland species that are routinely mown. However, non-persistent emergent and submerged vegetative species, such as common bladderwort, duckweed, and pondweed, were observed within the majority of the golf course ponds, and provide structure to the aquatic habitat of these areas. Additionally, canopy trees are typically found, along with occasional clumps of shrubs, within a short distance of the edge of the golf course ponds, and provide perching spots for angling avian species. Due to the shallow depths of these systems, these areas are considered well-mixed, and it is unlikely that seasonal stratification is established. As identified on the datasheets, a few of these water features foster a fringing wetland in areas around the perimeter of the pond.

4.2.2 Vegetated Lacustrine Systems

Four waterbodies comprise the vegetated lacustrine group, which includes the Kiamesha Lake. Kiamesha Lake is a large waterbody, over 100 acres in size, that was created during the retreat of the Laurentide Ice Sheet approximately 12,000 years ago. The contributing watershed to the lake comprises the headwaters of Kiamesha Creek, as described in Section 4.1. Road construction, commercial and residential development has reduced the lacustrine fringe around Kiamesha Lake to the west and the north. However, the lake frontage of the subject parcel is densely vegetated by Rosebay rhododendron, highbush blueberry and canopy trees. The other three ponds in this group were manipulated or created by man, likely through the excavation of wetland areas, and likely to encourage fisheries recreation. Similar to the golf course ponds, dredge spoils are found in mounds or berms around and adjacent to the shorelines of these systems. As these systems are less manicured than the golf course ponds, a more diverse assemblage of vegetation is found around the perimeters of these systems, most typically a red maple

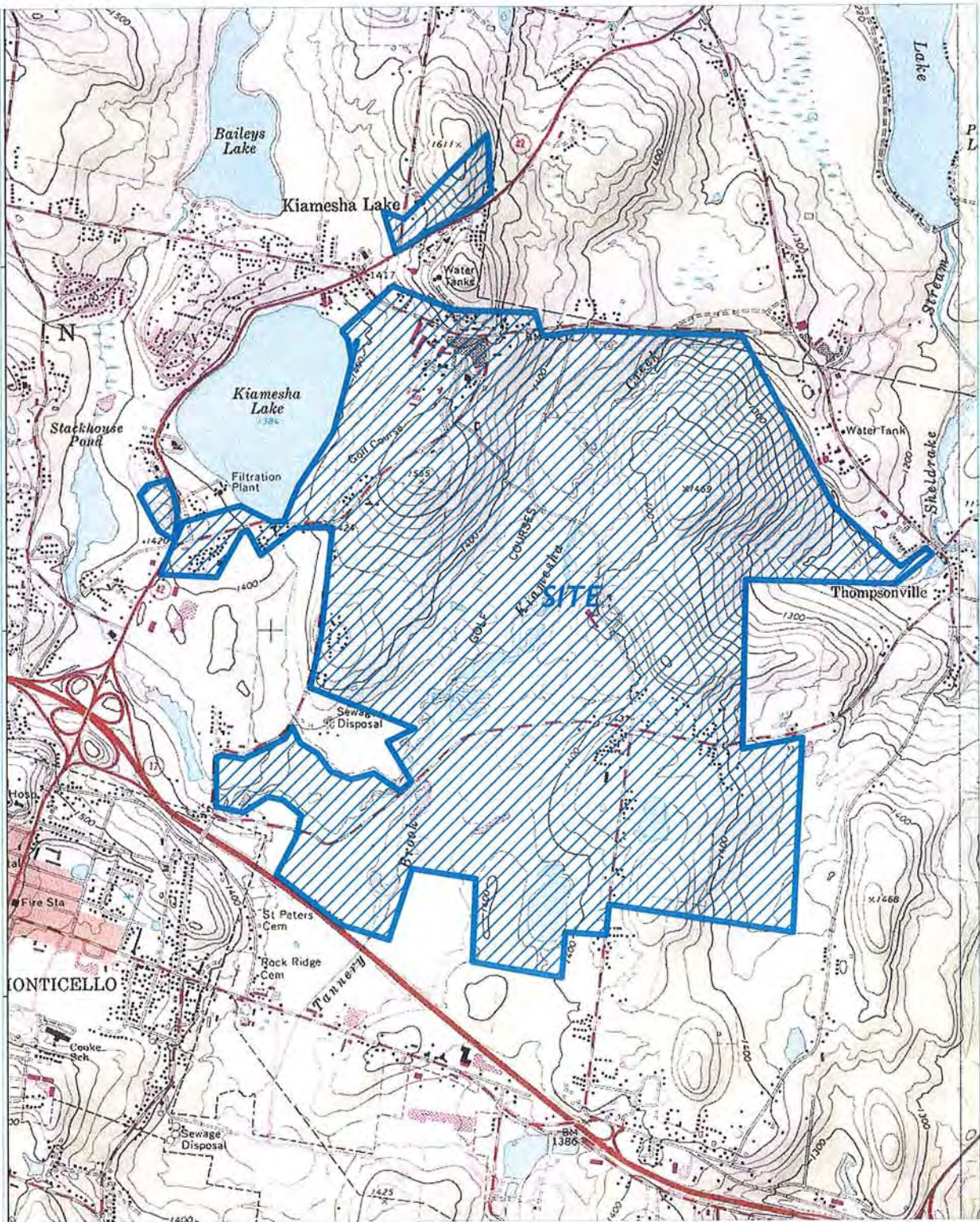
dominated wetland system. As well, nonpersistent emergent and submergent vegetation, such as spatterdock, pond lily, and wild celery, may be found within the aquatic habitat of these areas.

The depths of the vegetated ponds display variability when compared to the consistent maximum and average depths of the golf course ponds. The maximum depths of these systems range from six to over ten feet, with an average depth of between 3.5 and 6 feet⁵. The three smaller ponds (1-3) located on the central portion of the site have both permanent inlets and outlets, while Kiamesha Lake contains only a permanent outlet (Kiamesha Creek). Kiamesha Lake may be deep enough to develop a seasonal stratification, however the three smaller wetland ponds likely do not have an annual turnover, and are likely well-mixed, or holomictic, waterbodies.

⁵ The average depth of Kiamesha Lake was not determined.

5.0 References

- Brinson, M.M. (1993). *A hydrogeomorphic classification for wetlands, technical report WRP-DE-4*. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Cadwell, Donald and others. 1986. *Surficial Geological Map of New York*. New York State Museum-Geologic Survey Maps and Chart Series #40.
- Collins, Henry H. 1981. *Complete field guide to North American wildlife-eastern edition*. Harper & Row Publishers, Inc., New York.
- Edinger, G.J., D.J. Evans, S. Gebauer, T.G. Howard, D.M. Hunt, and A. M. Olivero (editors). 2002. *Vegetation & Wildlife Communities of New York state*. Second Edition. New York Natural Heritage Program, New York Department of Environmental Conservation, Albany, NY.
- Environmental Laboratory. (1987). *Corps of Engineers wetlands delineation manual, technical report Y-87-1*. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Fisher, Donald, Yngvar Isachsen, Lawrence Rickard. 1970. *Geologic Map of New York*. New York State Museum and Science Service Map & Chart Series #15.
- Kricher, John. 1998. *A field guide to eastern forests North America*. Houghton Mifflin Company, Boston, MA.
- Magee, Dennis W. and Hollands, Garrett G. 1998. *A rapid procedure for assessing wetland functional capacity*. Normandeau Associates Incorporated and ENSR, pg. 1-190.
- Newcomb, Lawrence. 1977. *Newcomb's wildflower guide*. Little, Brown and Company, Boston, MA.
- Seifried, Stefan T. 1994. *Soil survey of Putnam and Westchester Counties, New York*. United States Department of Agriculture, Soil Conservation Service.
- United States Department of Agriculture. 1993. *Soil survey manual*. U.S. Government Printing Office.



**WILLIAM KENNY
ASSOCIATES LLC**

SOIL SCIENCE
ECOLOGICAL SERVICES
LAND USE PLANNING
LANDSCAPE ARCHITECTURE

217 WEBB ROAD
FAIRFIELD, CT 06825
PHONE: 203 366 0588
FAX: 203 366 0067
www.wkassociates.net

**PROJECT LOCATION
THE CONCORD RESORT
KIAMESHA LAKE, NEW YORK**

DATE: MARCH 22, 2006
NOT TO SCALE

WKA REF. NO. 100309D03



WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/12/04

Wetland Number: W-1

Photo Numbers: Transect 1c1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		MICRORELIEF of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input checked="" type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input checked="" type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input checked="" type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input checked="" type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		VEGETATION VARIABLES																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Soil Lacking: <input type="checkbox"/>		Plant Species Diversity: <input checked="" type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input checked="" type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric		Proportion of Animal Food Plants: NA																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		VEGETATION Lacking: <input type="checkbox"/>		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input checked="" type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%																											
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input checked="" type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/12/04
Wetland Number: W-2
Photo Numbers: Transect 2.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input checked="" type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input checked="" type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input checked="" type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input checked="" type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input checked="" type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herbs:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herbs:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>(10) tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herbs:	<input type="checkbox"/> 2	5. tall herbs:	<input checked="" type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		(10) tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herbs:																										
<input type="checkbox"/> 2	5. tall herbs:																										
<input checked="" type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	(10) tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input checked="" type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input checked="" type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: NA <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (e.g. agriculture) <input type="checkbox"/> Moderate Intensity (e.g. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: NA <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/12/04
Wetland Number: W-3
Photo Numbers: Transect 3:1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Sizes:

- ☐ Small (<10 acres)
☒ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition: Culvert - under Road

- ☒ Connected Upstream and Downstream
☐ Only Connected Above
☐ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☒ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☐ 25-50% urbanized
☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☒ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☒ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☐ No Overbank Flooding

pH: NA

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (ie. agriculture)
☐ Moderate Intensity (ie. forestry)
☒ Low Intensity (ie. open space)

Wetland Water Regime:

- ☒ Wet: Penn Flooded, Intermittently Exposed, Semiperm. Flooded
☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☒ High Gradient >2%
☐ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☒ Unrestricted Outflow
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☒ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☐ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☒ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☒ Not Available

Evidence of Sedimentation:

- ☐ No Evidence Observed
☒ Sediment Observed on Wetland Substrate
☐ Fluviqvent Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☒ Seeps Observed
☐ Perennial Spring
☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

☐

Histosols:

- ☐ Fibric
☐ Hemic
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☐ Sandy
☒ Silty
☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

☐

Dominant Wetland Type:

- ☒ Forested - Evergreen - Needle-leaved
☐ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☒ Actual # 7
☐ 5
☐ 4
☐ 3
☐ 2
☐ 1

Evenness of Distribution

- ☐ Even Distribution
☒ Moderately Even Distribution
☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☒ Medium Density (40-60%)
☐ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☒ Moderate (broken irregular rings)
☐ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|-----------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergent: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input checked="" type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☐ Medium 3-4 plots sampled
☒ High 5 or more plots sampled

Proportion of Animal Food Plants: NA

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☒ Continuous Cover
☐ Small Scattered Patches
☐ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☐ Moderately Abundant (25-50% of surface)
☒ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☒ <25% Scattered or Peripheral
☐ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
☒ Moderately Convoluted (index 1.25-1.50)
☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
☐ One or Few
☒ Absent

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/12/04

Wetland Number: W-5

Photo Numbers: Transect 5.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input checked="" type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized

HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation & limited to
<input type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding: <i>NA</i>	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH: <i>NA</i>	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (i.e. agriculture)
<input type="checkbox"/>	Moderate Intensity (i.e. forestry)
<input checked="" type="checkbox"/>	Low Intensity (i.e. open space)
Wetland Water Regime:	
<input type="checkbox"/>	Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
<input checked="" type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input checked="" type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input checked="" type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input checked="" type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input type="checkbox"/>	No Evidence Observed
<input checked="" type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluviqent Soils
Evidence of Seeps and Springs:	
<input type="checkbox"/>	No Seeps or Springs
<input checked="" type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input checked="" type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input checked="" type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input checked="" type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input checked="" type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input checked="" type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low	1-2 plots sampled
<input type="checkbox"/> Medium	3-4 plots sampled
<input checked="" type="checkbox"/> High	5 or more plots sampled
Proportion of Animal Food Plants: <i>NA</i>	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input checked="" type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input checked="" type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input checked="" type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity: <i>NA</i>	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input checked="" type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/12/04
Wetland Number: W-6
Aerial Photo Numbers: Transect 6.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
☒ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☒ Connected Upstream and Downstream: OFF
☐ Only Connected Above
☐ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☐ 25-50% urbanized
☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☒ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs. * BEAVER
☐ Return Interval 2-5 yrs. ACTIVITY
☐ Return Interval 1-2 yrs.
☐ No Overbank Flooding

pH:

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (ie. agriculture)
☐ Moderate Intensity (ie. forestry)
☒ Low Intensity (ie. open space)

Wetland Water Regime:

- ☒ Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☒ High Gradient >2%
☐ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☒ Unrestricted Outflow BEAVER DAM
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☒ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☐ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☒ Perennial Inlet/Intermittent Outlet
☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☒ Not Available

Evidence of Sedimentation:

- ☐ No Evidence Observed
☒ Sediment Observed on Wetland Substrate
☐ Fluvaquent Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☒ Seeps Observed
☐ Perennial Spring
☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

☐

Histosol:

- ☐ Fibric
☐ Hemic
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☐ Sandy
☒ Silty
☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

☐

Dominant Wetland Type:

- ☒ Forested - Evergreen - Needle-leaved
☐ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

- Number of Types
☐ Actual #
☐ 5
☐ 4
☒ 3
☐ 2
☐ 1
- Evenness of Distribution
☐ Even Distribution
☒ Moderately Even Distribution
☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☐ Medium Density (40-60%)
☒ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☒ High (small groupings, diverse and interspersed)
☐ Moderate (broken irregular rings)
☐ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|-------------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: 7 |
| <input checked="" type="checkbox"/> 3 | 4. short herb: 3 |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: 95 |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☒ Medium 3-4 plots sampled
☐ High 5 or more plots sampled

Proportion of Animal Food Plants: NA

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☒ Continuous Cover
☐ Small Scattered Patches
☐ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☒ Moderately Abundant (25-50% of surface)
☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 25-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☒ 100% Cover or Open Water

Stream Sinuosity: NA

- ☐ Highly Convoluted (index 1.50 or >)
☐ Moderately Convoluted (index 1.25-1.50)
☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
☐ One or Few
☒ Absent

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/13/04

Wetland Number: W-8

Photo Numbers: Transect 8

USGS Quadrangle:

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
☒ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
☐ Only Connected Above
☒ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☒ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☒ 25-50% urbanized
☐ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☒ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☒ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☐ No Overbank Flooding

pH: NA

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
☐ Moderate Intensity (i.e. forestry)
☒ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☐ Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
☒ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☒ High Gradient >2%
☐ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☒ Unrestricted Outflow
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☒ High >10%
☐ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☒ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☒ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☒ Not Available

Evidence of Sedimentation:

- ☒ No Evidence Observed
☐ Sediment Observed on Wetland Substrate
☐ Fluviqent Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☒ Seeps Observed
☒ Perennial Spring
☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
☐ Hemic
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☐ Sandy
☒ Silty
☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
☒ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
☐ 5
☐ 4
☒ 3
☐ 2
☐ 1

Evenness of Distribution

- ☐ Even Distribution
☐ Moderately Even Distribution
☒ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☐ Medium Density (40-60%)
☒ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☒ Moderate (broken irregular rings)
☐ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|--------------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input checked="" type="checkbox"/> 4 | 3. moss-lichen: 10 |
| <input type="checkbox"/> 3 | 4. short herb: 5 |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: 5 |
| | 7. short shrub: |
| | 8. tall shrub: 10 |
| | 9. sapling: |
| | 10. tree: 10 |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☐ Medium 3-4 plots sampled
☒ High 5 or more plots sampled

Proportion of Animal Food Plants: NA

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☒ Continuous Cover
☐ Small Scattered Patches
☐ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☒ Moderately Abundant (25-50% of surface)
☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
☒ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☐ 100% Cover or Open Water

Stream Sinuosity: NA

- ☐ Highly Convoluted (index 1.50 or >)
☐ Moderately Convoluted (index 1.25-1.50)
☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
☐ One or Few
☒ Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/13/04
Wetland Number: W-9
Photo Numbers: Transect 9.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
☒ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
☒ Only Connected Above Pond
☐ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☒ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☐ 25-50% urbanized
☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☒ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☒ No Overbank Flooding

pH: NA

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
☐ Moderate Intensity (i.e. forestry)
☒ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☒ Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
☒ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☒ Unrestricted Outflow
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☒ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☒ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☒ Not Available

Evidence of Sedimentation:

- ☐ No Evidence Observed
☒ Sediment Observed on Wetland Substrate
☐ Fluviatile Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☒ Seeps Observed
☐ Perennial Spring
☒ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

☐

Histosol:

- ☐ Fibric
☐ Hemic
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☐ Sandy
☒ Silty
☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

☐

Dominant Wetland Type:

- ☒ Forested - Evergreen - Needle-leaved
☐ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☒ Actual #
☐ 5
☐ 4
☐ 3
☐ 2
☐ 1

Evenness of Distribution

- ☐ Even Distribution
☒ Moderately Even Distribution
☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☒ Medium Density (40-60%)
☐ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☐ Moderate (broken irregular rings)
☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|---|-----------------|
| <input checked="" type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☐ Medium 3-4 plots sampled
☒ High 5 or more plots sampled

Proportion of Animal Food Plants: NA

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
☒ Small Scattered Patches
☐ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☐ Moderately Abundant (25-50% of surface)
☒ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☒ 26-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☐ 100% Cover or Open Water

Stream Sinuosity: NA

- ☐ Highly Convoluted (Index 1.50 or >)
☐ Moderately Convoluted (Index 1.25-1.50)
☐ Straight/Slightly Irreg. (Index) 1.10-1.25

Presence of Islands: DEPRESSION

- ☐ Several to Many
☐ One or Few
☒ Absent

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/13/04

Wetland Number: W-10

Photo Numbers: Transect 10.1

USGS Quadrangle:

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES																					
Condition	Percent/Acreage		*For plant species see delineation data sheet.	OW	PW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H								
[Depressional symbol]	_____	Depressional	_____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
[Slope symbol]	100	Slope HIGH GRADIENT	_____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
[Flat symbol]	_____	Flat	_____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
[Extensive Peatland symbol]	_____	Extensive Peatland	_____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
[Lacustrine Fringe symbol]	_____	Lacustrine Fringe	_____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
[Riverine symbol]	_____	Riverine	_____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
Type	Percent/Acreage		VEGETATION TYPES																					
Forested Wetland			SOIL TYPES																					
Evergreen Needle-leaved	_____		Histosol																					
Deciduous Broad-leaved	90		• Fibric <input type="checkbox"/> • Hemic <input type="checkbox"/> • Sapric <input type="checkbox"/>																					
Needle-leaved	_____																							
Scrub Shrub Evergreen	_____		Mineral Hydric Soil																					
Broad-leaved	_____		• Gravelly <input type="checkbox"/> • Sandy <input type="checkbox"/> • Silty <input checked="" type="checkbox"/> • Clayey <input type="checkbox"/>																					
Needle-leaved	_____																							
Emergent Wetland Persistent	_____		GEOLOGY																					
Non-persistent	_____		Surficial: TILL																					
Aquatic Bed	_____																							
Total	_____		Bedrock: Shale and Sandstone																					
Comments:			PRE-EMPTIVE STATUS																					
_____ Public ownership _____ Documented habitat for state or federal listed species																								
_____ Wildlife management area _____ Regionally scarce wetland category																								
_____ Fisheries management area _____ Historic/archaeologic area																								
_____ Designated State or Federal protected wetland _____																								

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> >50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: N/A <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: N/A <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemiepic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 25-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: N/A <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/22/04
Wetland Number: W-11 i.
Photo Numbers: Transect 11a1
USGS Quadrangle: _____
Field Investigators: William Kenney Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input checked="" type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input checked="" type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input checked="" type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input checked="" type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		VEGETATION VARIABLES																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input checked="" type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input checked="" type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: N/A																							
pH: N/A <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input checked="" type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)		Vegetation Lacking: <input type="checkbox"/>		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Stream Sinuosity: N/A <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input checked="" type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow		Presence of Islands: <input type="checkbox"/> Several to Many <input checked="" type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/14/04
Wetland Number: W-12
Photo Numbers: Transect 12.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH: NA	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants: NA	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/14/04
Wetland Number: W-13
Photo Numbers: Transect 13.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH: NA	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluviqent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants: NA	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/14/04
Wetland Number: W-14
Photo Numbers: Transect 14.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		MICRORELIEF of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input checked="" type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input checked="" type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input checked="" type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviuquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input checked="" type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input checked="" type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input checked="" type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input checked="" type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input checked="" type="checkbox"/> Intermittent Spring		Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: NA <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/> Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemric <input type="checkbox"/> Sapric Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		VEGETATION VARIABLES		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Vegetation Lacking: <input type="checkbox"/> Dominant Wetland Type: <input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Interspersion of Cover and Open Water: <input checked="" type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)		Stream Sinuosity: NA <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25		Presence of Islands: NA <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated																											
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%																											
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input checked="" type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input checked="" type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/14/04
Wetland Number: W-15 15
Photo Numbers: Transect 15.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input checked="" type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding: NA	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH: NA	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (i.e. agriculture)
<input type="checkbox"/>	Moderate Intensity (i.e. forestry)
<input checked="" type="checkbox"/>	Low Intensity (i.e. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input checked="" type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input checked="" type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input checked="" type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input checked="" type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input checked="" type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluviacut Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input checked="" type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	
<input type="checkbox"/>	Actual #
<input type="checkbox"/>	5
<input type="checkbox"/>	4
<input checked="" type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
Evenness of Distribution	
<input type="checkbox"/>	Even Distribution
<input checked="" type="checkbox"/>	Moderately Even Distribution
<input type="checkbox"/>	Highly Uneven Distribution
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input checked="" type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input checked="" type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/>	6 or > (actual #)
<input type="checkbox"/>	5
<input type="checkbox"/>	4
<input checked="" type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
	1. submergents:
	2. floating:
	3. moss-lichen:
	4. short herb:
	5. tall herb:
	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input checked="" type="checkbox"/>	Medium 3-4 plots sampled
<input type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants: NA	
<input type="checkbox"/>	Low (5-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input type="checkbox"/>	Continuous Cover
<input checked="" type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50% of wetland surface)
<input checked="" type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input checked="" type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity: NA	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input checked="" type="checkbox"/>	Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/14/04
Wetland Number: W-16
Photo Numbers: Transect 16.1
USGS Quadrangle: _____
Field Investigators: William Kenney Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input checked="" type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 30% urbanized <input type="checkbox"/> 25-30% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviqent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input checked="" type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input checked="" type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input checked="" type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		SOIL VARIABLES		Proportion of Animal Food Plants: NA																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input checked="" type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		<input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input checked="" type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surface Geologic Deposit Under Wetland <input checked="" type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input checked="" type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: NA																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		<input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow				Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/14/04
Wetland Number: W-17
Photo Numbers: Transect 17.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input checked="" type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input checked="" type="checkbox"/> No Inlet/Intermittent Outlet EAST <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviuquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergent:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling: 10</td> </tr> <tr> <td></td> <td>10. tree: 90</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergent:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input checked="" type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling: 10		10. tree: 90
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergent:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input checked="" type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling: 10																										
	10. tree: 90																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input checked="" type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input checked="" type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input checked="" type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: NA																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy LITTLE SAND <input type="checkbox"/> Silty <input checked="" type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 25-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input checked="" type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: NA																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		<input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)																							
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow				Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/27/04
Wetland Number: W-18
Photo Numbers: Transect 18.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> >50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviqent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/27/04
Wetland Number: W-19
Photo Numbers: Transect 19.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Sizes:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Subsidence Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluviatile Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemiepic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/12/04
Wetland Number: W-20
Photo Numbers: Transect 20.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		MICRORELIEF of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input checked="" type="checkbox"/> Absent		Number of Types <input checked="" type="checkbox"/> Actual # 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input checked="" type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input checked="" type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvisquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input checked="" type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input checked="" type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity: NA																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: NA <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input checked="" type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: NA <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semi-perm. Flooded <input checked="" type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: NA <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord

Date:

10/13/04

Wetland Number: TW-21

Photo Numbers: Transect 21.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland juxtaposition:	
<input type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input checked="" type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input checked="" type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH: NA	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (i.e. agriculture)
<input type="checkbox"/>	Moderate Intensity (i.e. forestry)
<input checked="" type="checkbox"/>	Low Intensity (i.e. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input type="checkbox"/>	High Gradient >2%
<input checked="" type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input checked="" type="checkbox"/>	Restricted Outflow - ROADWAY
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input checked="" type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input checked="" type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input checked="" type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input type="checkbox"/>	No Evidence Observed
<input checked="" type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluviacut Soils
Evidence of Seeps and Springs:	
<input type="checkbox"/>	No Seeps or Springs
<input checked="" type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input checked="" type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input checked="" type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input type="checkbox"/>	Medium Density (40-60%)
<input checked="" type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input checked="" type="checkbox"/>	Moderate (broken irregular rings)
<input type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input checked="" type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input checked="" type="checkbox"/>	Medium 3-4 plots sampled
<input type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants: NA	
<input type="checkbox"/>	Low (5-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input checked="" type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input checked="" type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	26-75% Scattered or Peripheral
<input checked="" type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity: NA	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index 1.10-1.25)
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input checked="" type="checkbox"/>	Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/13/04
Wetland Number: W-22
Photo Numbers: Transect 22
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input checked="" type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input checked="" type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input checked="" type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> >30% urbanized <input type="checkbox"/> 25-30% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input checked="" type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input checked="" type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		VEGETATION VARIABLES																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input checked="" type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input checked="" type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: ? <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)		Vegetation Lacking: <input type="checkbox"/>		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input checked="" type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Dominant Wetland Type: <input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Stream Sinuosity: NA <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/13/04

Wetland Number: W-22

Photo Numbers: Transect 22.2

USGS Quadrangle: _____

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input checked="" type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input checked="" type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input checked="" type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input checked="" type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input checked="" type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen: > 90</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub: > 10</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input checked="" type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen: > 90	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub: > 10		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input checked="" type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen: > 90																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub: > 10																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input checked="" type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: NA																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input checked="" type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surface Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input checked="" type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input checked="" type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow CONNECT WITH <input type="checkbox"/> Unrestricted Outflow POND <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/18/04

Wetland Number: W-25

Photo Numbers: Transect 25.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
☐ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
☐ Only Connected Above
☐ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☐ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☐ 25-50% urbanized
☐ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☐ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☐ No Overbank Flooding

pH:

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surface Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☐ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
☐ Moderate Intensity (i.e. forestry)
☐ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☐ Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
☐ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☐ Unrestricted Outflow
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☐ Low <10%

Microrrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☐ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☐ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☐ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☐ Not Available

Evidence of Sedimentation:

- ☐ No Evidence Observed
☐ Sediment Observed on Wetland Substrate
☐ Fluvaquent Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☐ Seeps Observed
☐ Perennial Spring
☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
☐ Hemic
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☐ Sandy
☐ Silty
☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
☐ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
☐ 5
☐ 4
☐ 3
☐ 2
☐ 1

Evenness of Distribution

- ☐ Even Distribution
☐ Moderately Even Distribution
☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☐ Medium Density (40-60%)
☐ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☐ Moderate (broken irregular rings)
☐ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|-------------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: 5 |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: 5 |
| | 10. tree: 90 |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☐ Medium 3-4 plots sampled
☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
☐ Small Scattered Patches
☐ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☐ Moderately Abundant (25-50% of surface)
☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 25-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☐ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
☐ Moderately Convoluted (index 1.25-1.50)
☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
☐ One or Few
☐ Absent

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/18/04

Wetland Number: W-26, 2c

Photo Numbers: Transect 26.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	


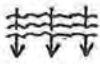
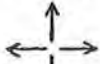



VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	
<input type="checkbox"/> Actual #	<input type="checkbox"/> Evenness of Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 3	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/18/04
Wetland Number: W-27
Photo Numbers: Transect 27.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES													
Condition	Percent/Acreage		OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H	
	_____	Depressional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<u>90</u>	Slope ^{HIGH} GRADIENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	_____	Flat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	_____	Extensive Peatland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	_____	Lacustrine Fringe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<u>10</u>	Riverine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VEGETATION TYPES			<u>Wild Strawberry</u> * For additional plant species see delineation data sheets.													
Type	Percent/Acreage															
Forest Wetland																
Evergreen																
Needle-leaved																
Deciduous																
Broad-leaved	<u>100</u>															
Needle-leaved																
Scrub Shrub																
Evergreen																
Broad-leaved																
Needle-leaved																
Deciduous																
Broad-leaved																
Needle-leaved																
Emergent Wetland																
Persistent																
Non-persistent																
Aquatic Bed																
Total																
Comments:			<div> <div> SOIL TYPES </div> <div> Histosol <ul style="list-style-type: none"> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric <input type="checkbox"/> Mineral Hydric Soil <ul style="list-style-type: none"> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey <input type="checkbox"/> </div> </div> <div> <div> GEOLOGY </div> <div> Surficial: <u>Till</u> </div> </div>													
			<div> OW Obligate Wetland COM Common FW Facultative Wetland OCC Occasional F Facultative C Canopy FU Facultative Upland S Sapling OU Obligate Upland TS Tall Shrub DOM Dominant LS Low Shrub H Herb </div>													
			PRE-EMPTIVE STATUS													
			Public ownership Documented habitat for state or federal listed species Wildlife management area Regionally scarce wetland category Fisheries management area Historic/archaeologic area Designated State or Federal protected wetland													

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		SOIL VARIABLES		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																							

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/18/04
Wetland Number: W-28
Photo Numbers: Transect 28.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☒ Small (<10 acres)
☐ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
☐ Only Connected Above
☐ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☒ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☐ 25-50% urbanized
☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☐ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☒ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☐ No Overbank Flooding

pH:

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (ie. agriculture)
☐ Moderate Intensity (ie. forestry)
☒ Low Intensity (ie. open space)

Wetland Water Regime:

- ☒ Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
☒ Low Gradient <2%

Degree of Outlet Restriction:

- ☒ Restricted Outflow-Natural Bank
☐ Unrestricted Outflow
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☐ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☒ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☒ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☐ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☒ Not Available

Evidence of Sedimentation:

- ☒ No Evidence Observed
☐ Sediment Observed on Wetland Substrate
☐ Fluvaquent Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☐ Seeps Observed
☒ Perennial Spring
☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
☐ Hemic
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☐ Sandy
☒ Silty
☒ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
☒ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

- Number of Types
☐ Actual #
☐ 5
☐ 4
☒ 3
☐ 2
☐ 1
- Evenness of Distribution
☐ Even Distribution
☒ Moderately Even Distribution
☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☒ Medium Density (40-60%)
☐ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☐ Moderate (broken irregular rings)
☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|-----------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: |
| <input checked="" type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☒ Medium 3-4 plots sampled
☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
☐ Small Scattered Patches
☒ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☐ Moderately Abundant (25-50% of surface)
☒ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☒ 26-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☐ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
☐ Moderately Convoluted (index 1.25-1.50)
☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
☒ One or Few
☐ Absent

WETLAND INVENTORY DATA

Project Number:

Date: _____

Wetland Number:

Photo Numbers:

USGS Quadrangle:

Field Investigators:

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input checked="" type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input checked="" type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input checked="" type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input checked="" type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input checked="" type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input checked="" type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input checked="" type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input checked="" type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input checked="" type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		SOIL VARIABLES		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input checked="" type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input checked="" type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input checked="" type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed																									
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input checked="" type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/18/04
Wetland Number: W-30
Photo Numbers: Transect 30.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		MICRORELIEF OF WETLAND SURFACE:		NUMBER OF TYPES & RELATIVE PROPORTIONS:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		PLANT SPECIES DIVERSITY:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/18/04
Wetland Number: W-31
Photo Numbers: Transect 31.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES															
Condition	Percent/Acreage																	
	50	Depressional	*For plant species see delineation data sheet <div style="display: flex; justify-content: space-between;"> <div> OW Obligate Wetland FW Facultative Wetland F Facultative FU Facultative Upland OU Obligate Upland DOM Dominant </div> <div> COM Common OCC Occasional C Canopy S Sapling TS Tall Shrub LS Low Shrub H Herb </div> </div>															
	50	Slope HIGH GRADIENT Flat																
		Extensive Peatland																
		Lacustrine Fringe																
		Riverine																
VEGETATION TYPES																		
Type	Percent/Acreage																	
Forested Wetland			SOIL TYPES Histosol • Fibric <input type="checkbox"/> • Hemie <input type="checkbox"/> • Sapric <input type="checkbox"/> Mineral Hydrie Soil • Gravelly <input type="checkbox"/> • Sandy <input checked="" type="checkbox"/> • Silty <input checked="" type="checkbox"/> • Clayey <input type="checkbox"/>															
Evergreen																		
Needle-leaved	25																	
Deciduous																		
Broad-leaved	75																	
Needle-leaved																		
Scrub Shrub																		
Evergreen																		
Broad-leaved			GEOLOGY Surficial: Till Bedrock: Slate and Sandstone															
Needle-leaved																		
Deciduous																		
Broad-leaved																		
Needle-leaved																		
Emergent Wetland																		
Persistent																		
Non-persistent																		
Aquatic Bed																		
Total																		
Comments:			PRE-EMPTIVE STATUS															
			Public ownership								Documented habitat for state or federal listed species							
			Wildlife management area								Regionally scarce wetland category							
			Fisheries management area								Historic/archaeologic area							
			Designated State or Federal protected wetland															

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/> Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		VEGETATION VARIABLES Vegetation Lacking: <input type="checkbox"/> Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till				Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input type="checkbox"/> Low Intensity (i.e. open space)				Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated				Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%				Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow - PIPE <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/19/04

Wetland Number: W-32

Photo Numbers: Transect 32.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		SOIL VARIABLES		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed																									
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/19/04
Wetland Number: W-33
Photo Numbers: Transect 33.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	MICRORELIEF of Wetland Surface:	Number of Types & Relative Proportions:																						
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)	<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent	Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																						
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated	Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet	Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input checked="" type="checkbox"/> Highly Uneven Distribution																						
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence	Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available	Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																						
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)	Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available	Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																						
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized	Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils	Number of Layers and Percent Cover: <table style="width: 100%;"> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </table>	Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																							
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																							
<input type="checkbox"/> 5	2. floating:																							
<input type="checkbox"/> 4	3. moss-lichen:																							
<input type="checkbox"/> 3	4. short herb:																							
<input type="checkbox"/> 2	5. tall herb:																							
<input type="checkbox"/> 1	6. dwarf shrub:																							
	7. short shrub:																							
	8. tall shrub:																							
	9. sapling:																							
	10. tree:																							
HYDROLOGIC VARIABLES	Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring	Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input checked="" type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																						
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated	SOIL VARIABLES	Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																						
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input checked="" type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding	Soil Lacking: <input type="checkbox"/>	Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																						
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water	Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric	Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																						
Surface Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till	Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input checked="" type="checkbox"/> Clayey	Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																						
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)	VEGETATION VARIABLES	Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input checked="" type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)																						
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	Vegetation Lacking: <input type="checkbox"/>	Presence of Islands: <input type="checkbox"/> Several to Many <input checked="" type="checkbox"/> One or Few <input type="checkbox"/> Absent																						
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%	Dominant Wetland Type: <input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed																							
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																								
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																								

WETLAND INVENTORY DATA

Project Number:

Date:

Wetland Number:

Photo Numbers:

USGS Quadrangle:

Field Investigators:

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input checked="" type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH:	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (ie. agriculture)
<input type="checkbox"/>	Moderate Intensity (ie. forestry)
<input checked="" type="checkbox"/>	Low Intensity (ie. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input checked="" type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input checked="" type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input checked="" type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input checked="" type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluvaquent Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input checked="" type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/>	Actual #
<input checked="" type="checkbox"/>	5
<input type="checkbox"/>	4
<input type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
<input type="checkbox"/>	Even Distribution
<input checked="" type="checkbox"/>	Moderately Even Distribution
<input type="checkbox"/>	Highly Uneven Distribution
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input checked="" type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input checked="" type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/>	6 or > (actual #)
<input checked="" type="checkbox"/>	5
<input type="checkbox"/>	4
<input type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
1. submergents:	
2. floating:	
3. moss-lichen:	5
4. short herb:	
5. tall herb:	5
6. dwarf shrub:	
7. short shrub:	5
8. tall shrub:	
9. sapling:	10
10. tree:	75
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input type="checkbox"/>	Medium 3-4 plots sampled
<input checked="" type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants:	
<input type="checkbox"/>	Low (5-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input checked="" type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input checked="" type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input checked="" type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input checked="" type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input checked="" type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input type="checkbox"/>	Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/19/04
Wetland Number: W-35
Photo Numbers: Transect 35.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:	
Size:	<input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)	<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent	Number of Types <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution	Actual # 6
Wetland Juxtaposition:	<input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated	Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet	Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)		
Fire Occurrence and Frequency:	<input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence	Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available	Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)		
Regional Scarcity:	<input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)	Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available	Number of Layers and Percent Cover: Number of Layers <input type="checkbox"/> 6 or > (actual #) <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	% Cover 1. submergents: 2. floating: 3. moss-lichen: 4. short herb: 5. tall herb: 6. dwarf shrub: 7. short shrub: 8. tall shrub: 9. sapling: 10. tree:	
Watershed Land Use:	<input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized	Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils	Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled		
HYDROLOGIC VARIABLES		Evidence of Seeps and Springs:		Proportion of Animal Food Plants:	
Surface Water Level Fluctuation of Wetland:	<input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated	<input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring	<input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)		
Frequency of Overbank Flooding:	<input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding	Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring	Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems		
pH:	<input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water	Soil Lacking: <input type="checkbox"/>	Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)		
Surficial Geologic Deposit Under Wetland	<input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till	Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric	Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water		
Wetland Land Use:	<input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input type="checkbox"/> Low Intensity (i.e. open space)	Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey	Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25		
Wetland Water Regime:	<input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	SOIL VARIABLES		Presence of Islands:	
Basin Topographic Gradient:	<input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%	Vegetation Lacking: <input type="checkbox"/>	Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed	<input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent	
Degree of Outlet Restriction:	<input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow	VEGETATION VARIABLES			
Ratio of Wetland Area to Watershed Area:	<input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%				

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/19/04
Wetland Number: W-36
Photo Numbers: Transect 36.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream MAN-MADE
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized - GOLF COURSE
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input checked="" type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH:	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (ie. agriculture)
<input checked="" type="checkbox"/>	Moderate Intensity (ie. forestry)
<input type="checkbox"/>	Low Intensity (ie. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input checked="" type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input checked="" type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input checked="" type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input checked="" type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluviuquent Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input checked="" type="checkbox"/>	Sandy
<input checked="" type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey







VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input checked="" type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	
<input type="checkbox"/>	Actual #
<input type="checkbox"/>	5
<input checked="" type="checkbox"/>	4
<input type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
Evenness of Distribution	
<input type="checkbox"/>	Even Distribution
<input type="checkbox"/>	Moderately Even Distribution
<input checked="" type="checkbox"/>	Highly Uneven Distribution
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input checked="" type="checkbox"/>	Low Density (20-40%)
<input type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input checked="" type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/>	6 or > (actual #)
<input type="checkbox"/>	5
<input type="checkbox"/>	4
<input checked="" type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
	1. submergents:
	2. floating:
	3. moss-lichen:
	4. short herb:
	5. tall herb:
	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input checked="" type="checkbox"/>	Medium 3-4 plots sampled
<input type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants:	
<input type="checkbox"/>	Low (5-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input checked="" type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input checked="" type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input checked="" type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input checked="" type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input checked="" type="checkbox"/>	One or Few
<input type="checkbox"/>	Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/20/04
 Wetland Number: W-37
 Photo Numbers: Transsect 37.1
 USGS Quadrangle: _____
 Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES													
Condition	Percent/Acreage		OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H	
	<u>20</u>	Depressional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<u>10</u>	Slope ^{HIGH} GRADIENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	_____	Flat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	_____	Extensive Peatland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	_____	Lacustrine Fringe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<u>70</u>	Riverine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VEGETATION TYPES			<u>High Bush Blueberry</u> # For additional plant species see delineation data sheet.													
Type	Percent/Acreage	SOIL TYPES														
Forested Wetland																
Evergreen		Histosol														
Needle-leaved	<u>30</u>	• Fibric <input type="checkbox"/>														
Deciduous		• Hemic <input type="checkbox"/>														
Broad-leaved	<u>50</u>	• Sapric <input type="checkbox"/>														
Needle-leaved	_____															
Scrub Shrub		Mineral														
Evergreen		Hydric Soil														
Broad-leaved	_____	• Gravelly <input type="checkbox"/>														
Needle-leaved	_____	• Sandy <input type="checkbox"/>														
Deciduous		• Silty <input type="checkbox"/>														
Broad-leaved	<u>20</u>	• Clayey <input type="checkbox"/>														
Needle-leaved	_____															
Emergent Wetland		GEOLOGY														
Persistent	_____	Surficial: <u>Till</u>														
Non-persistent	_____															
Aquatic Bed	_____	Bedrock: <u>Shale and Sandstone</u>														
Total	_____															
Comments: _____			OW Obligate Wetland COM Common FW Facultative Wetland OCC Occasional F Facultative C Canopy FU Facultative Upland S Sapling OU Obligate Upland TS Tall Shrub DOM Dominant LS Low Shrub H Herb													
			PRE-EMPTIVE STATUS													
			_____ Public ownership _____ Wildlife management area _____ Fisheries management area _____ Designated State or Federal protected wetland													
			_____ Documented habitat for state or federal listed species _____ Regionally scarce wetland category _____ Historic/archaeologic area													

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/>	Small (<10 acres)
<input checked="" type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use: GOLF COURSE	
<input type="checkbox"/>	> 50% urbanized
<input checked="" type="checkbox"/>	25-50% urbanized
<input type="checkbox"/>	0-25% urbanized
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input checked="" type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH: NA	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input checked="" type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (ie. agriculture)
<input checked="" type="checkbox"/>	Moderate Intensity (ie. forestry) GOLF
<input type="checkbox"/>	Low Intensity (ie. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input checked="" type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input checked="" type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input checked="" type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input checked="" type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluviacquent Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol: LEAF LITTER ONLY	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input checked="" type="checkbox"/>	Silty
<input checked="" type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input checked="" type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	
<input type="checkbox"/>	Actual #
<input type="checkbox"/>	3
<input checked="" type="checkbox"/>	4
<input type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
Evenness of Distribution	
<input type="checkbox"/>	Even Distribution
<input checked="" type="checkbox"/>	Moderately Even Distribution
<input type="checkbox"/>	Highly Uneven Distribution
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input checked="" type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input checked="" type="checkbox"/>	Moderate (broken irregular rings)
<input type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input checked="" type="checkbox"/>	6 or > (actual #) 7
<input type="checkbox"/>	5
<input type="checkbox"/>	4
<input type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
1.	submergents:
2.	floating:
3.	moss-lichen:
4.	short herb:
5.	tall herb:
6.	dwarf shrub:
7.	short shrub:
8.	tall shrub:
9.	sapling:
10.	tree:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input type="checkbox"/>	Medium 3-4 plots sampled
<input checked="" type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants: NA	
<input type="checkbox"/>	Low (3-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input checked="" type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input checked="" type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input checked="" type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input checked="" type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input type="checkbox"/>	Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/20/04
Wetland Number: W-38
Aerial Photo Numbers: Transect 38.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES																			
Condition	Percent/Acreage																					
		Depressional																				
	30	Slope HIGH GRADIENT																				
		Flat																				
		Extensive Peatland																				
		Lacustrine Fringe																				
	70	Riverine																				
Type	Percent/Acreage																					
Forested Wetland																						
Evergreen Needle-leaved	95																					
Deciduous Broad-leaved	5																					
Needle-leaved																						
Scrub Shrub																						
Evergreen Broad-leaved																						
Needle-leaved																						
Deciduous Broad-leaved																						
Needle-leaved																						
Emergent Wetland																						
Persistent																						
Non-persistent																						
Aquatic Bed																						
Total																						
Comments:																						
SOIL TYPES																						
Histosol																						
Fibric																						
Hemic																						
Sapric																						
Mineral Hydric Soil																						
Gravelly																						
Sandy																						
Silty																						
Clayey																						
GEOLOGY																						
Surficial: TILL																						
Bedrock: Shale and Sandstone																						
Red Maple			OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H							
*																						
For additional plant species see delineation data sheet																						
PRE-EMPTIVE STATUS																						
Public ownership		Documented habitat for state or federal listed species																				
Wildlife management area		Regionally scarce wetland category																				
Fisheries management area		Historic/archaeologic area																				
Designated State or Federal protected wetland																						

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use: GOLF COURSE	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH: NA	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluviqent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemie	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input checked="" type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen: 2
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling: 7
	10. tree: 90
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input checked="" type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input checked="" type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input checked="" type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (Index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (Index 1.25-1.50)	
<input checked="" type="checkbox"/> Straight/Slightly Irreg. (Index 1.10-1.25)	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input checked="" type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord

Date: _____

10/20/02

Wetland Number: W-39

Photo Numbers: Transect 39.1

USGS Quadrangle:

Field Investigators: William Perry Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence	
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input checked="" type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding	
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water	
Subsidence Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till	
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input checked="" type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%	

Microrelief of Wetland Surface: <input type="checkbox"/> Pronounced >45 cm <input checked="" type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent	
Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input checked="" type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available	
Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input checked="" type="checkbox"/> Seeps Observed <input checked="" type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking: <input type="checkbox"/>	
Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric	
Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input checked="" type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking: <input type="checkbox"/>	
Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions: Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Vegetative Interspersion: <input checked="" type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input checked="" type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																						
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																						
<input type="checkbox"/> 5	2. floating:																						
<input checked="" type="checkbox"/> 4	3. moss-lichen:																						
<input type="checkbox"/> 3	4. short herb:																						
<input type="checkbox"/> 2	5. tall herb:																						
<input type="checkbox"/> 1	6. dwarf shrub:																						
	7. short shrub:																						
	8. tall shrub:																						
	9. sapling:																						
	10. tree:																						
Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Stream Sinuosity: <input checked="" type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Presence of Islands: <input type="checkbox"/> Several to Many <input checked="" type="checkbox"/> One or Few <input type="checkbox"/> Absent																							

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/20/04
Wetland Number: W-40
Photo Numbers: Transect 40.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES													
Condition	Percent/Acreage															
	<u>90</u>	Depressional														
	<u>10</u>	Slope ^{LOW} GRADIENT Flat														
	_____	Extensive Peatland														
	_____	Lacustrine Fringe														
	_____	Riverine														
			Strawberry-Bush, Amer. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input checked="" type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input checked="" type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input checked="" type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input checked="" type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input checked="" type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH: ≈ 7.5	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input checked="" type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input checked="" type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input checked="" type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input checked="" type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input checked="" type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input checked="" type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input checked="" type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input checked="" type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input checked="" type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input checked="" type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemie	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input checked="" type="checkbox"/> Sandy - LITTLE	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input checked="" type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input checked="" type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input checked="" type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input checked="" type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants: NA	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input checked="" type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input checked="" type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity: NA	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input checked="" type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/20/04
Wetland Number: W-41
Aerial Photo Numbers: Transect 41.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		MICRORELIEF of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input checked="" type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviatile Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input checked="" type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input checked="" type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		SOIL VARIABLES		Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input checked="" type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Stream Sinuosity: NA <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Presence of Islands: NA <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed																									
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/20/04
Wetland Number: W-42
Photo Numbers: Transect 42.1
USGS Quadrangle: _____
Field Investigators: William Kenney Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES																
Condition	Percent/Acreage			*For plant species see delineation sheet	OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H		
			Depressional		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	100		Slope HIGH GRADIENT		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			Flat		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			Extensive Peatland		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			Lacustrine Fringe		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			Riverine		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Type	Percent/Acreage																		
Forested Wetland																			
Evergreen	90																		
Needle-leaved																			
Deciduous	10																		
Broad-leaved																			
Needle-leaved																			
Scrub Shrub																			
Evergreen																			
Broad-leaved																			
Needle-leaved																			
Deciduous																			
Broad-leaved																			
Needle-leaved																			
Emergent Wetland																			
Persistent																			
Non-persistent																			
Aquatic Bed																			
Total																			
Comments:																			
			SOIL TYPES																
			Histosol																
			• Fibric	<input type="checkbox"/>															
			• Hemic	<input type="checkbox"/>															
			• Sapric	<input type="checkbox"/>															
			Mineral Hydric Soil																
			• Gravelly	<input type="checkbox"/>															
			• Sandy	<input checked="" type="checkbox"/>															
			• Silty	<input checked="" type="checkbox"/>															
			• Clayey	<input type="checkbox"/>															
			GEOLOGY																
			Surficial: Till																
			Bedrock: Shale and Sandstone																
				OW Obligate Wet															

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		MICRORELIEF OF WETLAND SURFACE:		NUMBER OF TYPES & RELATIVE PROPORTIONS:																							
Size: <input type="checkbox"/> Small (<10 acres) <input checked="" type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input checked="" type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input checked="" type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input checked="" type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> >50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviuquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen: 5</td> </tr> <tr> <td><input checked="" type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling: 5</td> </tr> <tr> <td></td> <td>10. tree: 90</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen: 5	<input checked="" type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling: 5		10. tree: 90
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen: 5																										
<input checked="" type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling: 5																										
	10. tree: 90																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input checked="" type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input checked="" type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input checked="" type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: NA <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input checked="" type="checkbox"/> Sandy <i>LITTLE</i> <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Stream Sinuosity: NA <input type="checkbox"/> Highly Convoluted (Index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Presence of Islands: NA <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																							

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/20/04
Wetland Number: W-43
Photo Numbers: Transect 43.1
USGS Quadrangle: _____
Field Investigators: William Kenney Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	>50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input checked="" type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH: NA	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (ie. agriculture)
<input type="checkbox"/>	Moderate Intensity (ie. forestry)
<input checked="" type="checkbox"/>	Low Intensity (ie. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input checked="" type="checkbox"/>	Restricted Outflow MAN-MADE DRAIN
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input checked="" type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input checked="" type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input checked="" type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input type="checkbox"/>	No Evidence Observed
<input checked="" type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluvisquent Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input checked="" type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosols:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input checked="" type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey







VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input checked="" type="checkbox"/> Moderately Even Distribution
<input checked="" type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input checked="" type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input checked="" type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input checked="" type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input checked="" type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants: NA	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input checked="" type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input checked="" type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 25-75% Scattered or Peripheral	
<input checked="" type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input checked="" type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input checked="" type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/21/04
 Wetland Number: W-44
 Photo Numbers: Transect 44.1
 USGS Quadrangle: _____
 Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS		PLANT SPECIES	
Condition	Percent/Acreage		
	<u>90</u>	Depressional	<input type="checkbox"/> OW <input type="checkbox"/> FW <input type="checkbox"/> F <input type="checkbox"/> FU <input type="checkbox"/> OU <input type="checkbox"/> DOM <input type="checkbox"/> COM <input type="checkbox"/> OCC <input type="checkbox"/> C <input type="checkbox"/> S <input type="checkbox"/> TS <input type="checkbox"/> LS <input type="checkbox"/> H
	_____	Slope	
	_____	Flat	
	_____	Extensive Peatland	
	_____	Lacustrine Fringe	
	<u>10</u>	Riverine	
VEGETATION TYPES			
Type	Percent/Acreage	SOIL TYPES	
Forested Wetland			
Evergreen		Histosol	
Needle-leaved	<u>20</u>	• Fibric <input type="checkbox"/>	
Deciduous		• Hemic <input checked="" type="checkbox"/>	
Broad-leaved	<u>70</u>	• Sapric <input type="checkbox"/>	
Needle-leaved	_____		
Scrub Shrub		Mineral	
Evergreen		Hydric Soil	
Broad-leaved	<u>8</u>	• Gravelly <input type="checkbox"/>	
Needle-leaved	_____	• Sandy <input checked="" type="checkbox"/>	
Deciduous		• Silty <input type="checkbox"/>	
Broad-leaved	<u>2</u>	• Clayey <input type="checkbox"/>	
Needle-leaved	_____		
Emergent Wetland		GEOLOGY	
Persistent	_____	Surficial: Till	
Non-persistent	_____		
Aquatic Bed	_____	Bedrock: Shale and Sandstone	
Total	_____		
Comments:			
		OW Obligate Wetland COM Common FW Facultative Wetland OCC Occasional F Facultative C Canopy FU Facultative Upland S Sapling OU Obligate Upland TS Tall Shrub DOM Dominant LS Low Shrub H Herb	
		PRE-EMPTIVE STATUS	
		_____ Public ownership _____ Wildlife management area _____ Fisheries management area _____ Designated State or Federal protected wetland _____ Documented habitat for state or federal listed species _____ Regionally scarce wetland category _____ Historic/archaeologic area	

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☒ Small (<10 acres)
- ☐ Medium (10-100 acres)
- ☐ Large (>100 acres)

Wetland Juxtaposition:

- ☒ Connected Upstream and Downstream
- ☐ Only Connected Above
- ☐ Only Connected Below
- ☐ Other Wetlands Nearby but not Connected
- ☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
- ☐ Natural; Sporadic Frequency
- ☐ Human-caused; Predictable
- ☐ Human-caused; Sporadic
- ☐ Rare Event
- ☒ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
- ☒ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
- ☐ 25-50% urbanized
- ☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
- ☒ Low Fluctuation
- ☐ Never Inundated

Frequency of Overbank Flooding:

- ☒ Return Interval > 5 yrs.
- ☐ Return Interval 2-5 yrs.
- ☐ Return Interval 1-2 yrs.
- ☐ No Overbank Flooding

pH: NA

- ☐ Acid <5.5
- ☐ Circumneutral 5.5-7.4
- ☐ Alkaline >7.4
- ☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
- ☐ High Permeability Stratified Deposits
- ☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (ie. agriculture)
- ☐ Moderate Intensity (ie. forestry)
- ☒ Low Intensity (ie. open space)

Wetland Water Regime:

- ☒ Wet; Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
- ☐ Drier; Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
- ☒ Low Gradient <2%

Degree of Outlet Restriction:

- ☒ Restricted Outflow
- ☐ Unrestricted Outflow
- ☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
- ☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
- ☐ Well Developed 15-45 cm
- ☒ Poorly Developed <15 cm
- ☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
- ☐ No Inlet/Intermittent Outlet
- ☐ No Inlet/Perennial Outlet
- ☐ Intermittent Inlet/No Outlet
- ☐ Intermittent Inlet/Intermittent Outlet
- ☐ Intermittent Outlet/Perennial Outlet
- ☐ Perennial Inlet/No Outlet
- ☐ Perennial Inlet/Intermittent Outlet
- ☒ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
- ☐ Discharge
- ☐ Horizontal Flow
- ☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
- ☐ Piez. Surface below Substrate elev.
- ☒ Not Available

Evidence of Sedimentation:

- ☒ No Evidence Observed
- ☐ Sediment Observed on Wetland Substrate
- ☐ Fluvaquent Soils

Evidence of Seeps and Springs:

- ☒ No Seeps or Springs
- ☐ Seeps Observed
- ☐ Perennial Spring
- ☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

☐

Histosol:

- ☐ Fibric
- ☐ Hemic
- ☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
- ☒ Sandy
- ☐ Silty
- ☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
- ☒ Forested - Deciduous - Broad-leaved
- ☐ Forested - Deciduous - Needle-leaved
- ☐ Scrub Shrub - Evergreen - Broad-leaved
- ☐ Scrub Shrub - Evergreen - Needle-leaved
- ☐ Scrub Shrub - Deciduous - Broad-leaved
- ☐ Scrub Shrub - Deciduous - Needle-leaved
- ☐ Emergent - Persistent
- ☐ Emergent - Non-persistent
- ☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
- ☐ 5
- ☒ 4
- ☐ 3
- ☐ 2
- ☐ 1

Evenness of Distribution

- ☐ Even Distribution
- ☒ Moderately Even Distribution
- ☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
- ☐ Low Density (20-40%)
- ☐ Medium Density (40-60%)
- ☒ High Density (60-80%)
- ☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
- ☐ Moderate (broken irregular rings)
- ☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|---|-----------------|
| <input checked="" type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
- ☐ Medium 3-4 plots sampled
- ☒ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (5-25% cover)
- ☐ Medium (25-50% cover)
- ☐ High (>50% cover)

Cover Distribution:

- ☒ Continuous Cover
- ☐ Small Scattered Patches
- ☐ 1 or More Large Patches; Parts of Site Open
- ☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
- ☒ Moderately Abundant (25-50% of surface)
- ☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
- ☐ >75% Scattered or Peripheral
- ☐ <25% Scattered or Peripheral
- ☒ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
- ☒ Moderately Convoluted (index 1.25-1.50)
- ☐ Straight/Slightly Irreg. (index 1.10-1.25)

Presence of Islands:

- ☐ Several to Many
- ☒ One or Few
- ☐ Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/21/04
Wetland Number: W-45
Photo Numbers: Transect 45.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)






PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size:	<input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)	<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent	<input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	<input type="checkbox"/> Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Wetland Juxtaposition:	<input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated	Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet	Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																								
Fire Occurrence and Frequency:	<input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence	Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available	Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																								
Regional Scarcity:	<input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)	Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available	Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>			Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
Watershed Land Use:	<input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized	Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils	Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																								
HYDROLOGIC VARIABLES		SOIL VARIABLES																									
Surface Water Level Fluctuation of Wetland:	<input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated	Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring	Proportion of Animal Food Plants: (A) <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																								
Frequency of Overbank Flooding:	<input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding	Soil Lacking: <input type="checkbox"/> Histosol: N ₂ <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric	Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																								
pH: NA	<input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water	Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey	Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																								
Surficial Geologic Deposit Under Wetland	<input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till	VEGETATION VARIABLES																									
Wetland Land Use:	<input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)	Vegetation Lacking: <input type="checkbox"/> Dominant Wetland Type:	Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																								
Wetland Water Regime:	<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	<input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed	Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)																								
Basin Topographic Gradient:	<input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%	Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																									
Degree of Outlet Restriction:	<input type="checkbox"/> Restricted Outflow MAN MADE <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																										
Ratio of Wetland Area to Watershed Area:	<input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																										

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/21/04
Wetland Number: W-46
Photo Numbers: Transect 46.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS						PLANT SPECIES																	
Condition		Percent/Acreage																					
				Depressional		*for plant species see delineation data sheets	OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H				
		30 HIGH 40 LOW	>GRADIENT Slope																				
				Extensive Peatland																			
				Lacustrine Fringe																			
		30	Riverine																				
Type		Percent/Acreage																					
VEGETATION TYPES																							
Forested Wetland					SOIL TYPES																		
Evergreen					Histosol																		
Needle-leaved		40			• Fibric	<input type="checkbox"/>																	
Deciduous					• Hemic	<input type="checkbox"/>																	
Broad-leaved		40			• Sapric	<input type="checkbox"/>																	
Needle-leaved																							
Scrub Shrub					Mineral																		
Evergreen					Hydric Soil																		
Broad-leaved					• Gravelly	<input type="checkbox"/>																	
Needle-leaved					• Sandy	<input type="checkbox"/>																	
Deciduous					• Silty	<input checked="" type="checkbox"/>																	
Broad-leaved		20			• Clayey	<input type="checkbox"/>																	
Needle-leaved																							
Emergent Wetland					GEOLOGY																		
Persistent					Surficial:	Till																	
Non-persistent																							
Aquatic Bed																							
Total					Bedrock: Shale and Sandstone																		
Comments:																							
						PRE-EMPTIVE STATUS																	
						Public ownership								Documented habitat for state or federal listed species									
						Wildlife management area								Regionally scarce wetland category									
						Fisheries management area								Historic/archaeologic area									
						Designated State or Federal protected wetland																	

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input checked="" type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH: NA	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (ie. agriculture)
<input type="checkbox"/>	Moderate Intensity (ie. forestry)
<input checked="" type="checkbox"/>	Low Intensity (ie. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input checked="" type="checkbox"/>	Restricted Outflow MAN MADE
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input checked="" type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input checked="" type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input checked="" type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input checked="" type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluvaquent Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input checked="" type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

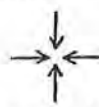





VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	
<input type="checkbox"/>	Actual #
<input checked="" type="checkbox"/>	5
<input type="checkbox"/>	4
<input type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
Evenness of Distribution	
<input type="checkbox"/>	Even Distribution
<input checked="" type="checkbox"/>	Moderately Even Distribution
<input type="checkbox"/>	Highly Uneven Distribution
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input checked="" type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input checked="" type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/>	6 or > (actual #)
<input type="checkbox"/>	5
<input checked="" type="checkbox"/>	4
<input type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
	1. submergents:
	2. floating:
	3. moss-lichen:
	4. short herb:
	5. tall herb:
	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. trees:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input type="checkbox"/>	Medium 3-4 plots sampled
<input checked="" type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants: NA	
<input type="checkbox"/>	Low (5-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input checked="" type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input checked="" type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input checked="" type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input checked="" type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input checked="" type="checkbox"/>	One or Few
<input type="checkbox"/>	Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/21/04
Wetland Number: W-47
Photo Numbers: Transect 47.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES													
Condition	Percent/Acreage		OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H	
	<u>20</u>	Depressional														
	<u>80</u>	Slope ^{LOW} GRADIENT														
		Flat														
		Extensive Peatland														
		Lacustrine Fringe														
		Riverine														
VEGETATION TYPES			*For additional plant species see delineation sheet.													
Type	Percent/Acreage	SOIL TYPES														
Forested Wetland																
Evergreen																
Needle-leaved	<u>5</u>	Histosol														
Deciduous		• Fibric <input type="checkbox"/>														
Broad-leaved	<u>25</u>	• Hemic <input type="checkbox"/>														
Needle-leaved		• Sapric <input type="checkbox"/>														
Scrub Shrub		Mineral														
Evergreen		Hydric Soil														
Broad-leaved		• Gravelly <input type="checkbox"/>														
Needle-leaved		• Sandy <input type="checkbox"/>														
Deciduous		• Silty <input type="checkbox"/>														
Broad-leaved	<u>70</u>	• Clayey <input type="checkbox"/>														
Needle-leaved																
Emergent Wetland		GEOLOGY														
Persistent		Surficial: <u>TU</u>														
Non-persistent																
Aquatic Bed		Bedrock: <u>Shale and sandstone</u>														
Total																
Comments:			<div> <div> Public ownership Wildlife management area Fisheries management area Designated State or Federal protected wetland </div> <div> Documented habitat for state or federal listed species Regionally scarce wetland category Historic/archaeologic area </div> </div>													

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input checked="" type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input checked="" type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input checked="" type="checkbox"/>	No Overbank Flooding
pH: NA	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (i.e. agriculture)
<input type="checkbox"/>	Moderate Intensity (i.e. forestry)
<input checked="" type="checkbox"/>	Low Intensity (i.e. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input type="checkbox"/>	High Gradient >2%
<input checked="" type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input checked="" type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input checked="" type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input checked="" type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input checked="" type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input checked="" type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluvuquent Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input checked="" type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input checked="" type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input checked="" type="checkbox"/> Even Distribution
<input checked="" type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input checked="" type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input checked="" type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input checked="" type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input checked="" type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants: NA	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input checked="" type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input checked="" type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input checked="" type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity: NA	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input checked="" type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/21/04
Wetland Number: W-48
Photo Numbers: Transect 48.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/>	Small (<10 acres)
<input checked="" type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input checked="" type="checkbox"/>	25-50% urbanized
<input type="checkbox"/>	0-25% urbanized

HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input checked="" type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH:	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Subsidence Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input checked="" type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (ie. agriculture)
<input type="checkbox"/>	Moderate Intensity (ie. forestry)
<input checked="" type="checkbox"/>	Low Intensity (ie. open space)
Wetland Water Regime:	
<input checked="" type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input checked="" type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input checked="" type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input checked="" type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input checked="" type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input checked="" type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input checked="" type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluviacut Soils
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input checked="" type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input checked="" type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	
<input type="checkbox"/>	Actual #
<input type="checkbox"/>	5
<input type="checkbox"/>	4
<input checked="" type="checkbox"/>	3
<input type="checkbox"/>	2
<input type="checkbox"/>	1
Evenness of Distribution	
<input type="checkbox"/>	Even Distribution
<input type="checkbox"/>	Moderately Even Distribution
<input checked="" type="checkbox"/>	Highly Uneven Distribution
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input type="checkbox"/>	Medium Density (40-60%)
<input checked="" type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/>	6 or > (actual #)
<input type="checkbox"/>	5
<input type="checkbox"/>	4
<input type="checkbox"/>	3
<input checked="" type="checkbox"/>	2
<input type="checkbox"/>	1
	1. submergents:
	2. floating:
	3. moss-lichen:
	4. short herb:
	5. tall herb:
	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input checked="" type="checkbox"/>	Low 1-2 plots sampled
<input type="checkbox"/>	Medium 3-4 plots sampled
<input type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants:	
<input type="checkbox"/>	Low (5-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input checked="" type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input checked="" type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input checked="" type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index 1.10-1.25)
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input checked="" type="checkbox"/>	One or Few
<input type="checkbox"/>	Absent

PIT/MOUND

WETLAND INVENTORY DATA

Project Number: Concord Date: 11/3/04
Wetland Number: W-49
Photo Numbers: Transect 49.1
USGS Quadrangle: _____
Field Investigators: William Kenney Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES																
Condition	Percent/Acreage		OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H				
	_____	Depressional														Winterberry			
	<u>100</u>	Slope HIGH GRADIENT														Blueberry			
	_____	Flat														Red Maple			
	_____	Extensive Peatland														White Pine			
	_____	Lacustrine Fringe														Sugar Maple			
	_____	Riverine														Flat-top Aster			
Type	Percent/Acreage	SOIL TYPES																	
Forested Wetland																			
Evergreen		Histosol																	
Needle-leaved	<u>30</u>	• Fibric <input type="checkbox"/>																	
Deciduous		• Hemic <input type="checkbox"/>																	
Broad-leaved	<u>50</u>	• Sapric <input type="checkbox"/>																	
Needle-leaved	_____																		
Scrub Shrub		Mineral																	
Evergreen		Hydric Soil																	
Broad-leaved	<u>20</u>	• Gravelly <input type="checkbox"/>																	
Needle-leaved	_____	• Sandy <input type="checkbox"/>																	
Deciduous	_____	• Silty <input type="checkbox"/>																	
Broad-leaved	_____	• Clayey <input type="checkbox"/>																	
Needle-leaved	_____																		
Emergent Wetland		GEOLOGY																	
Persistent	_____	Surficial: TILL																	
Non-persistent	_____																		
Aquatic Bed	_____	Bedrock: Shale and Sandstone																	
Total	_____																		
Comments:	_____																		

OW	Obligate Wetland	COM	Common																
FW	Facultative Wetland	OCC	Occasional																
F	Facultative	C	Canopy																
FU	Facultative Upland	S	Sapling																
OU	Obligate Upland	TS	Tall Shrub																
DOM	Dominant	LS	Low Shrub																
		H	Herb																
PRE-EMPTIVE STATUS																			
_____ Public ownership	_____ Documented habitat for state or federal listed species																		
_____ Wildlife management area	_____ Regionally scarce wetland category																		
_____ Fisheries management area	_____ Historic/archaeologic area																		
_____ Designated State or Federal protected wetland																			

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input checked="" type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input checked="" type="checkbox"/> Actual # 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input checked="" type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input checked="" type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input checked="" type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized - UNDEVELOPED		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input checked="" type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input checked="" type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input checked="" type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: <input type="checkbox"/> Acid <5.5 <input checked="" type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input checked="" type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral/Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input checked="" type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed																									
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input checked="" type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/21/04
Wetland Number: W-50
Photo Numbers: Transect 50.1
USGS Quadrangle: _____
Field Investigators: _____

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		SOIL VARIABLES		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/> Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		VEGETATION VARIABLES		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Vegetation Lacking: <input type="checkbox"/> Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated																											
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%																											
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/21/04

Wetland Number: W-51

Photo Numbers: Transect 51.1

USGS Quadrangle:

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input checked="" type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input checked="" type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input checked="" type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input checked="" type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input checked="" type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviogent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input checked="" type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input checked="" type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		VEGETATION VARIABLES																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Vegetation Lacking: <input type="checkbox"/>																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input checked="" type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sepic		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Cover Distribution: <input type="checkbox"/> Continuous Cover <input checked="" type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input checked="" type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION Lacking: <input type="checkbox"/>		Dead Woody Material: <input checked="" type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		VEGETATION Lacking: <input type="checkbox"/>		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input checked="" type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%		Stream Sinuosity: NA		Stream Sinuosity: NA <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input checked="" type="checkbox"/> No Outflow		Presence of Islands: <input checked="" type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																									
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/22/04
Wetland Number: W-52
Photo Numbers: Transect 52.1
USGS Quadrangle: _____
Field Investigators: William Kenney Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input checked="" type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input checked="" type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input checked="" type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input checked="" type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input checked="" type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input checked="" type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH: NA	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input checked="" type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (ie. agriculture)	
<input type="checkbox"/> Moderate Intensity (ie. forestry)	
<input checked="" type="checkbox"/> Low Intensity (ie. open space)	
Wetland Water Regime:	
<input checked="" type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input checked="" type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction: MAN-MADE	
<input checked="" type="checkbox"/> Restricted Outflow DRAIN, UNDER	
<input type="checkbox"/> Unrestricted Outflow ROAD	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input checked="" type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input checked="" type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input checked="" type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input checked="" type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input checked="" type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input checked="" type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	
SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input checked="" type="checkbox"/> Clayey	
VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input checked="" type="checkbox"/> 5	<input checked="" type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input checked="" type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input checked="" type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input checked="" type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input checked="" type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input checked="" type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input checked="" type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input checked="" type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input checked="" type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/22/04

Wetland Number: W-53

Photo Numbers: Transect 53.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input checked="" type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input checked="" type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input checked="" type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input checked="" type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input checked="" type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input checked="" type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input checked="" type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input checked="" type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		Soil Lacking: <input type="checkbox"/>		Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		Proportion of Animal Food Plants: NA <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input checked="" type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemie <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input checked="" type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
pH: NA: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input checked="" type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input checked="" type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input checked="" type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input checked="" type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%																											
Degree of Outlet Restriction: <input checked="" type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/27/04
Wetland Number: W-54
Photo Numbers: Transect 54.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	Previous Residence
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed From Lake	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent - Meadow	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 3	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/27/04
 Wetland Number: W-65
 Photo Numbers: Transect 55.1
 USGS Quadrangle: _____
 Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS		PLANT SPECIES	
Condition	Percent/Acreage		
	_____	Depressional	
	<u>50</u> ^{HIGH} _{LOW} Gradient	Slope	
	_____	Extensive Peatland	
	_____	Lacustrine Fringe	
	_____	Riverine	
VEGETATION TYPES		PLANT SPECIES	
Type	Percent/Acreage		
Forested Wetland			
Evergreen			
Needle-leaved	<u>5</u>		
Deciduous			
Broad-leaved	<u>10</u>		
Needle-leaved			
Scrub Shrub			
Evergreen			
Broad-leaved			
Needle-leaved			
Deciduous			
Broad-leaved	<u>10</u>		
Needle-leaved			
Emergent Wetland			
Persistent			
Non-persistent	<u>75</u>		
Aquatic Bed			
Total			
Comments: <u>Mostly Meadow Area</u>			

SOIL TYPES		GEOLOGY	
Histosol		Surficial: Till	
• Fibric	<input type="checkbox"/>		
• Hemic	<input type="checkbox"/>		
• Sapric	<input type="checkbox"/>		
Mineral			
Hydric Soil			
• Gravelly	<input type="checkbox"/>		
• Sandy	<input type="checkbox"/>		
• Silty	<input type="checkbox"/>		
• Clayey	<input checked="" type="checkbox"/>		
Bedrock: Shale and Sandstone			

PRE-EMPTIVE STATUS			
Public ownership	_____	Documented habitat for state or federal listed species	_____
Wildlife management area	_____	Regionally scarce wetland category	_____
Fisheries management area	_____	Historic/archaeologic area	_____
Designated State or Federal protected wetland	_____		

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
- ☐ Medium (10-100 acres)
- ☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
- ☐ Only Connected Above
- ☐ Only Connected Below
- ☐ Other Wetlands Nearby but not Connected
- ☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
- ☐ Natural; Sporadic Frequency
- ☐ Human-caused; Predictable
- ☐ Human-caused; Sporadic
- ☐ Rare Event
- ☐ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
- ☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
- ☐ 25-50% urbanized
- ☐ 0-25% urbanized - OLD FARM

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
- ☐ Low Fluctuation
- ☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
- ☐ Return Interval 2-5 yrs.
- ☐ Return Interval 1-2 yrs.
- ☐ No Overbank Flooding

pH:

- ☐ Acid <5.5
- ☐ Circumneutral 5.5-7.4
- ☐ Alkaline >7.4
- ☐ No Water

Surface Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
- ☐ High Permeability Stratified Deposits
- ☐ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture) OLD FARM
- ☐ Moderate Intensity (i.e. forestry)
- ☐ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☐ Wet: Penn Flooded, Intermittently Exposed, Semiperm. Flooded
- ☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
- ☐ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
- ☐ Unrestricted Outflow
- ☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
- ☐ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
- ☐ Well Developed 15-45 cm
- ☐ Poorly Developed <15 cm
- ☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
- ☐ No Inlet/Intermittent Outlet
- ☐ No Inlet/Perennial Outlet
- ☐ Intermittent Inlet/No Outlet
- ☐ Intermittent Inlet/Intermittent Outlet
- ☐ Intermittent Outlet/Perennial Outlet
- ☐ Perennial Inlet/No Outlet
- ☐ Perennial Inlet/Intermittent Outlet
- ☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
- ☐ Discharge
- ☐ Horizontal Flow
- ☐ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
- ☐ Piez. Surface below Substrate elev.
- ☐ Not Available

Evidence of Sedimentation:

- ☐ No Evidence Observed
- ☐ Sediment Observed on Wetland Substrate
- ☐ Fluvaquent Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
- ☐ Seeps Observed
- ☐ Perennial Spring
- ☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
- ☐ Hemic
- ☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
- ☐ Sandy
- ☐ Silty
- ☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
- ☐ Forested - Deciduous - Broad-leaved
- ☐ Forested - Deciduous - Needle-leaved
- ☐ Scrub Shrub - Evergreen - Broad-leaved
- ☐ Scrub Shrub - Evergreen - Needle-leaved
- ☐ Scrub Shrub - Deciduous - Broad-leaved
- ☐ Scrub Shrub - Deciduous - Needle-leaved
- ☐ Emergent - Persistent
- ☐ Emergent - Non-persistent - MEADOW
- ☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
- ☐ 5
- ☐ 4
- ☐ 3
- ☐ 2
- ☐ 1

Evenness of Distribution

- ☐ Even Distribution
- ☐ Moderately Even Distribution
- ☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
- ☐ Low Density (20-40%)
- ☐ Medium Density (40-60%)
- ☐ High Density (60-80%)
- ☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
- ☐ Moderate (broken irregular rings)
- ☐ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|-----------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
- ☐ Medium 3-4 plots sampled
- ☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (5-25% cover)
- ☐ Medium (25-50% cover)
- ☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
- ☐ Small Scattered Patches
- ☐ 1 or More Large Patches; Parts of Site Open
- ☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
- ☐ Moderately Abundant (25-50% of surface)
- ☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
- ☐ >75% Scattered or Peripheral
- ☐ <25% Scattered or Peripheral
- ☐ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
- ☐ Moderately Convoluted (index 1.25-1.50)
- ☐ Straight/Slightly Irreg. (index 1.10-1.25)

Presence of Islands:

- ☐ Several to Many
- ☐ One or Few
- ☐ Absent

WETLAND INVENTORY DATA

Project Number: Concorel

Date: 10/27/04

Wetland Number: W-56

Photo Numbers: Transect 56.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
☒ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☒ Connected Upstream and Downstream
☐ Only Connected Above
☐ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
☒ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☐ 25-50% urbanized
☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☒ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☒ No Overbank Flooding

pH: NA

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☒ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☐ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
☐ Moderate Intensity (i.e. forestry)
☒ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☒ Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
☒ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☒ Unrestricted Outflow
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☒ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☐ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☒ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☒ Not Available

Evidence of Sedimentation:

- ☒ No Evidence Observed
☐ Sediment Observed on Wetland Substrate
☐ Fluvaquent Soils

Evidence of Seeps and Springs:

- ☒ No Seeps or Springs
☐ Seeps Observed
☐ Perennial Spring
☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
☐ Hemic
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☒ Sandy
☐ Silty
☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
☐ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☒ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

- Number of Types
☐ Actual #
☒ 5
☐ 4
☐ 3
☐ 2
☐ 1
- Evenness of Distribution
☐ Even Distribution
☒ Moderately Even Distribution
☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☐ Medium Density (40-60%)
☒ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☐ Moderate (broken irregular rings)
☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|---|-----------------|
| <input checked="" type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☐ Medium 3-4 plots sampled
☒ High 5 or more plots sampled

Proportion of Animal Food Plants: NA

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
☐ Small Scattered Patches
☒ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☐ Moderately Abundant (25-50% of surface)
☒ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☒ 100% Cover or Open Water

Stream Sinuosity:

- ☒ Highly Convoluted (index 1.50 or >)
☐ Moderately Convoluted (index 1.25-1.50)
☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☒ Several to Many
☐ One or Few
☐ Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/27/04
Wetland Number: W-57
Photo Numbers: Transect 57.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES													
Condition	Percent/Acreage		<div> <div>* For plant species see delineation data sheets</div> <div> <div>OW</div> <div>FW</div> <div>F</div> <div>FU</div> <div>OU</div> <div>DOM</div> <div>COM</div> <div>OCC</div> <div>C</div> <div>S</div> <div>TS</div> <div>LS</div> <div>H</div> </div> </div>													
	_____		<div> <div>Depressional</div> <div>_____</div> </div>													
	<div> <div>25 HIGH</div> <div>25 LOW</div> </div> Gradient Slope		<div> <div>_____</div> <div>_____</div> </div>													
	_____		<div> <div>Extensive Peatland</div> <div>_____</div> </div>													
	_____		<div> <div>Lacustrine Fringe</div> <div>_____</div> </div>													
	<div> <div>50</div> </div> Riverine		<div> <div>_____</div> <div>_____</div> </div>													
VEGETATION TYPES																
Type	Percent/Acreage															
Forested Wetland			<div> <div>SOIL TYPES</div> <div> <div>Histosol</div> <div> <div>• Fibric</div> <div>• Hemic</div> <div>• Sapric</div> </div> </div> </div>													
Evergreen	10															
Needle-leaved																
Deciduous	30															
Broad-leaved																
Needle-leaved																
Scrub Shrub			<div> <div>Mineral</div> <div>Hydric Soil</div> <div> <div>• Gravelly</div> <div>• Sandy</div> <div>• Silty</div> <div>• Clayey</div> </div> </div>													
Evergreen	40															
Broad-leaved																
Needle-leaved																
Deciduous																
Broad-leaved																
Needle-leaved																
Emergent Wetland			<div> <div>GEOLOGY</div> <div>Surficial: Till</div> </div>													
Persistent																
Non-persistent																
Aquatic Bed	20															
Total	_____		<div> <div>Bedrock: Shale and Sandstone</div> </div>													
Comments: _____			<div> <div> <div>OW</div> <div>Obligate Wetland</div> <div>FW</div> <div>Facultative Wetland</div> <div>F</div> <div>Facultative</div> <div>FU</div> <div>Facultative Upland</div> <div>OU</div> <div>Obligate Upland</div> <div>DOM</div> <div>Dominant</div> </div> <div> <div>COM</div> <div>Common</div> <div>OCC</div> <div>Occasional</div> <div>C</div> <div>Canopy</div> <div>S</div> <div>Sapling</div> <div>TS</div> <div>Tall Shrub</div> <div>LS</div> <div>Low Shrub</div> <div>H</div> <div>Herb</div> </div> </div>													
			<div> <div>PRE-EMPTIVE STATUS</div> <div> <div>Public ownership</div> <div>Wildlife management area</div> <div>Fisheries management area</div> <div>Designated State or Federal protected wetland</div> </div> <div> <div>Documented habitat for state or federal listed species</div> <div>Regionally scarce wetland category</div> <div>Historic/archaeologic area</div> </div> </div>													

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual # > 7	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover equal
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/28/04

Wetland Number: W-58

Photo Numbers: Transect 58.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
☐ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
☐ Only Connected Above
☐ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☒ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ >50% urbanized
☐ 25-50% urbanized
☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
☐ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☒ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☐ No Overbank Flooding

pH:

- ☐ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
☐ Moderate Intensity (i.e. forestry)
☒ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☒ Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☒ High Gradient >2%
☐ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☒ Unrestricted Outflow
☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☐ Well Developed 15-45 cm
☐ Poorly Developed <15 cm
☒ Absent

Inlet/Outlet Class:

- ☒ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☐ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☐ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☐ Horizontal Flow
☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☒ Not Available

Evidence of Sedimentation:

- ☒ No Evidence Observed
☐ Sediment Observed on Wetland Substrate
☐ Fluvaqueut Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☐ Seeps Observed
☐ Perennial Spring
☒ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
☐ Hemie
☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☒ Sandy
☐ Silty
☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☒ Forested - Evergreen - Needle-leaved
☐ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
☐ 5
☒ 4
☐ 3
☐ 2
☐ 1

Evenness of Distribution

- ☐ Even Distribution
☐ Moderately Even Distribution
☒ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☒ Medium Density (40-60%)
☐ High Density (60-80%)
☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☐ Moderate (broken irregular rings)
☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|-----------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input checked="" type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☒ Medium 3-4 plots sampled
☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (5-25% cover)
☐ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☒ Continuous Cover
☐ Small Scattered Patches
☐ 1 or More Large Patches; Parts of Site Open
☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
☐ Moderately Abundant (25-50% of surface)
☒ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☒ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
☐ Moderately Convoluted (index 1.25-1.50)
☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
☐ One or Few
☒ Absent

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/28/04

Wetland Number: W-59

Photo Numbers: Transect 59.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES																
Condition	Percent/Acreage		Rhododendron	Bowbay	OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H		
		Depressional																	
	100	Slope HIGH GRADIENT Flat																	
		Extensive Peatland																	
		Lacustrine Fringe																	
		Riverine																	
Type	Percent/Acreage																		
Forested Wetland																			
Evergreen																			
Needle-leaved	40																		
Deciduous																			
Broad-leaved	40																		
Needle-leaved																			
Scrub Shrub																			
Evergreen																			
Broad-leaved	10																		
Needle-leaved																			
Deciduous																			
Broad-leaved																			
Needle-leaved																			
Emergent Wetland																			
Persistent																			
Non-persistent																			
Aquatic Bed																			
Total																			
Comments:																			
SOIL TYPES																			
Histosol																			
• Fibric			<input type="checkbox"/>																
• Hemic			<input checked="" type="checkbox"/>																
• Sapric			<input type="checkbox"/>																
Mineral Hydric Soil																			
• Gravelly			<input checked="" type="checkbox"/>																
• Sandy			<input checked="" type="checkbox"/>																
• Silty			<input type="checkbox"/>																
• Clayey			<input type="checkbox"/>																
GEOLOGY																			
Surficial: Till																			
Bedrock: Shale and Sandstone																			
OW	Obligate Wetland	COM	Common																
FW	Facultative Wetland	OCC	Occasional																
F	Facultative	C	Canopy																
FU	Facultative Upland	S	Sapling																
OU	Obligate Upland	TS	Tall Shrub																
DOM	Dominant	LS	Low Shrub																
		H	Herb																
PRE-EMPTIVE STATUS																			
Public ownership		Documented habitat for state or federal listed species																	
Wildlife management area		Regionally scarce wetland category																	
Fisheries management area		Historic/archaeologic area																	
Designated State or Federal protected wetland																			

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
- ☐ Medium (10-100 acres)
- ☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
- ☐ Only Connected Above
- ☐ Only Connected Below
- ☐ Other Wetlands Nearby but not Connected
- ☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
- ☐ Natural; Sporadic Frequency
- ☐ Human-caused; Predictable
- ☐ Human-caused; Sporadic
- ☐ Rare Event
- ☐ No Evidence

Regional Scarcity:

- ☐ Not Scarce (>5% of total wetland area of region)
- ☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
- ☐ 25-50% urbanized
- ☐ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
- ☐ Low Fluctuation
- ☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
- ☐ Return Interval 2-5 yrs.
- ☐ Return Interval 1-2 yrs.
- ☐ No Overbank Flooding

pH:

- ☐ Acid <5.5
- ☐ Circumneutral 5.5-7.4
- ☐ Alkaline >7.4
- ☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
- ☐ High Permeability Stratified Deposits
- ☐ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
- ☐ Moderate Intensity (i.e. forestry)
- ☐ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☐ Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
- ☐ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
- ☐ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
- ☐ Unrestricted Outflow
- ☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
- ☐ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
- ☐ Well Developed 15-45 cm
- ☐ Poorly Developed <15 cm
- ☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
- ☐ No Inlet/Intermittent Outlet
- ☐ No Inlet/Perennial Outlet
- ☐ Intermittent Inlet/No Outlet
- ☐ Intermittent Inlet/Intermittent Outlet
- ☐ Intermittent Outlet/Perennial Outlet
- ☐ Perennial Inlet/No Outlet
- ☐ Perennial Inlet/Intermittent Outlet
- ☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
- ☐ Discharge
- ☐ Horizontal Flow
- ☐ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
- ☐ Piez. Surface below Substrate elev.
- ☐ Not Available

Evidence of Sedimentation:

- ☐ No Evidence Observed
- ☐ Sediment Observed on Wetland Substrate
- ☐ Fluviatile Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
- ☐ Seeps Observed
- ☐ Perennial Spring
- ☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
- ☐ Hemic
- ☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
- ☐ Sandy
- ☐ Silty
- ☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
- ☐ Forested - Deciduous - Broad-leaved
- ☐ Forested - Deciduous - Needle-leaved
- ☐ Scrub Shrub - Evergreen - Broad-leaved
- ☐ Scrub Shrub - Evergreen - Needle-leaved
- ☐ Scrub Shrub - Deciduous - Broad-leaved
- ☐ Scrub Shrub - Deciduous - Needle-leaved
- ☐ Emergent - Persistent
- ☐ Emergent - Non-persistent
- ☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
- ☐ 5
- ☐ 4
- ☐ 3
- ☐ 2
- ☐ 1

Evenness of Distribution

- ☐ Even Distribution
- ☐ Moderately Even Distribution
- ☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
- ☐ Low Density (20-40%)
- ☐ Medium Density (40-60%)
- ☐ High Density (60-80%)
- ☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
- ☐ Moderate (broken irregular rings)
- ☐ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|-----------------|
| <input type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
- ☐ Medium 3-4 plots sampled
- ☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (5-25% cover)
- ☐ Medium (25-50% cover)
- ☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
- ☐ Small Scattered Patches
- ☐ 1 or More Large Patches; Parts of Site Open
- ☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
- ☐ Moderately Abundant (25-50% of surface)
- ☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
- ☐ >75% Scattered or Peripheral
- ☐ <25% Scattered or Peripheral
- ☐ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
- ☐ Moderately Convoluted (index 1.25-1.50)
- ☐ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
- ☐ One or Few
- ☐ Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/29/04
Wetland Number: W-60
Photo Numbers: Transect 60.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemic	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	<input type="checkbox"/> 1 submergents:
<input type="checkbox"/> 5	<input type="checkbox"/> 2 floating:
<input type="checkbox"/> 4	<input type="checkbox"/> 3 moss-lichen:
<input type="checkbox"/> 3	<input type="checkbox"/> 4 short herb:
<input type="checkbox"/> 2	<input type="checkbox"/> 5 tall herb:
<input type="checkbox"/> 1	<input type="checkbox"/> 6 dwarf shrub:
	<input type="checkbox"/> 7 short shrub:
	<input type="checkbox"/> 8 tall shrub:
	<input type="checkbox"/> 9 sapling:
	<input type="checkbox"/> 10 tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord

Date: 10/28/04

Wetland Number: W-61

Photo Numbers: Transect 61.1

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input checked="" type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input checked="" type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input checked="" type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input checked="" type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input checked="" type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input checked="" type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input checked="" type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input checked="" type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input checked="" type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input checked="" type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input checked="" type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input checked="" type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input checked="" type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input checked="" type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemie	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input checked="" type="checkbox"/> Silty	
<input checked="" type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input checked="" type="checkbox"/> Moderately Even Distribution
<input checked="" type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input checked="" type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input checked="" type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input checked="" type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input checked="" type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input checked="" type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input checked="" type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input checked="" type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input checked="" type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/29/04
Wetland Number: W-62
Photo Numbers: Transect 62.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land User:	
<input type="checkbox"/> > 50% urbanized	
<input type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluviuquent Soils	
Evidence of Seeps and Springs:	
<input type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemie	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	


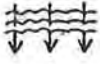

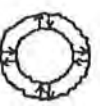

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 25-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord Date: 10/29/04
Wetland Number: W-63
Photo Numbers: Transect 63.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION OF WETLAND

SURFACE WATER FLOW VECTORS		PLANT SPECIES																																																																														
Condition	Percent/Acreage																																																																															
	_____ Depressional	<p>* For plant species see delineation data sheet</p> <table border="1"> <tr> <th>OW</th><th>FW</th><th>F</th><th>FU</th><th>OU</th><th>DOM</th><th>COM</th><th>OCC</th><th>C</th><th>S</th><th>TS</th><th>LS</th><th>H</th> </tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>														OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OW	FW															F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H																																																						
<input type="checkbox"/>	<input type="checkbox"/>															<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																						
<input type="checkbox"/>	<input type="checkbox"/>															<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																						
<input type="checkbox"/>	<input type="checkbox"/>															<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																				
	<u>40</u> mch Gradient Slope <u>30</u> low																																																																															
	_____ Extensive Peatland																																																																															
	_____ Lacustrine Fringe																																																																															
	<u>30</u> Riverine																																																																															
VEGETATION TYPES																																																																																
Type	Percent/Acreage																																																																															
Forested Wetland		SOIL TYPES																																																																														
Evergreen		Histosol																																																																														
Needle-leaved	<u>80</u>	• Fibric <input type="checkbox"/>																																																																														
Deciduous		• Hemic <input type="checkbox"/>																																																																														
Broad-leaved	<u>20</u>	• Sapric <input type="checkbox"/>																																																																														
Needle-leaved																																																																																
Scrub Shrub		Mineral																																																																														
Evergreen		Hydric Soil																																																																														
Broad-leaved		• Gravelly <input type="checkbox"/>																																																																														
Needle-leaved		• Sandy <input checked="" type="checkbox"/>																																																																														
Deciduous		• Silty <input type="checkbox"/>																																																																														
Broad-leaved		• Clayey <input type="checkbox"/>																																																																														
Needle-leaved																																																																																
Emergent Wetland		GEOLOGY																																																																														
Persistent		Surficial: T, 11																																																																														
Non-persistent																																																																																
Aquatic Bed		Bedrock: Shale and sandstone																																																																														
Total																																																																																
Comments: _____		PRE-EMPTIVE STATUS																																																																														
_____		Public ownership _____ Documented habitat for																																																																														
_____		Wildlife management _____ state or federal listed																																																																														
_____		area _____ species																																																																														
_____		Fisheries management _____ Regionally scarce																																																																														
_____		area _____ wetland category																																																																														
_____		Designated State or _____ Historic/archaeologic																																																																														
_____		Federal protected wetland _____ area																																																																														

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/> Small (<10 acres)	
<input type="checkbox"/> Medium (10-100 acres)	
<input type="checkbox"/> Large (>100 acres)	
Wetland Juxtaposition:	
<input checked="" type="checkbox"/> Connected Upstream and Downstream	
<input type="checkbox"/> Only Connected Above	
<input type="checkbox"/> Only Connected Below	
<input type="checkbox"/> Other Wetlands Nearby but not Connected	
<input type="checkbox"/> Wetland Isolated	
Fire Occurrence and Frequency:	
<input type="checkbox"/> Natural; Predictable Frequency	
<input type="checkbox"/> Natural; Sporadic Frequency	
<input type="checkbox"/> Human-caused; Predictable	
<input type="checkbox"/> Human-caused; Sporadic	
<input type="checkbox"/> Rare Event	
<input checked="" type="checkbox"/> No Evidence	
Regional Scarcity:	
<input type="checkbox"/> Not Scarce (>5% of total wetland area of region)	
<input type="checkbox"/> Scarce (<5% of total wetland area of region)	
Watershed Land Use:	
<input type="checkbox"/> > 50% urbanized	
<input checked="" type="checkbox"/> 25-50% urbanized	
<input type="checkbox"/> 0-25% urbanized	
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/> High Fluctuation	
<input checked="" type="checkbox"/> Low Fluctuation	
<input type="checkbox"/> Never Inundated	
Frequency of Overbank Flooding:	
<input type="checkbox"/> Return Interval > 5 yrs.	
<input type="checkbox"/> Return Interval 2-5 yrs.	
<input type="checkbox"/> Return Interval 1-2 yrs.	
<input type="checkbox"/> No Overbank Flooding	
pH:	
<input type="checkbox"/> Acid <5.5	
<input type="checkbox"/> Circumneutral 5.5-7.4	
<input type="checkbox"/> Alkaline >7.4	
<input type="checkbox"/> No Water	
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/> Low Permeability Stratified Deposits	
<input type="checkbox"/> High Permeability Stratified Deposits	
<input checked="" type="checkbox"/> Glacial Till	
Wetland Land Use:	
<input type="checkbox"/> High Intensity (i.e. agriculture)	
<input type="checkbox"/> Moderate Intensity (i.e. forestry)	
<input checked="" type="checkbox"/> Low Intensity (i.e. open space)	
Wetland Water Regime:	
<input checked="" type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded	
<input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	
Basin Topographic Gradient:	
<input checked="" type="checkbox"/> High Gradient >2%	
<input type="checkbox"/> Low Gradient <2%	
Degree of Outlet Restriction:	
<input checked="" type="checkbox"/> Restricted Outflow	
<input type="checkbox"/> Unrestricted Outflow	
<input type="checkbox"/> No Outflow	
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/> High >10%	
<input type="checkbox"/> Low <10%	

Microrelief of Wetland Surface:	
<input type="checkbox"/> Pronounced >45 cm	
<input type="checkbox"/> Well Developed 15-45 cm	
<input type="checkbox"/> Poorly Developed <15 cm	
<input checked="" type="checkbox"/> Absent	
Inlet/Outlet Class:	
<input type="checkbox"/> No Inlet/No Outlet	
<input type="checkbox"/> No Inlet/Intermittent Outlet	
<input type="checkbox"/> No Inlet/Perennial Outlet	
<input type="checkbox"/> Intermittent Inlet/No Outlet	
<input type="checkbox"/> Intermittent Inlet/Intermittent Outlet	
<input checked="" type="checkbox"/> Intermittent Outlet/Perennial Outlet	
<input type="checkbox"/> Perennial Inlet/No Outlet	
<input type="checkbox"/> Perennial Inlet/Intermittent Outlet	
<input type="checkbox"/> Perennial Inlet/Perennial Outlet	
Nested Piezometer Data:	
<input type="checkbox"/> Recharge	
<input type="checkbox"/> Discharge	
<input type="checkbox"/> Horizontal Flow	
<input checked="" type="checkbox"/> Not Available	
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/> Piez. Surface Above or at Substrate elev.	
<input type="checkbox"/> Piez. Surface below Substrate elev.	
<input checked="" type="checkbox"/> Not Available	
Evidence of Sedimentation:	
<input checked="" type="checkbox"/> No Evidence Observed	
<input type="checkbox"/> Sediment Observed on Wetland Substrate	
<input type="checkbox"/> Fluvaquent Soils	
Evidence of Seeps and Springs:	
<input checked="" type="checkbox"/> No Seeps or Springs	
<input type="checkbox"/> Seeps Observed	
<input type="checkbox"/> Perennial Spring	
<input type="checkbox"/> Intermittent Spring	

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/> Fibric	
<input type="checkbox"/> Hemie	
<input type="checkbox"/> Sapric	
Mineral Hydric Soil:	
<input type="checkbox"/> Gravelly	
<input checked="" type="checkbox"/> Sandy	
<input type="checkbox"/> Silty	
<input type="checkbox"/> Clayey	

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved	
<input type="checkbox"/> Forested - Deciduous - Broad-leaved	
<input type="checkbox"/> Forested - Deciduous - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved	
<input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved	
<input type="checkbox"/> Emergent - Persistent	
<input type="checkbox"/> Emergent - Non-persistent	
<input type="checkbox"/> Aquatic Bed	

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input checked="" type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input checked="" type="checkbox"/> High (small groupings, diverse and interspersed)	
<input type="checkbox"/> Moderate (broken irregular rings)	
<input type="checkbox"/> Low (large patches, concentric rings)	
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input checked="" type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input checked="" type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input checked="" type="checkbox"/> Continuous Cover	
<input type="checkbox"/> Small Scattered Patches	
<input type="checkbox"/> 1 or More Large Patches; Parts of Site Open	
<input type="checkbox"/> Solitary, Scattered Stems	
Dead Woody Material:	
<input type="checkbox"/> Abundant (>50 of wetland surface)	
<input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface)	
<input type="checkbox"/> Low Abundance (0-25% of surface)	
Interspersion of Cover and Open Water:	
<input type="checkbox"/> 26-75% Scattered or Peripheral	
<input type="checkbox"/> >75% Scattered or Peripheral	
<input type="checkbox"/> <25% Scattered or Peripheral	
<input checked="" type="checkbox"/> 100% Cover or Open Water	
Stream Sinuosity:	
<input type="checkbox"/> Highly Convoluted (index 1.50 or >)	
<input checked="" type="checkbox"/> Moderately Convoluted (index 1.25-1.50)	
<input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Presence of Islands:	
<input checked="" type="checkbox"/> Several to Many	
<input type="checkbox"/> One or Few	
<input type="checkbox"/> Absent	

WETLAND INVENTORY DATA

Project Number: Concord

Date:

10/28/04

Wetland Number: W-69

Photo Numbers: Transect 64.1

USGS Quadrangle:

Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input checked="" type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input checked="" type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input checked="" type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input checked="" type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input checked="" type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input checked="" type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submerged:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submerged:	<input checked="" type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submerged:																										
<input checked="" type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input checked="" type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input checked="" type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input checked="" type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input checked="" type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input checked="" type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input checked="" type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Ineg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input checked="" type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input checked="" type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input checked="" type="checkbox"/> One or Few <input type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input checked="" type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 12/2/04
Wetland Number: W-70
Aerial Photo Numbers: Transect 70.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☒ Small (<10 acres)
- ☐ Medium (10-100 acres)
- ☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
- ☐ Only Connected Above
- ☒ Only Connected Below
- ☐ Other Wetlands Nearby but not Connected
- ☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
- ☐ Natural; Sporadic Frequency
- ☐ Human-caused; Predictable
- ☐ Human-caused; Sporadic
- ☐ Rare Event
- ☒ No Evidence

Regional Scarcity:

- ☒ Not Scarce (>5% of total wetland area of region)
- ☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
- ☐ 25-50% urbanized
- ☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
- ☒ Low Fluctuation
- ☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
- ☐ Return Interval 2-5 yrs.
- ☐ Return Interval 1-2 yrs.
- ☒ No Overbank Flooding

pH:

- ☒ Acid <5.5
- ☐ Circumneutral 5.5-7.4
- ☐ Alkaline >7.4
- ☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
- ☐ High Permeability Stratified Deposits
- ☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
- ☐ Moderate Intensity (i.e. forestry)
- ☒ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☐ Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
- ☒ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
- ☒ Low Gradient <2%

Degree of Outlet Restriction:

- ☒ Restricted Outflow
- ☐ Unrestricted Outflow
- ☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
- ☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
- ☐ Well Developed 15-45 cm
- ☐ Poorly Developed <15 cm
- ☒ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
- ☒ No Inlet/Intermittent Outlet
- ☐ No Inlet/Perennial Outlet
- ☐ Intermittent Inlet/No Outlet
- ☐ Intermittent Inlet/Intermittent Outlet
- ☐ Intermittent Outlet/Perennial Outlet
- ☐ Perennial Inlet/No Outlet
- ☐ Perennial Inlet/Intermittent Outlet
- ☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
- ☐ Discharge
- ☐ Horizontal Flow
- ☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
- ☐ Piez. Surface below Substrate elev.
- ☒ Not Available

Evidence of Sedimentation:

- ☒ No Evidence Observed
- ☐ Sediment Observed on Wetland Substrate
- ☐ Fluvaquent Soils

Evidence of Seeps and Springs:

- ☒ No Seeps or Springs
- ☐ Seeps Observed
- ☐ Perennial Spring
- ☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
- ☐ Hemic
- ☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
- ☒ Sandy
- ☐ Silty
- ☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☒ Forested - Evergreen - Needle-leaved
- ☐ Forested - Deciduous - Broad-leaved
- ☐ Forested - Deciduous - Needle-leaved
- ☐ Scrub Shrub - Evergreen - Broad-leaved
- ☐ Scrub Shrub - Evergreen - Needle-leaved
- ☐ Scrub Shrub - Deciduous - Broad-leaved
- ☐ Scrub Shrub - Deciduous - Needle-leaved
- ☐ Emergent - Persistent
- ☐ Emergent - Non-persistent
- ☐ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
- ☐ 5
- ☐ 4
- ☒ 3
- ☐ 2
- ☐ 1

Evenness of Distribution

- ☐ Even Distribution
- ☐ Moderately Even Distribution
- ☒ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
- ☐ Low Density (20-40%)
- ☐ Medium Density (40-60%)
- ☒ High Density (60-80%)
- ☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☒ High (small groupings, diverse and interspersed)
- ☐ Moderate (broken irregular rings)
- ☐ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | Number of Layers | % Cover |
|--|--|
| <input type="checkbox"/> 6 or > (actual #) | <input checked="" type="checkbox"/> 1 submergents: |
| <input type="checkbox"/> 5 | <input type="checkbox"/> 2 floating: |
| <input type="checkbox"/> 4 | <input type="checkbox"/> 3 moss-lichen: |
| <input checked="" type="checkbox"/> 3 | <input type="checkbox"/> 4 short herb: |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 5 tall herb: |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 6 dwarf shrub: |
| | <input type="checkbox"/> 7 short shrub: |
| | <input type="checkbox"/> 8 tall shrub: |
| | <input checked="" type="checkbox"/> 9 sapling: |
| | <input type="checkbox"/> 10 tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
- ☒ Medium 3-4 plots sampled
- ☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (<25% cover)
- ☒ Medium (25-50% cover)
- ☐ High (>50% cover)

Cover Distribution:

- ☒ Continuous Cover
- ☐ Small Scattered Patches
- ☐ 1 or More Large Patches; Parts of Site Open
- ☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
- ☒ Moderately Abundant (25-50% of surface)
- ☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 25-75% Scattered or Peripheral
- ☐ >75% Scattered or Peripheral
- ☐ <25% Scattered or Peripheral
- ☒ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
- ☐ Moderately Convoluted (index 1.25-1.50)
- ☒ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
- ☐ One or Few
- ☒ Absent

WETLAND INVENTORY DATA

Project Number: Concord Date: 12/2/04
Wetland Number: W-71
Aerial Photo Numbers: Transect 71.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS						PLANT SPECIES																
Condition		Percent/Acreage				* For plant species see delineation data sheet.	OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H			
		_____		Depressional																		
		<u>100</u>		Slope Low Gradient																		
		_____		Flat																		
		_____		Extensive Peatland																		
		_____		Lacustrine Fringe																		
		_____		Riverine																		
Type	Percent/Acreage																					
Forested Wetland																						
Evergreen																						
Needle-leaved	<u>20</u>																					
Deciduous																						
Broad-leaved																						
Needle-leaved																						
Scrub Shrub																						
Evergreen																						
Broad-leaved	<u>30</u>																					
Needle-leaved																						
Deciduous																						
Broad-leaved	<u>50</u>																					
Needle-leaved																						
			SOIL TYPES																			
			Histosol																			
			• Fibric <input checked="" type="checkbox"/>																			
			• Hemic <input type="checkbox"/>																			
			• Sapric <input type="checkbox"/>																			
			Mineral																			
			Hydric Soil																			
			• Gravelly <input type="checkbox"/>																			
			• Sandy <input checked="" type="checkbox"/>																			
			• Silty <input type="checkbox"/>																			
			• Clayey <input type="checkbox"/>																			
			GEOLOGY																			
			Surficial: T-LL																			
			Bedrock: Shale and Sandstone																			
OW	Obligate Wetland	COM	Common																			
FW	Facultative Wetland	OCC	Occasional																			
F	Facultative	C	Canopy																			
FU	Facultative Upland	S	Sapling																			
OU	Obligate Upland	TS	Tall Shrub																			
DOM	Dominant	LS	Low Shrub																			
		H	Herb																			
PRE-EMPTIVE STATUS																						
Public ownership	Documented habitat for state or federal listed species																					
Wildlife management area	Regionally scarce wetland category																					
Fisheries management area	Historic/archaeologic area																					
Designated State or Federal protected wetland																						

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input checked="" type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input checked="" type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input checked="" type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input checked="" type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input checked="" type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input checked="" type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvaquent Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input checked="" type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input checked="" type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input checked="" type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: <input type="checkbox"/> Low (<25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: <input type="checkbox"/> Acid <5.5 <input checked="" type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input checked="" type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input checked="" type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input checked="" type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input checked="" type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input checked="" type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input checked="" type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input checked="" type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input checked="" type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WETLAND INVENTORY DATA

Project Number: Concord Date: 12/2/04
Wetland Number: W-72
Aerial Photo Numbers: Transect 72.1
USGS Quadrangle: _____
Field Investigators: William Kenny Associates LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WETLAND INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☒ Small (<10 acres)
- ☐ Medium (10-100 acres)
- ☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
- ☐ Only Connected Above
- ☐ Only Connected Below
- ☐ Other Wetlands Nearby but not Connected
- ☒ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
- ☐ Natural; Sporadic Frequency
- ☐ Human-caused; Predictable
- ☐ Human-caused; Sporadic
- ☐ Rare Event
- ☒ No Evidence

Regional Scarcity:

- ☒ Not Scarce (>5% of total wetland area of region)
- ☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
- ☐ 25-50% urbanized
- ☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☐ High Fluctuation
- ☒ Low Fluctuation
- ☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
- ☐ Return Interval 2-5 yrs.
- ☐ Return Interval 1-2 yrs.
- ☒ No Overbank Flooding

pH:

- ☒ Acid <5.5
- ☐ Circumneutral 5.5-7.4
- ☐ Alkaline >7.4
- ☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
- ☐ High Permeability Stratified Deposits
- ☒ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
- ☐ Moderate Intensity (i.e. forestry)
- ☒ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☐ Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
- ☒ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
- ☒ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
- ☒ Unrestricted Outflow
- ☐ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
- ☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
- ☒ Well Developed 15-45 cm
- ☐ Poorly Developed <15 cm
- ☐ Absent

Inlet/Outlet Class:

- ☒ No Inlet/No Outlet
- ☐ No Inlet/Intermittent Outlet
- ☐ No Inlet/Perennial Outlet
- ☐ Intermittent Inlet/No Outlet
- ☐ Intermittent Inlet/Intermittent Outlet
- ☐ Intermittent Outlet/Perennial Outlet
- ☐ Perennial Inlet/No Outlet
- ☐ Perennial Inlet/Intermittent Outlet
- ☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
- ☐ Discharge
- ☐ Horizontal Flow
- ☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
- ☐ Piez. Surface below Substrate elev.
- ☐ Not Available

Evidence of Sedimentation:

- ☒ No Evidence Observed
- ☐ Sediment Observed on Wetland Substrate
- ☐ Fluviogent Soils

Evidence of Seeps and Springs:

- ☒ No Seeps or Springs
- ☐ Seeps Observed
- ☐ Perennial Spring
- ☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
- ☐ Hemic
- ☐ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
- ☐ Sandy
- ☒ Silty
- ☐ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
- ☐ Forested - Deciduous - Broad-leaved
- ☐ Forested - Deciduous - Needle-leaved
- ☐ Scrub Shrub - Evergreen - Broad-leaved
- ☐ Scrub Shrub - Evergreen - Needle-leaved
- ☒ Scrub Shrub - Deciduous - Broad-leaved
- ☐ Scrub Shrub - Deciduous - Needle-leaved
- ☐ Emergent - Persistent
- ☐ Emergent - Non-persistent
- ☐ Aquatic Bed

Number of Types & Relative Proportions:

- | | |
|---------------------------------------|---|
| Number of Types | Evenness of Distribution |
| <input type="checkbox"/> Actual # | <input checked="" type="checkbox"/> Even Distribution |
| <input type="checkbox"/> 5 | <input type="checkbox"/> Moderately Even Distribution |
| <input checked="" type="checkbox"/> 4 | <input type="checkbox"/> Highly Uneven Distribution |
| <input type="checkbox"/> 3 | |
| <input type="checkbox"/> 2 | |
| <input type="checkbox"/> 1 | |

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
- ☐ Low Density (20-40%)
- ☒ Medium Density (40-60%)
- ☐ High Density (60-80%)
- ☐ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
- ☐ Moderate (broken irregular rings)
- ☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

- | | |
|---|-----------------|
| Number of Layers | % Cover |
| <input checked="" type="checkbox"/> 6 or > (actual #) | 1. submergents: |
| <input type="checkbox"/> 5 | 2. floating: |
| <input type="checkbox"/> 4 | 3. moss-lichen: |
| <input type="checkbox"/> 3 | 4. short herb: |
| <input type="checkbox"/> 2 | 5. tall herb: |
| <input type="checkbox"/> 1 | 6. dwarf shrub: |
| | 7. short shrub: |
| | 8. tall shrub: |
| | 9. sapling: |
| | 10. tree: |

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
- ☐ Medium 3-4 plots sampled
- ☒ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (5-25% cover)
- ☐ Medium (25-50% cover)
- ☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
- ☐ Small Scattered Patches
- ☒ 1 or More Large Patches; Parts of Site Open
- ☐ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50 of wetland surface)
- ☒ Moderately Abundant (25-50% of surface)
- ☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
- ☒ >75% Scattered or Peripheral
- ☐ <25% Scattered or Peripheral
- ☐ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
- ☐ Moderately Convoluted (index 1.25-1.50)
- ☒ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

- ☐ Several to Many
- ☐ One or Few
- ☒ Absent

Reach Level Assessment

RCH

SURVEY REACH ID: <u>KC-6M</u>		WTRSHD/SUBSHD: _____	DATE: <u>11/13/04</u>	ASSESSED BY: <u>MBR</u>
START TIME: <u>1:54 AM/PM</u>	LMK: _____	END TIME: _____ AM/PM	LMK: _____	GPS ID: _____
LAT _____ ° _____ ' _____ "	LONG _____ ° _____ ' _____ "	LAT _____ ° _____ ' _____ "	LONG _____ ° _____ ' _____ "	
DESCRIPTION: _____		DESCRIPTION: _____		

RAIN IN LAST 24 HOURS <input type="checkbox"/> Heavy rain <input checked="" type="checkbox"/> Steady rain <input type="checkbox"/> Intermittent <input type="checkbox"/> None <input type="checkbox"/> Trace		PRESENT CONDITIONS <input type="checkbox"/> Heavy rain <input type="checkbox"/> Steady rain <input type="checkbox"/> Intermittent <input type="checkbox"/> Clear <input type="checkbox"/> Trace <input type="checkbox"/> Overcast <input type="checkbox"/> Partly cloudy				
SURROUNDING LAND USE: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Urban/Residential <input type="checkbox"/> Suburban/Res <input checked="" type="checkbox"/> Forested <input type="checkbox"/> Institutional <input checked="" type="checkbox"/> Golf course <input type="checkbox"/> Park <input type="checkbox"/> Crop <input type="checkbox"/> Pasture <input type="checkbox"/> Other:						
AVERAGE CONDITIONS (check applicable) BASE FLOW AS % <input checked="" type="checkbox"/> 0-25% <input type="checkbox"/> 50%-75% CHANNEL WIDTH <input type="checkbox"/> 25-50 % <input checked="" type="checkbox"/> 75-100%		REACH SKETCH AND SITE IMPACT TRACKING Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB, SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow.				
DOMINANT SUBSTRATE <input checked="" type="checkbox"/> Silt/clay (fine or slick) <input type="checkbox"/> Cobble (2.5 -10") <input type="checkbox"/> Sand (gritty) <input type="checkbox"/> Boulder (>10") <input type="checkbox"/> Gravel (0.1-2.5") <input type="checkbox"/> Bed rock						
WATER CLARITY <input type="checkbox"/> Clear <input type="checkbox"/> Turbid (suspended matter) <input checked="" type="checkbox"/> Stained (clear, naturally colored) <input type="checkbox"/> Opaque (milky) <input type="checkbox"/> Other (chemicals, dyes)						
AQUATIC PLANTS Attached: <input type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots Floating: <input type="checkbox"/> none <input checked="" type="checkbox"/> some <input type="checkbox"/> lots						
WILDLIFE IN OR AROUND STREAM (Evidence of) <input type="checkbox"/> Fish <input type="checkbox"/> Beaver <input checked="" type="checkbox"/> Deer <input checked="" type="checkbox"/> Snails <input type="checkbox"/> Other:						
STREAM SHADING (water surface) <input type="checkbox"/> Mostly shaded (≥75% coverage) <input type="checkbox"/> Halfway (≥50%) <input type="checkbox"/> Partially shaded (≥25%) <input checked="" type="checkbox"/> Unshaded (< 25%)						
CHANNEL DYNAMICS <input type="checkbox"/> Downcutting <input type="checkbox"/> Bed scour <input type="checkbox"/> Widening <input type="checkbox"/> Bank failure <input type="checkbox"/> Headcutting <input type="checkbox"/> Bank scour <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Aggrading <input type="checkbox"/> Slope failure <input type="checkbox"/> Sed. deposition <input type="checkbox"/> Channelized						
CHANNEL DIMENSIONS (FACING DOWNSTREAM) Height: LT bank <u>10</u> (ft) RT bank <u>10</u> (ft) Width: Bottom <u>30</u> (ft) Top <u>35</u> (ft)						
REACH ACCESSIBILITY <table border="1"> <tr> <td> Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails. </td> <td> Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream. </td> <td> Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required. </td> </tr> </table>				Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.			Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.		
(5) 4 3 2 1						

NOTES: (biggest problem you see in survey reach)

OVERALL STREAM CONDITION																				
	Optimal					Suboptimal					Marginal					Poor				
IN-STREAM HABITAT <i>(May modify criteria based on appropriate habitat regime)</i>	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).					40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).					20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.					Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
VEGETATIVE PROTECTION <i>(score each bank, determine sides by facing downstream)</i>	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.					70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.					50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.					Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.				
	Left Bank	10	9			8	7	6			5	4	3			2	1	0		
	Right Bank	10	9			8	7	6			5	4	3			2	1	0		
BANK EROSION <i>(facing downstream)</i>	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.					Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.					Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure					Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.				
	Left Bank	10	9			8	7	6			5	4	3			2	1	0		
	Right Bank	10	9			8	7	6			5	4	3			2	1	0		
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.					High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.					High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.					High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

OVERALL BUFFER AND FLOODPLAIN CONDITION

	Optimal					Suboptimal					Marginal					Poor				
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.					Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.					Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.					Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.				
	Left Bank	10	9			8	7	6			5	4	3			2	1	0		
	Right Bank	10	9			8	7	6			5	4	3			2	1	0		
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest					Predominant floodplain vegetation type is young forest					Predominant floodplain vegetation type is shrub or old field					Predominant floodplain vegetation type is turf or crop land				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water					Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water					Either all wetland or all non-wetland habitat, evidence of standing/ponded water					Either all wetland or all non-wetland habitat, no evidence of standing/ponded water				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures					Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function					Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function					Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

Sub Total In-stream: 49 /80 + Buffer/Floodplain: 46 /80 = Total Survey Reach 94 /160

Reach Level Assessment

RCH

SURVEY REACH ID: _____		WTRSHD/SUBSHD: <u>KC on 6C</u>		DATE: ____/____/____		ASSESSED BY: _____	
START TIME: ____:____ AM/PM LMK: _____		END TIME: ____:____ AM/PM LMK: _____		GPS ID: _____			
LAT ____° ____' ____" LONG ____° ____' ____"		LAT ____° ____' ____" LONG ____° ____' ____"					
DESCRIPTION:		DESCRIPTION:					

RAIN IN LAST 24 HOURS <input checked="" type="checkbox"/> Heavy rain <input type="checkbox"/> Steady rain <input type="checkbox"/> Intermittent <input type="checkbox"/> None <input type="checkbox"/> Trace		PRESENT CONDITIONS <input type="checkbox"/> Heavy rain <input type="checkbox"/> Steady rain <input type="checkbox"/> Intermittent <input type="checkbox"/> Clear <input type="checkbox"/> Trace <input type="checkbox"/> Overcast <input type="checkbox"/> Partly cloudy	
SURROUNDING LAND USE: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Urban/Residential <input type="checkbox"/> Suburban/Res <input type="checkbox"/> Forested <input type="checkbox"/> Institutional <input type="checkbox"/> Golf course <input type="checkbox"/> Park <input type="checkbox"/> Crop <input type="checkbox"/> Pasture <input type="checkbox"/> Other:			

AVERAGE CONDITIONS (check applicable)		REACH SKETCH AND SITE IMPACT TRACKING				
BASE FLOW AS % <input type="checkbox"/> 0-25% <input type="checkbox"/> 50%-75% CHANNEL WIDTH <input type="checkbox"/> 25-50 % <input type="checkbox"/> 75-100%		<p>Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB, SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow</p>				
DOMINANT SUBSTRATE <input checked="" type="checkbox"/> Silt/clay (fine or slick) <input type="checkbox"/> Cobble (2.5 -10") <input type="checkbox"/> Sand (gritty) <input type="checkbox"/> Boulder (>10") <input type="checkbox"/> Gravel (0.1-2.5") <input type="checkbox"/> Bed rock						
WATER CLARITY <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid (suspended matter) <input type="checkbox"/> Stained (clear, naturally colored) <input type="checkbox"/> Opaque (milky) <input type="checkbox"/> Other (chemicals, dyes)						
AQUATIC PLANTS IN STREAM Attached: <input checked="" type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots Floating: <input checked="" type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots						
WILDLIFE IN OR AROUND STREAM (Evidence of) <input type="checkbox"/> Fish <input type="checkbox"/> Beaver <input type="checkbox"/> Deer <input type="checkbox"/> Snails <input type="checkbox"/> Other:						
STREAM SHADING (water surface) <input type="checkbox"/> Mostly shaded (≥75% coverage) <input type="checkbox"/> Halfway (≥50%) <input type="checkbox"/> Partially shaded (≥25%) <input checked="" type="checkbox"/> Unshaded (< 25%)						
CHANNEL DYNAMICS <input type="checkbox"/> Downcutting <input type="checkbox"/> Bed scour <input type="checkbox"/> Widening <input type="checkbox"/> Bank failure <input type="checkbox"/> Headcutting <input type="checkbox"/> Bank scour <input type="checkbox"/> Aggrading <input type="checkbox"/> Slope failure <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Sed. deposition <input type="checkbox"/> Channelized						
CHANNEL DIMENSIONS (FACING DOWNSTREAM) Height: LT bank <u>2</u> (ft) RT bank <u>2</u> (ft) Width: Bottom <u>25</u> (ft) Top <u>30</u> (ft)						
REACH ACCESSIBILITY <table border="1"> <tr> <td>Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.</td> <td>Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.</td> <td>Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.</td> </tr> </table>				Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.			Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.		
<div style="display: flex; justify-content: space-around;"> 5 4 <u>3</u> 2 1 </div>						

NOTES: (biggest problem you see in survey reach)

REPORTED TO AUTHORITIES ☐ YES ☐ NO

OVERALL STREAM CONDITION																				
	Optimal					Suboptimal					Marginal					Poor				
IN-STREAM HABITAT <i>(May modify criteria based on appropriate habitat regime)</i>	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).					40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).					20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.					Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
VEGETATIVE PROTECTION <i>(score each bank, determine sides by facing downstream)</i>	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.					70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.					50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.					Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.				
	Left Bank	10	9			8	7	6			5	4	3			2	1	0		
	Right Bank	10	9			8	7	6			5	4	3			2	1	0		
BANK EROSION <i>(facing downstream)</i>	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.					Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.					Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure					Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.				
	Left Bank	10	9			8	7	6			5	4	3			2	1	0		
	Right Bank	10	9			8	7	6			5	4	3			2	1	0		
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.					High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.					High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.					High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

OVERALL BUFFER AND FLOODPLAIN CONDITION

	Optimal					Suboptimal					Marginal					Poor				
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.					Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.					Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.					Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.				
	Left Bank	10	9			8	7	6			5	4	3			2	1	0		
	Right Bank	10	9			8	7	6			5	4	3			2	1	0		
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest					Predominant floodplain vegetation type is young forest					Predominant floodplain vegetation type is shrub or old field					Predominant floodplain vegetation type is turf or crop land				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water					Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water					Either all wetland or all non-wetland habitat, evidence of standing/ponded water					Either all wetland or all non-wetland habitat, no evidence of standing/ponded water				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures					Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function					Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function					Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

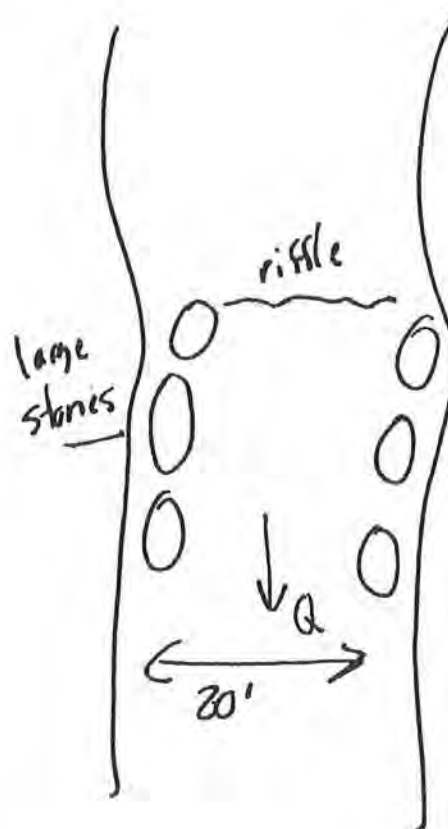
Sub Total In-stream: 46 /80 + Buffer/Floodplain: 26 /80 = Total Survey Reach 72 /160

Reach Level Assessment

RCH

SURVEY REACH ID: <u>KC-N</u>		WTRSHD/SUBSHD:		DATE: <u>11 / 3 / 04</u>		ASSESSED BY: <u>MBK</u>	
START TIME: <u>1 : 03</u> AM/PM <u>AM</u> LMK: _____		END TIME: _____ AM/PM LMK: _____		GPS ID: _____			
LAT _____ ° _____ ' _____ " LONG _____ ° _____ ' _____ "		LAT _____ ° _____ ' _____ " LONG _____ ° _____ ' _____ "					
DESCRIPTION:		DESCRIPTION:					

RAIN IN LAST 24 HOURS <input type="checkbox"/> Heavy rain <input checked="" type="checkbox"/> Steady rain <input type="checkbox"/> Intermittent <input type="checkbox"/> None <input type="checkbox"/> Intermittent <input type="checkbox"/> Trace		PRESENT CONDITIONS <input type="checkbox"/> Heavy rain <input type="checkbox"/> Steady rain <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Trace <input type="checkbox"/> Overcast <input type="checkbox"/> Partly cloudy				
SURROUNDING LAND USE: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Urban/Residential <input type="checkbox"/> Suburban/Res <input checked="" type="checkbox"/> Forested <input type="checkbox"/> Institutional <input type="checkbox"/> Golf course <input type="checkbox"/> Park <input type="checkbox"/> Crop <input type="checkbox"/> Pasture <input type="checkbox"/> Other:						
AVERAGE CONDITIONS (check applicable) BASE FLOW AS % <input checked="" type="checkbox"/> 0-25% <input type="checkbox"/> 50%-75% CHANNEL WIDTH <input type="checkbox"/> 25-50 % <input checked="" type="checkbox"/> 75-100%		REACH SKETCH AND SITE IMPACT TRACKING Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB, SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow.				
DOMINANT SUBSTRATE <input type="checkbox"/> Silt/clay (fine or slick) <input checked="" type="checkbox"/> Cobble (2.5 - 10") <input type="checkbox"/> Sand (gritty) <input type="checkbox"/> Boulder (>10") <input type="checkbox"/> Gravel (0.1-2.5") <input type="checkbox"/> Bed rock						
WATER CLARITY <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid (suspended matter) <input type="checkbox"/> Stained (clear, naturally colored) <input type="checkbox"/> Opaque (milky) <input type="checkbox"/> Other (chemicals, dyes)						
AQUATIC PLANTS IN STREAM Attached: <input checked="" type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots Floating: <input checked="" type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots						
WILDLIFE IN OR AROUND STREAM (Evidence of) <input type="checkbox"/> Fish <input type="checkbox"/> Beaver <input checked="" type="checkbox"/> Deer <input type="checkbox"/> Snails <input type="checkbox"/> Other:						
STREAM SHADING (water surface) <input checked="" type="checkbox"/> Mostly shaded (≥75% coverage) <input type="checkbox"/> Halfway (≥50%) <input type="checkbox"/> Partially shaded (≥25%) <input type="checkbox"/> Unshaded (< 25%)						
CHANNEL DYNAMICS <input checked="" type="checkbox"/> Downcutting <input type="checkbox"/> Bed scour <input type="checkbox"/> Widening <input type="checkbox"/> Bank failure <input type="checkbox"/> Headcutting <input checked="" type="checkbox"/> Bank scour <input type="checkbox"/> Aggrading <input type="checkbox"/> Slope failure <input type="checkbox"/> Sed. deposition <input type="checkbox"/> Channelized <input type="checkbox"/> Unknown						
CHANNEL DIMENSIONS (FACING DOWNSTREAM) Height: LT bank <u>5</u> (ft) RT bank <u>3</u> (ft) Width: Bottom <u>20</u> (ft) Top <u>25</u> (ft)						
REACH ACCESSIBILITY <table border="1"> <tr> <td> Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails. </td> <td> Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream. </td> <td> Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required. </td> </tr> </table>				Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.			Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.		
5 4 3 2 1						



close to road (northside is) but steep slope + forested

NOTES: (biggest problem you see in survey reach)

REPORTED TO AUTHORITIES ☐ YES ☐ NO

OVERALL STREAM CONDITION																					
	Optimal					Suboptimal					Marginal					Poor					
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).					40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).					20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.					Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.					70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.					50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.					Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.					
	Left Bank	0		9		8	7	6			5	4	3			2	1	0			
	Right Bank	0		9		8	7	6			5	4	3			2	1	0			
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.					Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.					Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure					Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.					
	Left Bank	0		9		8	7	6			5	4	3			2	1	0			
	Right Bank	0		9		8	7	6			5	4	3			2	1	0			
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.					High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.					High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.					High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
OVERALL BUFFER AND FLOODPLAIN CONDITION																					
	Optimal					Suboptimal					Marginal					Poor					
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.					Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.					Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.					Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.					
	Left Bank	0		9		8	7	6			5	4	3			2	1	0			
	Right Bank	0		9		8	7	6			5	4	3			2	1	0			
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest					Predominant floodplain vegetation type is young forest					Predominant floodplain vegetation type is shrub or old field					Predominant floodplain vegetation type is turf or crop land					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water					Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water					Either all wetland or all non-wetland habitat, evidence of standing/ponded water					Either all wetland or all non-wetland habitat, no evidence of standing/ponded water					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
FLOODPLAIN ENCROACHMENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures					Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function					Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function					Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Sub Total In-stream: <u>80</u> /80 + Buffer/Floodplain: <u>80</u> /80 = Total Survey Reach <u>160</u> /160																					

Reach Level Assessment

RCH

by STP intern

SURVEY REACH ID: _____		WTRSHD/SUBSHD: _____		DATE: ____/____/____		ASSESSED BY: _____	
START TIME: <u>1:50</u> AM/PM		LMK: _____		END TIME: ____:____ AM/PM		LMK: _____	
LAT ____° ____' ____"		LONG ____° ____' ____"		LAT ____° ____' ____"		LONG ____° ____' ____"	
DESCRIPTION: _____				DESCRIPTION: _____			

RAIN IN LAST 24 HOURS		PRESENT CONDITIONS		Heavy rain		Steady rain		Intermittent	
<input checked="" type="checkbox"/> Heavy rain		<input type="checkbox"/> Clear		<input type="checkbox"/> Trace		<input type="checkbox"/> Overcast		<input type="checkbox"/> Partly cloudy	
<input type="checkbox"/> None		<input type="checkbox"/> Urban/Residential		<input type="checkbox"/> Suburban/Res		<input checked="" type="checkbox"/> Forested		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Intermittent		<input type="checkbox"/> Crop		<input type="checkbox"/> Pasture		<input checked="" type="checkbox"/> Other: <u>forest management</u>			

AVERAGE CONDITIONS (check applicable)		REACH SKETCH AND SITE IMPACT TRACKING	
BASE FLOW AS % <input type="checkbox"/> 0-25% <input checked="" type="checkbox"/> 50%-75% CHANNEL WIDTH <input type="checkbox"/> 25-50 % <input type="checkbox"/> 75-100%		<p>Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB, SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow</p>	
DOMINANT SUBSTRATE <input type="checkbox"/> Silt/clay (fine or slick) <input type="checkbox"/> Cobble (2.5 - 10") <input checked="" type="checkbox"/> Sand (gritty) <input type="checkbox"/> Boulder (>10") <input type="checkbox"/> Gravel (0.1-2.5") <input type="checkbox"/> Bed rock			
WATER CLARITY <input type="checkbox"/> Clear <input type="checkbox"/> Turbid (suspended matter) <input checked="" type="checkbox"/> Stained (clear, naturally colored) <input type="checkbox"/> Opaque (milky) <input type="checkbox"/> Other (chemicals, dyes)			
AQUATIC PLANTS Attached: <input type="checkbox"/> none <input checked="" type="checkbox"/> some <input type="checkbox"/> lots Floating: <input checked="" type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots			
WILDLIFE IN OR AROUND STREAM (Evidence of) <input type="checkbox"/> Fish <input type="checkbox"/> Beaver <input checked="" type="checkbox"/> Deer <input type="checkbox"/> Snails <input type="checkbox"/> Other:			
STREAM SHADING (water surface) <input checked="" type="checkbox"/> Mostly shaded (≥75% coverage) <input type="checkbox"/> Halfway (≥50%) <input type="checkbox"/> Partially shaded (≥25%) <input type="checkbox"/> Unshaded (< 25%)			
CHANNEL DYNAMICS <input checked="" type="checkbox"/> Downcutting <input type="checkbox"/> Bed scour <input type="checkbox"/> Widening <input type="checkbox"/> Bank failure <input type="checkbox"/> Headcutting <input type="checkbox"/> Bank scour <input type="checkbox"/> Aggrading <input type="checkbox"/> Slope failure <input type="checkbox"/> Sed. deposition <input type="checkbox"/> Channelized <input type="checkbox"/> Unknown			
CHANNEL DIMENSIONS (FACING DOWNSTREAM) Height: LT bank <u>7</u> (ft) RT bank <u>4</u> (ft) Width: Bottom <u>8</u> (ft) Top <u>14</u> (ft)			
REACH ACCESSIBILITY Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails. Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream. Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.			

NOTES: (biggest problem you see in survey reach)

REPORTED TO AUTHORITIES ☐ YES ☐ NO

OVERALL STREAM CONDITION

	Optimal	Suboptimal	Marginal	Poor
IN-STREAM HABITAT <i>(May modify criteria based on appropriate habitat regime)</i>	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient). 20 19 18 17 16	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale). 15 14 13 12 11	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed. 10 9 8 7 6	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking. 5 4 3 2 1 0
VEGETATIVE PROTECTION <i>(score each bank, determine sides by facing downstream)</i>	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally. Left Bank 10 9 Right Bank 10 9	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining. 8 7 6 8 7 6	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining. 5 4 3 5 4 3	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height. 2 1 0 2 1 0
BANK EROSION <i>(facing downstream)</i>	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected. Left Bank 10 9 Right Bank 10 9	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use. 8 7 6 8 7 6	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure 5 4 3 5 4 3	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure. 2 1 0 2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched. 20 19 18 17 16	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched. 15 14 13 12 11	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched. 10 9 8 7 6	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched. 5 4 3 2 1 0

OVERALL BUFFER AND FLOODPLAIN CONDITION

	Optimal	Suboptimal	Marginal	Poor
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone. Left Bank 10 9 Right Bank 10 9	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally. 8 7 6 8 7 6	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal. 5 4 3 5 4 3	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities. 2 1 0 2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest 20 19 18 17 16	Predominant floodplain vegetation type is young forest 15 14 13 12 11	Predominant floodplain vegetation type is shrub or old field 10 9 8 7 6	Predominant floodplain vegetation type is turf or crop land 5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water 20 19 18 17 16	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water 15 14 13 12 11	Either all wetland or all non-wetland habitat, evidence of standing/ponded water 10 9 8 7 6	Either all wetland or all non-wetland habitat, no evidence of standing/ponded water 5 4 3 2 1 0
FLOODPLAIN ENCROACHMENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures 20 19 18 17 16	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function 15 14 13 12 11	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function 10 9 8 7 6	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function 5 4 3 2 1 0

Sub Total In-stream: 61 /80 + Buffer/Floodplain: 56 /80 = Total Survey Reach 117 /160

Reach Level Assessment

RCH

South of culvert
off Thompson Rd
4' deep

SURVEY REACH ID: <u>TB</u>		WTRSHD/SUBSHD:		DATE: <u> </u> / <u> </u> / <u> </u>		ASSESSED BY:	
START TIME: <u>10:43</u> AM/PM		LMK: <u> </u>		END TIME: <u> </u> : <u> </u> AM/PM		LMK: <u> </u>	
LAT <u> </u> ° <u> </u> ' <u> </u> "		LONG <u> </u> ° <u> </u> ' <u> </u> "		LAT <u> </u> ° <u> </u> ' <u> </u> "		LONG <u> </u> ° <u> </u> ' <u> </u> "	
DESCRIPTION:				DESCRIPTION:			

RAIN IN LAST 24 HOURS		PRESENT CONDITIONS	
<input type="checkbox"/> Heavy rain	<input checked="" type="checkbox"/> Steady rain	<input type="checkbox"/> Heavy rain	<input type="checkbox"/> Steady rain
<input type="checkbox"/> None	<input type="checkbox"/> Intermittent	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Trace
<input type="checkbox"/> Trace	<input type="checkbox"/> Overcast	<input type="checkbox"/> Partly cloudy	<input type="checkbox"/> Partly cloudy
SURROUNDING LAND USE:		SURROUNDING LAND USE:	
<input type="checkbox"/> Industrial	<input type="checkbox"/> Commercial	<input type="checkbox"/> Urban/Residential	<input type="checkbox"/> Suburban/Res
<input checked="" type="checkbox"/> Golf course	<input type="checkbox"/> Park	<input checked="" type="checkbox"/> Forested	<input type="checkbox"/> Institutional
<input type="checkbox"/> Crop	<input type="checkbox"/> Pasture	<input type="checkbox"/> Other:	<input type="checkbox"/> Other:

AVERAGE CONDITIONS (check applicable)		REACH SKETCH AND SITE IMPACT TRACKING	
BASE FLOW AS % <input checked="" type="checkbox"/> 0-25% <input type="checkbox"/> 50%-75%		<p>Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB, SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow</p>	
CHANNEL WIDTH <input type="checkbox"/> 25-50 % <input checked="" type="checkbox"/> 75-100%			
DOMINANT SUBSTRATE			
<input checked="" type="checkbox"/> Silt/clay (fine or slick) <input type="checkbox"/> Cobble (2.5 - 10")			
<input type="checkbox"/> Sand (gritty) <input type="checkbox"/> Boulder (>10")			
<input type="checkbox"/> Gravel (0.1-2.5") <input type="checkbox"/> Bed rock			
WATER CLARITY <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid (suspended matter)			
<input type="checkbox"/> Stained (clear, naturally colored) <input type="checkbox"/> Opaque (milky)			
<input type="checkbox"/> Other (chemicals, dyes)			
AQUATIC PLANTS			
Attached: <input checked="" type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots			
Floating: <input type="checkbox"/> none <input checked="" type="checkbox"/> some <input type="checkbox"/> lots			
WILDLIFE IN OR AROUND STREAM			
(Evidence of)			
<input type="checkbox"/> Fish <input type="checkbox"/> Beaver <input checked="" type="checkbox"/> Deer			
<input type="checkbox"/> Snails <input type="checkbox"/> Other:			
STREAM SHADING (water surface)			
<input type="checkbox"/> Mostly shaded (≥75% coverage)			
<input type="checkbox"/> Halfway (≥50%)			
<input checked="" type="checkbox"/> Partially shaded (≥25%)			
<input type="checkbox"/> Unshaded (< 25%)			
CHANNEL DYNAMICS			
<input checked="" type="checkbox"/> Downcutting <input type="checkbox"/> Bed scour			
<input type="checkbox"/> Widening <input type="checkbox"/> Bank failure			
<input type="checkbox"/> Headcutting <input checked="" type="checkbox"/> Bank scour			
<input type="checkbox"/> Aggrading <input type="checkbox"/> Slope failure			
<input type="checkbox"/> Sed. deposition <input type="checkbox"/> Channelized			
<input type="checkbox"/> Unknown			
CHANNEL DIMENSIONS (FACING DOWNSTREAM)			
Height: LT bank <u>3</u> (ft)			
RT bank <u>3</u> (ft)			
Width: Bottom <u>12</u> (ft)			
Top <u>14</u> (ft)			
REACH ACCESSIBILITY			
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.			
Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.			
Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.			

NOTES: (biggest problem you see in survey reach)

OVERALL STREAM CONDITION

	Optimal	Suboptimal	Marginal	Poor
STREAM HABITAT <i>(May modify criteria based on appropriate habitat regime)</i>	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	20 19 18 17 16	15 14 13 12 11	<u>10</u> 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION <i>(score each bank, determine sides by facing downstream)</i>	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 9	<u>8</u> 7 6	5 4 3	2 1 0
	Right Bank 10 <u>9</u>	8 7 6	5 4 3	2 1 0
BANK EROSION <i>(facing downstream)</i>	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10 9	<u>8</u> 7 6	5 4 3	2 1 0
	Right Bank 10 <u>9</u>	8 7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
	<u>20</u> 19 18 17 16	15 14 13 <u>12</u> 11	10 9 8 7 6	5 4 3 2 1 0

OVERALL BUFFER AND FLOODPLAIN CONDITION

	Optimal	Suboptimal	Marginal	Poor
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
	Left Bank 10 <u>8</u>	8 <u>7</u> 6 5	5 4 3	2 1 0
	Right Bank 10 9	<u>8</u> 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land
	20 19 18 17 16	15 14 13 12 11	<u>10</u> 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non-wetland habitat, evidence of standing/ponded water	Either all wetland or all non-wetland habitat, no evidence of standing/ponded water
	20 19 18 17 16	<u>15</u> 14 13 <u>12</u> 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN ENCROACHMENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
	20 19 18 17 16	15 14 13 <u>12</u> 11	10 9 8 7 6	5 4 3 2 1 0

Sub Total In-stream: 66 /80 + Buffer/Floodplain: 49 /80 = Total Survey Reach 115 /160

Reach Level Assessment

RCH

N of Thompson Rd

SURVEY REACH ID: _____		WTRSHD/SUBSHD: _____		DATE: ____/____/____		ASSESSED BY: _____	
START TIME: 12:50 AM/PM		LMK: _____		END TIME: ____:____ AM/PM		LMK: _____	
LAT ____° ____' ____"		LONG ____° ____' ____"		LAT ____° ____' ____"		LONG ____° ____' ____"	
DESCRIPTION: _____				DESCRIPTION: _____			

RAIN IN LAST 24 HOURS <input checked="" type="checkbox"/> Heavy rain <input type="checkbox"/> Steady rain <input type="checkbox"/> None <input type="checkbox"/> Intermittent <input type="checkbox"/> Trace		PRESENT CONDITIONS <input type="checkbox"/> Clear <input type="checkbox"/> Heavy rain <input type="checkbox"/> Steady rain <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Overcast <input type="checkbox"/> Partly cloudy				
SURROUNDING LAND USE: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Urban/Residential <input type="checkbox"/> Suburban/Res <input checked="" type="checkbox"/> Golf course <input type="checkbox"/> Park <input type="checkbox"/> Crop <input type="checkbox"/> Pasture <input type="checkbox"/> Forested <input type="checkbox"/> Institutional <input type="checkbox"/> Other:						
AVERAGE CONDITIONS (check applicable) BASE FLOW AS % <input type="checkbox"/> 0-25% <input type="checkbox"/> 50%-75% CHANNEL WIDTH <input type="checkbox"/> 25-50 % <input checked="" type="checkbox"/> 75-100% DOMINANT SUBSTRATE <input type="checkbox"/> Silt/clay (fine or slick) <input type="checkbox"/> Cobble (2.5 -10") <input checked="" type="checkbox"/> Sand (gritty) <input type="checkbox"/> Boulder (>10") <input type="checkbox"/> Gravel (0.1-2.5") <input type="checkbox"/> Bed rock WATER CLARITY <input type="checkbox"/> Clear <input type="checkbox"/> Turbid (suspended matter) <input checked="" type="checkbox"/> Stained (clear, naturally colored) <input type="checkbox"/> Opaque (milky) <input type="checkbox"/> Other (chemicals, dyes) AQUATIC PLANTS Attached: <input type="checkbox"/> none <input checked="" type="checkbox"/> some <input type="checkbox"/> lots IN STREAM Floating: <input checked="" type="checkbox"/> none <input type="checkbox"/> some <input type="checkbox"/> lots WILDLIFE IN OR AROUND STREAM (Evidence of) <input type="checkbox"/> Fish <input type="checkbox"/> Beaver <input checked="" type="checkbox"/> Deer <input type="checkbox"/> Snails <input type="checkbox"/> Other: STREAM SHADING (water surface) <input type="checkbox"/> Mostly shaded (>75% coverage) <input checked="" type="checkbox"/> Halfway (>50%) <input type="checkbox"/> Partially shaded (>25%) <input type="checkbox"/> Unshaded (<25%) CHANNEL DYNAMICS <input type="checkbox"/> Downcutting <input type="checkbox"/> Bed scour <input checked="" type="checkbox"/> Widening <input checked="" type="checkbox"/> Bank failure <input type="checkbox"/> Headcutting <input checked="" type="checkbox"/> Bank scour <input type="checkbox"/> Aggrading <input type="checkbox"/> Slope failure <input type="checkbox"/> Sed. deposition <input type="checkbox"/> Channelized <input type="checkbox"/> Unknown CHANNEL DIMENSIONS (FACING DOWNSTREAM) Height: LT bank <u>5</u> (ft) RT bank <u>6</u> (ft) Width: Bottom <u>18</u> (ft) Top <u>22</u> (ft)		REACH SKETCH AND SITE IMPACT TRACKING <i>Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB, SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow</i> 				
REACH ACCESSIBILITY <table border="1"> <tr> <td> Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails. </td> <td> Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream. </td> <td> Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required. </td> </tr> </table>				Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult: Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.				
NOTES: (biggest problem you see in survey reach) <div style="text-align: center;"> 5 4 3 2 1 </div>						
REPORTED TO AUTHORITIES <input type="checkbox"/> YES <input type="checkbox"/> NO						

OVERALL STREAM CONDITION

	Optimal	Suboptimal	Marginal	Poor
STREAM HABITAT <i>(May modify criteria based on appropriate habitat regime)</i>	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION <i>(score each bank, determine sides by facing downstream)</i>	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 9 0	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
BANK EROSION <i>(facing downstream)</i>	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10 9	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

OVERALL BUFFER AND FLOODPLAIN CONDITION

	Optimal	Suboptimal	Marginal	Poor
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet; little or no riparian vegetation due to human activities.
	Left Bank 10 9	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non-wetland habitat, evidence of standing/ponded water	Either all wetland or all non-wetland habitat, no evidence of standing/ponded water
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN ENCROACHMENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

Sub Total In-stream: 67 /80 + Buffer/Floodplain: 64 /80 = Total Survey Reach 131 /160

WATERCOURSE INVENTORY DATA

Project Number: 100509

Date: 11/2/07

Wetland Number: W100 - POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenney Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:	
Size:	<input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)	<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent	Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution	
Wetland Juxtaposition:	<input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated	Inlet/Outlet Class: <input checked="" type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet	Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input checked="" type="checkbox"/> Very High Density (80-100%)	Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)	
Fire Occurrence and Frequency:	<input type="checkbox"/> Natural, Predictable Frequency <input type="checkbox"/> Natural, Sporadic Frequency <input type="checkbox"/> Human-caused, Predictable <input type="checkbox"/> Human-caused, Sporadic <input type="checkbox"/> Rare Event <input checked="" type="checkbox"/> No Evidence	Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available	Number of Layers and Percent Cover: Number of Layers <input type="checkbox"/> 6 or > (actual #) <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	% Cover 1. submergents: 2. floating: 3. moss-lichen: 4. short herb: 5. tall herb: 6. dwarf shrub: 7. short shrub: 8. tall shrub: 9. sapling: 10. tree:	
Regional Scarcity:	<input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)	Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available	Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input checked="" type="checkbox"/> Fluvaquent Soils	Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input checked="" type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled	
Watershed Land Use:	<input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized	Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input checked="" type="checkbox"/> Intermittent Spring	SOIL VARIABLES Soil Lacking: <input type="checkbox"/>	Proportion of Animal Food Plants: <input type="checkbox"/> Low (<25% cover) <input type="checkbox"/> Medium (25-50% cover) <input checked="" type="checkbox"/> High (>50% cover)	
HYDROLOGIC VARIABLES		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input checked="" type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems	
Surface Water Level Fluctuation of Wetland:	<input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated	Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input checked="" type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)	
Frequency of Overbank Flooding:	<input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding	VEGETATION VARIABLES Vegetation Lacking: <input type="checkbox"/>		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water	
pH:	<input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input checked="" type="checkbox"/> No Water	Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input checked="" type="checkbox"/> Aquatic Bed - POND		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25	
Surficial Geologic Deposit Under Wetland	<input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till			Presence of Islands: <input type="checkbox"/> Several to Many <input checked="" type="checkbox"/> One or Few <input type="checkbox"/> Absent	
Wetland Land Use:	<input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)				
Wetland Water Regime:	<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Sediperm. Flooded <input checked="" type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated				
Basin Topographic Gradient:	<input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%				
Degree of Outlet Restriction:	<input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input checked="" type="checkbox"/> No Outflow				
Ratio of Wetland Area to Watershed Area:	<input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%				

Max Depth - 7'

Average Depth - 3.5'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/2/04

Wetland Number: W101-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

- ☐ Small (<10 acres)
☒ Medium (10-100 acres)
☐ Large (>100 acres)

Wetland Juxtaposition:

- ☐ Connected Upstream and Downstream
☐ Only Connected Above
☒ Only Connected Below
☐ Other Wetlands Nearby but not Connected
☐ Wetland Isolated

Fire Occurrence and Frequency:

- ☐ Natural; Predictable Frequency
☐ Natural; Sporadic Frequency
☐ Human-caused; Predictable
☐ Human-caused; Sporadic
☐ Rare Event
☒ No Evidence

Regional Scarcity:

- ☒ Not Scarce (>5% of total wetland area of region)
☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

- ☐ > 50% urbanized
☐ 25-50% urbanized
☒ 0-25% urbanized

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

- ☒ High Fluctuation - Beaver Dam continues to raise water level
☐ Low Fluctuation
☐ Never Inundated

Frequency of Overbank Flooding:

- ☐ Return Interval > 5 yrs.
☐ Return Interval 2-5 yrs.
☐ Return Interval 1-2 yrs.
☐ No Overbank Flooding

pH:

- ☒ Acid <5.5
☐ Circumneutral 5.5-7.4
☐ Alkaline >7.4
☐ No Water

Surficial Geologic Deposit Under Wetland

- ☐ Low Permeability Stratified Deposits
☐ High Permeability Stratified Deposits
☐ Glacial Till

Wetland Land Use:

- ☐ High Intensity (i.e. agriculture)
☐ Moderate Intensity (i.e. forestry)
☒ Low Intensity (i.e. open space)

Wetland Water Regime:

- ☐ Wet: Perm. Flooded, Intermittently Exposed, Saturated
☒ Drier: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

- ☐ High Gradient >2%
☒ Low Gradient <2%

Degree of Outlet Restriction:

- ☐ Restricted Outflow
☐ Unrestricted Outflow
☒ No Outflow

Ratio of Wetland Area to Watershed Area:

- ☐ High >10%
☒ Low <10%

Microrelief of Wetland Surface:

- ☐ Pronounced >45 cm
☒ Well Developed 15-45 cm
☐ Poorly Developed <15 cm
☐ Absent

Inlet/Outlet Class:

- ☐ No Inlet/No Outlet
☐ No Inlet/Intermittent Outlet
☐ No Inlet/Perennial Outlet
☐ Intermittent Inlet/No Outlet
☒ Intermittent Inlet/Intermittent Outlet
☐ Intermittent Outlet/Perennial Outlet
☐ Perennial Inlet/No Outlet
☐ Perennial Inlet/Intermittent Outlet
☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

- ☐ Recharge
☐ Discharge
☒ Horizontal Flow
☐ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

- ☐ Piez. Surface Above or at Substrate elev.
☐ Piez. Surface below Substrate elev.
☐ Not Available

Evidence of Sedimentation:

- ☐ No Evidence Observed
☐ Sediment Observed on Wetland Substrate
☒ Fluviatile Soils

Evidence of Seeps and Springs:

- ☐ No Seeps or Springs
☐ Seeps Observed
☐ Perennial Spring
☒ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

- ☐

Histosol:

- ☐ Fibric
☐ Hemic
☒ Sapric

Mineral Hydric Soil:

- ☐ Gravelly
☐ Sandy
☐ Silty
☒ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

- ☐

Dominant Wetland Type:

- ☐ Forested - Evergreen - Needle-leaved
☐ Forested - Deciduous - Broad-leaved
☐ Forested - Deciduous - Needle-leaved
☐ Scrub Shrub - Evergreen - Broad-leaved
☐ Scrub Shrub - Evergreen - Needle-leaved
☐ Scrub Shrub - Deciduous - Broad-leaved
☐ Scrub Shrub - Deciduous - Needle-leaved
☐ Emergent - Persistent
☐ Emergent - Non-persistent
☒ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

- ☐ Actual #
☐ 5
☐ 4
☐ 3
☐ 2
☒ 1

Evenness of Distribution

- ☒ Even Distribution
☐ Moderately Even Distribution
☐ Highly Uneven Distribution

Vegetation Density/Dominance:

- ☐ Sparse (0-20%)
☐ Low Density (20-40%)
☐ Medium Density (40-60%)
☐ High Density (60-80%)
☒ Very High Density (80-100%)

Vegetative Interspersion:

- ☐ High (small groupings, diverse and interspersed)
☐ Moderate (broken irregular rings)
☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

Number of Layers

- ☐ 6 or > (actual #)
☒ 5
☐ 4
☐ 3
☐ 2
☐ 1

% Cover

1. submergents:
 2. floating:
 3. moss-lichen:
 4. short herb:
 5. tall herb:
 6. dwarf shrub:
 7. short shrub:
 8. tall shrub:
 9. sapling:
 10. tree:

Plant Species Diversity:

- ☐ Low 1-2 plots sampled
☒ Medium 3-4 plots sampled
☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

- ☐ Low (<25% cover)
☒ Medium (25-50% cover)
☐ High (>50% cover)

Cover Distribution:

- ☐ Continuous Cover
☐ Small Scattered Patches
☐ 1 or More Large Patches; Parts of Site Open
☒ Solitary, Scattered Stems

Dead Woody Material:

- ☐ Abundant (>50% of wetland surface)
☒ Moderately Abundant (25-50% of surface)
☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

- ☐ 26-75% Scattered or Peripheral
☐ >75% Scattered or Peripheral
☐ <25% Scattered or Peripheral
☒ 100% Cover or Open Water

Stream Sinuosity:

- ☐ Highly Convoluted (index 1.50 or >)
☐ Moderately Convoluted (index 1.25-1.50)
☒ Straight/Slightly Irreg. (index 1.10-1.25)

Presence of Islands:

- ☐ Several to Many
☐ One or Few
☒ Absent

Max Depth - 9.0'

• Average Depth - 6'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/2/04

Wetland Number: W102-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input checked="" type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input checked="" type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input checked="" type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: (FORMER RESIDENT PROPERTY) <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvial Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td>6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td>5</td> <td>2. floating:</td> </tr> <tr> <td>4</td> <td>3. moss-lichen:</td> </tr> <tr> <td>3</td> <td>4. short herb:</td> </tr> <tr> <td>2</td> <td>5. tall herb:</td> </tr> <tr> <td>1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>		Number of Layers	% Cover	6 or > (actual #)	1. submergents:	5	2. floating:	4	3. moss-lichen:	3	4. short herb:	2	5. tall herb:	1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
6 or > (actual #)	1. submergents:																										
5	2. floating:																										
4	3. moss-lichen:																										
3	4. short herb:																										
2	5. tall herb:																										
1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: <input type="checkbox"/> Low (<25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land/Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input type="checkbox"/> Low Intensity (ie. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Dry: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input checked="" type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																											

Max Depth - 6'

Average Depth - 4'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/2/04

Wetland Number: W103-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input type="checkbox"/>	No Evidence
Regional Scarplify:	
<input type="checkbox"/>	Not Scarplify (>5% of total wetland area of region)
<input type="checkbox"/>	Scarplify (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized (Golf Course)
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation - Controlled IN/OUT
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH:	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (ie. agriculture)
<input type="checkbox"/>	Moderate Intensity (ie. forestry)
<input type="checkbox"/>	Low Intensity (ie. open space)
Wetland Water Regime:	
<input type="checkbox"/>	Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Dry: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input checked="" type="checkbox"/>	Intermittent Inlet/Intermittent Outlet Controlled
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluvial Soils
Evidence of Seeps and Springs:	
<input type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input checked="" type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input checked="" type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input checked="" type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input type="checkbox"/>	Medium 3-4 plots sampled
<input type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants:	
<input type="checkbox"/>	Low (<25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	25% Scattered or Peripheral
<input type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input checked="" type="checkbox"/>	Absent

• Max Depth - 4'

• Average - 3'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/2/04

Wetland Number: W104-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: _____

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:	
Size:	<input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)	<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent	Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution	
Wetland Juxtaposition:	<input checked="" type="checkbox"/> Connected Upstream and Downstream - Controlled <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated	Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input checked="" type="checkbox"/> Perennial Inlet/Perennial Outlet Controlled	Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input type="checkbox"/> Very High Density (80-100%)	Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)	
Fire Occurrence and Frequency:	<input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence	Nested Piezometer Data: + Pump <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available	Number of Layers and Percent Cover: Number of Layers <input type="checkbox"/> 6 or > (actual #) <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	% Cover <input type="checkbox"/> 1. submergents: <input checked="" type="checkbox"/> 2. floating: <input type="checkbox"/> 3. moss-lichen: <input type="checkbox"/> 4. short herb: <input type="checkbox"/> 5. tall herb: <input type="checkbox"/> 6. dwarf shrub: <input type="checkbox"/> 7. short shrub: <input type="checkbox"/> 8. tall shrub: <input type="checkbox"/> 9. sapling: <input type="checkbox"/> 10. tree:	
Regional Scarcity:	<input checked="" type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)	Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available	Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluvi-scent Soils	Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled	
Watershed Land Use:	<input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized (GOLF COURSE)	Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring	SOIL VARIABLES Soil Lacking: <input type="checkbox"/> Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input checked="" type="checkbox"/> Sapric Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input checked="" type="checkbox"/> Clayey	Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)	
HYDROLOGIC VARIABLES		VEGETATION VARIABLES			
Surface Water Level Fluctuation of Wetland:	<input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated	Vegetation Lacking: <input type="checkbox"/> Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input checked="" type="checkbox"/> Aquatic Bed	Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems	Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)	
Frequency of Overbank Flooding:	<input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding	Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%	Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input checked="" type="checkbox"/> No Outflow	Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water	
pH:	<input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input checked="" type="checkbox"/> No Water	Wetland Land Use: <input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)	Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input checked="" type="checkbox"/> Straight/Slightly Irreg. (index 1.10-1.25)	Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent	
Surficial Geologic Deposit Under Wetland	<input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till	Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%			
Wetland Land Use:	<input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)				
Wetland Water Regime:	<input type="checkbox"/> Wet: Permanently Flooded, Intermittently Exposed, Semipermanently Flooded <input checked="" type="checkbox"/> Dry: Seasonally Flooded, Temporarily Flooded, Saturated				

Max Depth - 5.5'

- Average Depth - 4'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/2/09

Wetland Number: W105-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input type="checkbox"/>	No Evidence
Regional Scarcity:	
<input checked="" type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized (GOLF COURSE)
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH:	
<input checked="" type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input checked="" type="checkbox"/>	High Permeability Stratified Deposits
<input type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (i.e. agriculture)
<input type="checkbox"/>	Moderate Intensity (i.e. forestry)
<input type="checkbox"/>	Low Intensity (i.e. open space)
Wetland Water Regime:	
<input type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semi-perm. Flooded
<input checked="" type="checkbox"/>	Dry: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input type="checkbox"/>	High Gradient >2%
<input checked="" type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input checked="" type="checkbox"/>	Low <10%

Max Depth - 4'

* Average Depth - 3.5'

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluviogent Soils
Evidence of Seeps and Springs:	
<input type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input type="checkbox"/>	Medium 3-4 plots sampled
<input type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants:	
<input type="checkbox"/>	Low (5-25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abundant (25-50% of surface)
<input type="checkbox"/>	Low Abundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	26-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input type="checkbox"/>	Absent

WATERCOURSE INVENTORY DATA

Project Number: 100309 Date: 11/2/04
Wetland Number: W106-POND
Photo Numbers: _____
USGS Quadrangle: _____
Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		Microrelief of Wetland Surface:		Number of Types & Relative Proportions:																							
Size: <input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)		<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input checked="" type="checkbox"/> Absent		Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1																							
Wetland Juxtaposition: <input checked="" type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated		Inlet/Outlet Class: <input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input checked="" type="checkbox"/> Perennial Inlet/Perennial Outlet		Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Fire Occurrence and Frequency: <input type="checkbox"/> Natural, Predictable Frequency <input type="checkbox"/> Natural, Sporadic Frequency <input type="checkbox"/> Human-caused, Predictable <input type="checkbox"/> Human-caused, Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence		Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available		Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input checked="" type="checkbox"/> Very High Density (80-100%)																							
Regional Scarcity: <input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)		Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available		Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																							
Watershed Land Use: <input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized (GOLF COURSE)		Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Fluviatile Soils		Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. trees: 12-40.5</td> </tr> </tbody> </table>		Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input checked="" type="checkbox"/> 3	4. short herb:	<input type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. trees: 12-40.5
Number of Layers	% Cover																										
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																										
<input type="checkbox"/> 5	2. floating:																										
<input type="checkbox"/> 4	3. moss-lichen:																										
<input checked="" type="checkbox"/> 3	4. short herb:																										
<input type="checkbox"/> 2	5. tall herb:																										
<input type="checkbox"/> 1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. trees: 12-40.5																										
HYDROLOGIC VARIABLES		SOIL VARIABLES		Plant Species Diversity:																							
Surface Water Level Fluctuation of Wetland: <input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated		Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring		<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																							
Frequency of Overbank Flooding: <input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding		Soil Lacking: <input type="checkbox"/>		Proportion of Animal Food Plants: <input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input type="checkbox"/> High (>50% cover)																							
pH: <input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input checked="" type="checkbox"/> No Water		Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input type="checkbox"/> Sapric		Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																							
Surficial Geologic Deposit Under Wetland <input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till		Mineral/Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input checked="" type="checkbox"/> Silty <input type="checkbox"/> Clayey		Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																							
Wetland Land Use: <input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input type="checkbox"/> Low Intensity (i.e. open space)		VEGETATION VARIABLES		Interspersion of Cover and Open Water: <input type="checkbox"/> 25-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																							
Wetland Water Regime: <input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated		Vegetation Lacking: <input type="checkbox"/>		Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input checked="" type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																							
Basin Topographic Gradient: <input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%		Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input checked="" type="checkbox"/> Aquatic Bed		Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																							
Degree of Outlet Restriction: <input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input checked="" type="checkbox"/> No Outflow																											
Ratio of Wetland Area to Watershed Area: <input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%																											

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/3/04

Wetland Number: W107-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES

Size:

☒ Small (<10 acres)

☐ Medium (10-100 acres)

☐ Large (>100 acres)

Wetland Juxtaposition:

☒ Connected Upstream and Downstream

☐ Only Connected Above

☐ Only Connected Below

☐ Other Wetlands Nearby but not Connected

☐ Wetland Isolated

Fire Occurrence and Frequency:

☐ Natural; Predictable Frequency

☐ Natural; Sporadic Frequency

☐ Human-caused; Predictable

☐ Human-caused; Sporadic

☐ Rare Event

☐ No Evidence

Regional Scarcity:

☐ Not Scarce (>5% of total wetland area of region)

☐ Scarce (<5% of total wetland area of region)

Watershed Land Use:

☐ > 50% urbanized

☐ 25-50% urbanized

☒ 0-25% urbanized (GOLF COURSE)

HYDROLOGIC VARIABLES

Surface Water Level Fluctuation of Wetland:

☐ High Fluctuation

☒ Low Fluctuation

☐ Never Inundated

Frequency of Overbank Flooding:

☐ Return Interval > 5 yrs.

☐ Return Interval 2-5 yrs.

☐ Return Interval 1-2 yrs.

☒ No Overbank Flooding

pH:

☐ Acid <5.5

☒ Circumneutral 5.5-7.4

☐ Alkaline >7.4

☒ No Water

Surficial Geologic Deposit Under Wetland

☐ Low Permeability Stratified Deposits

☐ High Permeability Stratified Deposits

☐ Glacial Till

Wetland Land Use:

☐ High Intensity (i.e. agriculture)

☐ Moderate Intensity (i.e. forestry)

☐ Low Intensity (i.e. open space)

Wetland Water Regime:

☐ Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded

☒ Dry: Seasonally Flooded, Temporarily Flooded, Saturated

Basin Topographic Gradient:

☐ High Gradient >2%

☒ Low Gradient <2%

Degree of Outlet Restriction:

☐ Restricted Outflow

☐ Unrestricted Outflow

☒ No Outflow

Ratio of Wetland Area to Watershed Area:

☐ High >10%

☒ Low <10%

Microrelief of Wetland Surface:

☐ Pronounced >45 cm

☐ Well Developed 15-45 cm

☐ Poorly Developed <15 cm

☒ Absent

Inlet/Outlet Class:

☐ No Inlet/No Outlet

☐ No Inlet/Intermittent Outlet

☐ No Inlet/Perennial Outlet

☐ Intermittent Inlet/No Outlet

☒ Intermittent Inlet/Intermittent Outlet

☐ Intermittent Outlet/Perennial Outlet

☐ Perennial Inlet/No Outlet

☐ Perennial Inlet/Intermittent Outlet

☐ Perennial Inlet/Perennial Outlet

Nested Piezometer Data:

☐ Recharge

☐ Discharge

☐ Horizontal Flow

☒ Not Available

Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:

☐ Piez. Surface Above or at Substrate elev.

☐ Piez. Surface below Substrate elev.

☒ Not Available

Evidence of Sedimentation:

☐ No Evidence Observed

☐ Sediment Observed on Wetland Substrate

☒ Fluviqent Soils

Evidence of Seeps and Springs:

☐ No Seeps or Springs

☐ Seeps Observed

☐ Perennial Spring

☐ Intermittent Spring

SOIL VARIABLES

Soil Lacking:

☐

Histosol:

☐ Fibric

☐ Hemic

☒ Sapric

Mineral Hydric Soil:

☐ Gravelly

☐ Sandy

☐ Silty

☒ Clayey

VEGETATION VARIABLES

Vegetation Lacking:

☐

Dominant Wetland Type:

☐ Forested - Evergreen - Needle-leaved

☐ Forested - Deciduous - Broad-leaved

☐ Forested - Deciduous - Needle-leaved

☐ Scrub Shrub - Evergreen - Broad-leaved

☐ Scrub Shrub - Evergreen - Needle-leaved

☐ Scrub Shrub - Deciduous - Broad-leaved

☐ Scrub Shrub - Deciduous - Needle-leaved

☐ Emergent - Persistent

☐ Emergent - Non-persistent

☒ Aquatic Bed

Number of Types & Relative Proportions:

Number of Types

☐ Actual #

☐ 5

☐ 4

☐ 3

☐ 2

☒ 1

Evenness of Distribution

☐ Even Distribution

☐ Moderately Even Distribution

☐ Highly Uneven Distribution

Vegetation Density/Dominance:

☐ Sparse (0-20%)

☐ Low Density (20-40%)

☐ Medium Density (40-60%)

☐ High Density (60-80%)

☒ Very High Density (80-100%)

Vegetative Interspersion:

☐ High (small groupings, diverse and interspersed)

☐ Moderate (broken irregular rings)

☒ Low (large patches, concentric rings)

Number of Layers and Percent Cover:

Number of Layers

☐ 6 or > (actual #)

☐ 5

☐ 4

☐ 3

☒ 2

☐ 1

% Cover

☒ 1. submergents:

☐ 2. floating:

☐ 3. moss-lichen:

☐ 4. short herb:

☐ 5. tall herb:

☐ 6. dwarf shrub:

☐ 7. short shrub:

☐ 8. tall shrub:

☐ 9. sapling:

☐ 10. tree:

Plant Species Diversity:

☐ Low 1-2 plots sampled

☒ Medium 3-4 plots sampled

☐ High 5 or more plots sampled

Proportion of Animal Food Plants:

☐ Low (<25% cover)

☐ Medium (25-50% cover)

☒ High (>50% cover)

Cover Distribution:

☐ Continuous Cover

☐ Small Scattered Patches

☐ 1 or More Large Patches; Parts of Site Open

☐ Solitary, Scattered Stems

Dead Woody Material:

☐ Abundant (>50 of wetland surface)

☒ Moderately Abundant (25-50% of surface)

☐ Low Abundance (0-25% of surface)

Interspersion of Cover and Open Water:

☐ 25-75% Scattered or Peripheral

☐ >75% Scattered or Peripheral

☐ <25% Scattered or Peripheral

☒ 100% Cover or Open Water

Stream Sinuosity:

☐ Highly Convoluted (index 1.50 or >)

☐ Moderately Convoluted (index 1.25-1.50)

☒ Straight/Slightly Irreg. (index) 1.10-1.25

Presence of Islands:

☐ Several to Many

☐ One or Few

☒ Absent

Max Depth - 4.5'

Average Depth - 4'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/3/09

Wetland Number: W108-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES															
Condition	Percent/Acreage			OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H		
	_____	Depressional	Merrimack Weed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	_____	Slope	Tussock Sedge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	_____	Flat	Small Duckweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	_____	Extensive Peatland	Cattail - Narrow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<u>100</u>	Lacustrine Fringe	Common Eleocharis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	_____	Riverine		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>														

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input checked="" type="checkbox"/>	Connected Upstream and Downstream - CONTIGUOUS
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input checked="" type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized (Golf Course)
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH:	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (i.e. agriculture)
<input type="checkbox"/>	Moderate Intensity (i.e. forestry)
<input type="checkbox"/>	Low Intensity (i.e. open space)
Wetland Water Regime:	
<input type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input checked="" type="checkbox"/>	No Inlet/Intermittent Outlet - INTERMITTENT WETLAND
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input type="checkbox"/>	Perennial Inlet/No Outlet
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluvial Soils
Evidence of Seeps and Springs:	
<input type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input checked="" type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input checked="" type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/>	Sparse (0-20%)
<input type="checkbox"/>	Low Density (20-40%)
<input type="checkbox"/>	Medium Density (40-60%)
<input type="checkbox"/>	High Density (60-80%)
<input type="checkbox"/>	Very High Density (80-100%)
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submerged:
<input type="checkbox"/> 5	2. floating:
<input type="checkbox"/> 4	3. moss-lichen:
<input checked="" type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/>	Low 1-2 plots sampled
<input type="checkbox"/>	Medium 3-4 plots sampled
<input type="checkbox"/>	High 5 or more plots sampled
Proportion of Animal Food Plants:	
<input type="checkbox"/>	Low (<25% cover)
<input type="checkbox"/>	Medium (25-50% cover)
<input type="checkbox"/>	High (>50% cover)
Cover Distribution:	
<input type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small/Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	25-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index 1.10-1.25)
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input type="checkbox"/>	Absent

Max. Depth - 5.5'
Average Depth - 4.5'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/5/09

Wetland Number: W109-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES		MICRORELIEF of Wetland Surface:		Number of Types & Relative Proportions:																							
Size:	<input checked="" type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input type="checkbox"/> Large (>100 acres)	<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input type="checkbox"/> Absent	Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1	Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input type="checkbox"/> Highly Uneven Distribution																							
Wetland Juxtaposition:	<input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input checked="" type="checkbox"/> Wetland Isolated	Inlet/Outlet Class: <input checked="" type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet	Vegetation Density/Dominance: <input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input checked="" type="checkbox"/> Very High Density (80-100%)																								
Fire Occurrence and Frequency:	<input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence	Nested Piezometer Data: <input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Not Available	Vegetative Interspersion: <input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input type="checkbox"/> Low (large patches, concentric rings)																								
Regional Scarcity:	<input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input type="checkbox"/> Scarce (<5% of total wetland area of region)	Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface: <input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input type="checkbox"/> Not Available	Number of Layers and Percent Cover: <table border="1"> <thead> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> </thead> <tbody> <tr> <td>6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td>5</td> <td>2. floating:</td> </tr> <tr> <td>4</td> <td>3. moss-lichen:</td> </tr> <tr> <td>3</td> <td>4. short herb:</td> </tr> <tr> <td>2</td> <td>5. tall herb:</td> </tr> <tr> <td>1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </tbody> </table>			Number of Layers	% Cover	6 or > (actual #)	1. submergents:	5	2. floating:	4	3. moss-lichen:	3	4. short herb:	2	5. tall herb:	1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																										
6 or > (actual #)	1. submergents:																										
5	2. floating:																										
4	3. moss-lichen:																										
3	4. short herb:																										
2	5. tall herb:																										
1	6. dwarf shrub:																										
	7. short shrub:																										
	8. tall shrub:																										
	9. sapling:																										
	10. tree:																										
Watershed Land Use:	<input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized (COIF COURSE)	Evidence of Sedimentation: <input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input type="checkbox"/> Evident Soils	Plant Species Diversity: <input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input type="checkbox"/> High 5 or more plots sampled																								
HYDROLOGIC VARIABLES		SOIL VARIABLES		VEGETATION VARIABLES																							
Surface Water Level Fluctuation of Wetland:	<input type="checkbox"/> High Fluctuation <input type="checkbox"/> Low Fluctuation <input checked="" type="checkbox"/> Never Inundated	Evidence of Seeps and Springs: <input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input type="checkbox"/> Intermittent Spring	Soil Lacking: <input type="checkbox"/>																								
Frequency of Overbank Flooding:	<input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding	Histosol: <input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input checked="" type="checkbox"/> Sapric	Cover Distribution: <input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input type="checkbox"/> Solitary, Scattered Stems																								
pH:	<input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input type="checkbox"/> No Water	Mineral Hydric Soil: <input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input type="checkbox"/> Clayey	Dead Woody Material: <input type="checkbox"/> Abundant (>50 of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input type="checkbox"/> Low Abundance (0-25% of surface)																								
Surficial Geologic Deposit Under Wetland	<input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input type="checkbox"/> Glacial Till	Vegetation Lacking: <input type="checkbox"/>																									
Wetland Land Use:	<input type="checkbox"/> High Intensity (ie. agriculture) <input type="checkbox"/> Moderate Intensity (ie. forestry) <input checked="" type="checkbox"/> Low Intensity (ie. open space)	Dominant Wetland Type: <input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input checked="" type="checkbox"/> Aquatic Bed																									
Wetland Water Regime:	<input type="checkbox"/> Wet: Perm. Flooded, Intermittently Exposed, Semiperm. Flooded <input type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated	Interspersion of Cover and Open Water: <input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input type="checkbox"/> 100% Cover or Open Water																									
Basin Topographic Gradient:	<input type="checkbox"/> High Gradient >2% <input type="checkbox"/> Low Gradient <2%	Stream Sinuosity: <input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																									
Degree of Outlet Restriction:	<input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input type="checkbox"/> No Outflow	Presence of Islands: <input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																									
Ratio of Wetland Area to Watershed Area:	<input type="checkbox"/> High >10% <input type="checkbox"/> Low <10%																										

Max Depth - 5'

Average Depth - 3'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/3/04

Wetland Number: W110-POND

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

SURFACE WATER FLOW VECTORS			PLANT SPECIES													
Condition	Percent/Acreage		OW	FW	F	FU	OU	DOM	COM	OCC	C	S	TS	LS	H	
	_____	Depressional														
	_____	Slope														
	_____	Flat														
	_____	Extensive Peatland														
	<u>100</u> <small>See NOTE 1</small>	Lacustrine Fringe														
	_____	Riverine														
VEGETATION TYPES			<div style="display: flex; flex-direction: column;"> <div style="margin-bottom: 5px;"><u>Tussock Sedge</u></div> <div style="margin-bottom: 5px;"><u>Spikerush</u></div> <div style="margin-bottom: 5px;"><u>Floating Pond Weed</u></div> <div style="margin-bottom: 5px;"><u>Small duck Weed</u></div> <div style="margin-bottom: 5px;"><u>Wild Celery</u></div> <div style="margin-bottom: 5px;"><u>Common Bladderwort</u></div> <div style="margin-bottom: 5px;"><u>Mermaid Weed</u></div> <div style="margin-bottom: 5px;"><u>Surrounding Pond</u></div> <div style="margin-bottom: 5px;"><u>White Pine</u></div> <div style="margin-bottom: 5px;"><u>White Birch</u></div> <div style="margin-bottom: 5px;"><u>Red Maple</u></div> <div style="margin-bottom: 5px;"><u>Blueberry</u></div> <div style="margin-bottom: 5px;"><u>Winterberry</u></div> <div style="margin-bottom: 5px;"><u>Sphagnum</u></div> <div style="margin-bottom: 5px;"><u>Golf Course Turf</u></div> </div>													
Type	Percent/Acreage															
Forested Wetland																
Evergreen																
Needle-leaved																
Deciduous																
Broad-leaved																
Needle-leaved																
Scrub Shrub																
Evergreen																
Broad-leaved																
Needle-leaved																
Deciduous																
Broad-leaved	<u>5</u>															
Needle-leaved																
Emergent Wetland																
Persistent	<u>5</u>															
Non-persistent																
Aquatic Bed	<u>90</u>															
Total																
SOIL TYPES			<div style="display: flex; flex-direction: column;"> <div style="margin-bottom: 5px;"><u>White Pine</u></div> <div style="margin-bottom: 5px;"><u>White Birch</u></div> <div style="margin-bottom: 5px;"><u>Red Maple</u></div> <div style="margin-bottom: 5px;"><u>Blueberry</u></div> <div style="margin-bottom: 5px;"><u>Winterberry</u></div> <div style="margin-bottom: 5px;"><u>Sphagnum</u></div> <div style="margin-bottom: 5px;"><u>Golf Course Turf</u></div> </div>													
HISTOSOL																
• Fibric <input type="checkbox"/>																
• Hemic <input type="checkbox"/>																
• Sapric <input type="checkbox"/>																
MINERAL																
Hydric Soil																
• Gravelly <input type="checkbox"/>																
• Sandy <input type="checkbox"/>																
• Silty <input type="checkbox"/>																
• Clayey <input type="checkbox"/>																
GEOLOGY			<div style="display: flex; flex-direction: column;"> <div style="margin-bottom: 5px;"><u>White Pine</u></div> <div style="margin-bottom: 5px;"><u>White Birch</u></div> <div style="margin-bottom: 5px;"><u>Red Maple</u></div> <div style="margin-bottom: 5px;"><u>Blueberry</u></div> <div style="margin-bottom: 5px;"><u>Winterberry</u></div> <div style="margin-bottom: 5px;"><u>Sphagnum</u></div> <div style="margin-bottom: 5px;"><u>Golf Course Turf</u></div> </div>													
Surficial:																
Bedrock:																
Public ownership																
Wildlife management area																
Fisheries management area																
Designated State or Federal protected wetland																
Documented habitat for state or federal listed species																
Regionally scarce wetland category																
Historic/archaeologic area																

Comments: The lacustrine fringe is primarily golf course turf.

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	
<input checked="" type="checkbox"/>	Small (<10 acres)
<input type="checkbox"/>	Medium (10-100 acres)
<input type="checkbox"/>	Large (>100 acres)
Wetland Juxtaposition:	
<input type="checkbox"/>	Connected Upstream and Downstream
<input type="checkbox"/>	Only Connected Above
<input type="checkbox"/>	Only Connected Below
<input type="checkbox"/>	Other Wetlands Nearby but not Connected
<input type="checkbox"/>	Wetland Isolated
Fire Occurrence and Frequency:	
<input type="checkbox"/>	Natural; Predictable Frequency
<input type="checkbox"/>	Natural; Sporadic Frequency
<input type="checkbox"/>	Human-caused; Predictable
<input type="checkbox"/>	Human-caused; Sporadic
<input type="checkbox"/>	Rare Event
<input type="checkbox"/>	No Evidence
Regional Scarcity:	
<input type="checkbox"/>	Not Scarce (>5% of total wetland area of region)
<input type="checkbox"/>	Scarce (<5% of total wetland area of region)
Watershed Land Use:	
<input type="checkbox"/>	> 50% urbanized
<input type="checkbox"/>	25-50% urbanized
<input checked="" type="checkbox"/>	0-25% urbanized - (GOLF COURSE)
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	
<input type="checkbox"/>	High Fluctuation
<input checked="" type="checkbox"/>	Low Fluctuation
<input type="checkbox"/>	Never Inundated
Frequency of Overbank Flooding:	
<input type="checkbox"/>	Return Interval > 5 yrs.
<input type="checkbox"/>	Return Interval 2-5 yrs.
<input type="checkbox"/>	Return Interval 1-2 yrs.
<input type="checkbox"/>	No Overbank Flooding
pH:	
<input type="checkbox"/>	Acid <5.5
<input type="checkbox"/>	Circumneutral 5.5-7.4
<input type="checkbox"/>	Alkaline >7.4
<input type="checkbox"/>	No Water
Surficial Geologic Deposit Under Wetland	
<input type="checkbox"/>	Low Permeability Stratified Deposits
<input type="checkbox"/>	High Permeability Stratified Deposits
<input type="checkbox"/>	Glacial Till
Wetland Land Use:	
<input type="checkbox"/>	High Intensity (i.e. agriculture)
<input type="checkbox"/>	Moderate Intensity (i.e. forestry)
<input type="checkbox"/>	Low Intensity (i.e. open space)
Wetland Water Regime:	
<input type="checkbox"/>	Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded
<input type="checkbox"/>	Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	
<input type="checkbox"/>	High Gradient >2%
<input type="checkbox"/>	Low Gradient <2%
Degree of Outlet Restriction:	
<input type="checkbox"/>	Restricted Outflow
<input type="checkbox"/>	Unrestricted Outflow
<input type="checkbox"/>	No Outflow
Ratio of Wetland Area to Watershed Area:	
<input type="checkbox"/>	High >10%
<input type="checkbox"/>	Low <10%

Microrelief of Wetland Surface:	
<input type="checkbox"/>	Pronounced >45 cm
<input type="checkbox"/>	Well Developed 15-45 cm
<input type="checkbox"/>	Poorly Developed <15 cm
<input type="checkbox"/>	Absent
Inlet/Outlet Class:	
<input type="checkbox"/>	No Inlet/No Outlet
<input type="checkbox"/>	No Inlet/Intermittent Outlet
<input type="checkbox"/>	No Inlet/Perennial Outlet
<input type="checkbox"/>	Intermittent Inlet/No Outlet
<input type="checkbox"/>	Intermittent Inlet/Intermittent Outlet
<input type="checkbox"/>	Intermittent Outlet/Perennial Outlet
<input checked="" type="checkbox"/>	Perennial Inlet/No Outlet - PUMPS
<input type="checkbox"/>	Perennial Inlet/Intermittent Outlet
<input type="checkbox"/>	Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	
<input type="checkbox"/>	Recharge
<input type="checkbox"/>	Discharge
<input type="checkbox"/>	Horizontal Flow
<input type="checkbox"/>	Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	
<input type="checkbox"/>	Piez. Surface Above or at Substrate elev.
<input type="checkbox"/>	Piez. Surface below Substrate elev.
<input type="checkbox"/>	Not Available
Evidence of Sedimentation:	
<input type="checkbox"/>	No Evidence Observed
<input type="checkbox"/>	Sediment Observed on Wetland Substrate
<input type="checkbox"/>	Fluvial Soils
Evidence of Seeps and Springs:	
<input type="checkbox"/>	No Seeps or Springs
<input type="checkbox"/>	Seeps Observed
<input type="checkbox"/>	Perennial Spring
<input type="checkbox"/>	Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	
<input type="checkbox"/>	
Histosol:	
<input type="checkbox"/>	Fibric
<input type="checkbox"/>	Hemic
<input type="checkbox"/>	Sapric
Mineral Hydric Soil:	
<input type="checkbox"/>	Gravelly
<input type="checkbox"/>	Sandy
<input type="checkbox"/>	Silty
<input type="checkbox"/>	Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	
<input type="checkbox"/>	
Dominant Wetland Type:	
<input type="checkbox"/>	Forested - Evergreen - Needle-leaved
<input type="checkbox"/>	Forested - Deciduous - Broad-leaved
<input type="checkbox"/>	Forested - Deciduous - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Evergreen - Needle-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Broad-leaved
<input type="checkbox"/>	Scrub Shrub - Deciduous - Needle-leaved
<input type="checkbox"/>	Emergent - Persistent
<input type="checkbox"/>	Emergent - Non-persistent
<input checked="" type="checkbox"/>	Aquatic Bed

Number of Types & Relative Proportions:	
Number of Types	Evenness of Distribution
<input type="checkbox"/> Actual #	<input type="checkbox"/> Even Distribution
<input type="checkbox"/> 5	<input type="checkbox"/> Moderately Even Distribution
<input type="checkbox"/> 4	<input type="checkbox"/> Highly Uneven Distribution
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	
Vegetation Density/Dominance:	
<input type="checkbox"/> Sparse (0-20%)	
<input type="checkbox"/> Low Density (20-40%)	
<input type="checkbox"/> Medium Density (40-60%)	
<input type="checkbox"/> High Density (60-80%)	
<input type="checkbox"/> Very High Density (80-100%)	
Vegetative Interspersion:	
<input type="checkbox"/>	High (small groupings, diverse and interspersed)
<input type="checkbox"/>	Moderate (broken irregular rings)
<input type="checkbox"/>	Low (large patches, concentric rings)
Number of Layers and Percent Cover:	
Number of Layers	% Cover
<input type="checkbox"/> 6 or > (actual #)	1. submergents:
<input type="checkbox"/> 5	2. floating:
<input checked="" type="checkbox"/> 4	3. moss-lichen:
<input type="checkbox"/> 3	4. short herb:
<input type="checkbox"/> 2	5. tall herb:
<input type="checkbox"/> 1	6. dwarf shrub:
	7. short shrub:
	8. tall shrub:
	9. sapling:
	10. tree:
Plant Species Diversity:	
<input type="checkbox"/> Low 1-2 plots sampled	
<input type="checkbox"/> Medium 3-4 plots sampled	
<input type="checkbox"/> High 5 or more plots sampled	
Proportion of Animal Food Plants:	
<input type="checkbox"/> Low (5-25% cover)	
<input type="checkbox"/> Medium (25-50% cover)	
<input type="checkbox"/> High (>50% cover)	
Cover Distribution:	
<input type="checkbox"/>	Continuous Cover
<input type="checkbox"/>	Small Scattered Patches
<input type="checkbox"/>	1 or More Large Patches; Parts of Site Open
<input type="checkbox"/>	Solitary, Scattered Stems
Dead Woody Material:	
<input type="checkbox"/>	Abrundant (>50 of wetland surface)
<input type="checkbox"/>	Moderately Abrundant (25-50% of surface)
<input type="checkbox"/>	Low Abrundance (0-25% of surface)
Interspersion of Cover and Open Water:	
<input type="checkbox"/>	25-75% Scattered or Peripheral
<input type="checkbox"/>	>75% Scattered or Peripheral
<input type="checkbox"/>	<25% Scattered or Peripheral
<input type="checkbox"/>	100% Cover or Open Water
Stream Sinuosity:	
<input type="checkbox"/>	Highly Convoluted (index 1.50 or >)
<input type="checkbox"/>	Moderately Convoluted (index 1.25-1.50)
<input type="checkbox"/>	Straight/Slightly Irreg. (index) 1.10-1.25
Presence of Islands:	
<input type="checkbox"/>	Several to Many
<input type="checkbox"/>	One or Few
<input checked="" type="checkbox"/>	Absent

Max Depth - 4.5'

Average Depth - 3.5'

WATERCOURSE INVENTORY DATA

Project Number: 100309

Date: 11/3/04

Wetland Number: W-III-LAKE

Photo Numbers: _____

USGS Quadrangle: _____

Field Investigators: William Kenny Associates, LLC

PART 1 - CHARACTERIZATION of WETLAND

[illegible]

WATERCOURSE INVENTORY DATA (continued)

PART 2 - CHARACTERIZATION of MODEL VARIABLES

LANDSCAPE VARIABLES	
Size:	<input type="checkbox"/> Small (<10 acres) <input type="checkbox"/> Medium (10-100 acres) <input checked="" type="checkbox"/> Large (>100 acres)
Wetland Juxtaposition:	<input type="checkbox"/> Connected Upstream and Downstream <input type="checkbox"/> Only Connected Above <input checked="" type="checkbox"/> Only Connected Below <input type="checkbox"/> Other Wetlands Nearby but not Connected <input type="checkbox"/> Wetland Isolated
Fire Occurrence and Frequency:	<input type="checkbox"/> Natural; Predictable Frequency <input type="checkbox"/> Natural; Sporadic Frequency <input type="checkbox"/> Human-caused; Predictable <input type="checkbox"/> Human-caused; Sporadic <input type="checkbox"/> Rare Event <input type="checkbox"/> No Evidence
Regional Scarcity:	<input type="checkbox"/> Not Scarce (>5% of total wetland area of region) <input checked="" type="checkbox"/> Scarce (<5% of total wetland area of region)
Watershed Land Use:	<input type="checkbox"/> > 50% urbanized <input type="checkbox"/> 25-50% urbanized <input checked="" type="checkbox"/> 0-25% urbanized - (SUPPLY WATER)
HYDROLOGIC VARIABLES	
Surface Water Level Fluctuation of Wetland:	<input type="checkbox"/> High Fluctuation <input checked="" type="checkbox"/> Low Fluctuation <input type="checkbox"/> Never Inundated
Frequency of Overbank Flooding:	<input type="checkbox"/> Return Interval > 5 yrs. <input type="checkbox"/> Return Interval 2-5 yrs. <input type="checkbox"/> Return Interval 1-2 yrs. <input checked="" type="checkbox"/> No Overbank Flooding
pH:	<input type="checkbox"/> Acid <5.5 <input type="checkbox"/> Circumneutral 5.5-7.4 <input type="checkbox"/> Alkaline >7.4 <input checked="" type="checkbox"/> No Water
Surficial Geologic Deposit Under Wetland	<input type="checkbox"/> Low Permeability Stratified Deposits <input type="checkbox"/> High Permeability Stratified Deposits <input checked="" type="checkbox"/> Glacial Till
Wetland Land Use:	<input type="checkbox"/> High Intensity (i.e. agriculture) <input type="checkbox"/> Moderate Intensity (i.e. forestry) <input checked="" type="checkbox"/> Low Intensity (i.e. open space)
Wetland Water Regime:	<input type="checkbox"/> Wet: Perm Flooded, Intermittently Exposed, Semiperm. Flooded <input checked="" type="checkbox"/> Drier: Seasonally Flooded, Temporarily Flooded, Saturated
Basin Topographic Gradient:	<input type="checkbox"/> High Gradient >2% <input checked="" type="checkbox"/> Low Gradient <2%
Degree of Outlet Restriction:	<input type="checkbox"/> Restricted Outflow <input type="checkbox"/> Unrestricted Outflow <input checked="" type="checkbox"/> No Outflow
Ratio of Wetland Area to Watershed Area:	<input type="checkbox"/> High >10% <input checked="" type="checkbox"/> Low <10%

Microrelief of Wetland Surface:	<input type="checkbox"/> Pronounced >45 cm <input type="checkbox"/> Well Developed 15-45 cm <input type="checkbox"/> Poorly Developed <15 cm <input checked="" type="checkbox"/> Absent
Inlet/Outlet Class:	<input type="checkbox"/> No Inlet/No Outlet <input type="checkbox"/> No Inlet/Intermittent Outlet <input type="checkbox"/> No Inlet/Perennial Outlet <input type="checkbox"/> Intermittent Inlet/No Outlet <input checked="" type="checkbox"/> Intermittent Inlet/Intermittent Outlet <input type="checkbox"/> Intermittent Outlet/Perennial Outlet <input type="checkbox"/> Perennial Inlet/No Outlet <input type="checkbox"/> Perennial Inlet/Intermittent Outlet <input type="checkbox"/> Perennial Inlet/Perennial Outlet
Nested Piezometer Data:	<input type="checkbox"/> Recharge <input type="checkbox"/> Discharge <input type="checkbox"/> Horizontal Flow <input checked="" type="checkbox"/> Not Available
Relationship of Wetlands' Substrate Elevation to Regional Piezometric Surface:	<input type="checkbox"/> Piez. Surface Above or at Substrate elev. <input type="checkbox"/> Piez. Surface below Substrate elev. <input checked="" type="checkbox"/> Not Available
Evidence of Sedimentation:	<input type="checkbox"/> No Evidence Observed <input type="checkbox"/> Sediment Observed on Wetland Substrate <input checked="" type="checkbox"/> Fluvial Soils
Evidence of Seeps and Springs:	<input type="checkbox"/> No Seeps or Springs <input type="checkbox"/> Seeps Observed <input type="checkbox"/> Perennial Spring <input checked="" type="checkbox"/> Intermittent Spring

SOIL VARIABLES	
Soil Lacking:	<input type="checkbox"/>
Histosol:	<input type="checkbox"/> Fibric <input type="checkbox"/> Hemic <input checked="" type="checkbox"/> Sapric
Mineral Hydric Soil:	<input type="checkbox"/> Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/> Silty <input checked="" type="checkbox"/> Clayey

VEGETATION VARIABLES	
Vegetation Lacking:	<input type="checkbox"/>
Dominant Wetland Type:	<input type="checkbox"/> Forested - Evergreen - Needle-leaved <input type="checkbox"/> Forested - Deciduous - Broad-leaved <input type="checkbox"/> Forested - Deciduous - Needle-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Broad-leaved <input type="checkbox"/> Scrub Shrub - Evergreen - Needle-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Broad-leaved <input type="checkbox"/> Scrub Shrub - Deciduous - Needle-leaved <input type="checkbox"/> Emergent - Persistent <input type="checkbox"/> Emergent - Non-persistent <input checked="" type="checkbox"/> Aquatic Bed

Number of Types & Relative Proportions:	Number of Types <input type="checkbox"/> Actual # <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 1 Evenness of Distribution <input type="checkbox"/> Even Distribution <input type="checkbox"/> Moderately Even Distribution <input checked="" type="checkbox"/> Highly Uneven Distribution																						
Vegetation Density/Dominance:	<input type="checkbox"/> Sparse (0-20%) <input type="checkbox"/> Low Density (20-40%) <input type="checkbox"/> Medium Density (40-60%) <input type="checkbox"/> High Density (60-80%) <input checked="" type="checkbox"/> Very High Density (80-100%)																						
Vegetative Interspersion:	<input type="checkbox"/> High (small groupings, diverse and interspersed) <input type="checkbox"/> Moderate (broken irregular rings) <input checked="" type="checkbox"/> Low (large patches, concentric rings)																						
Number of Layers and Percent Cover:	<table border="0"> <tr> <th>Number of Layers</th> <th>% Cover</th> </tr> <tr> <td><input type="checkbox"/> 6 or > (actual #)</td> <td>1. submergents:</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td>2. floating:</td> </tr> <tr> <td><input type="checkbox"/> 4</td> <td>3. moss-lichen:</td> </tr> <tr> <td><input type="checkbox"/> 3</td> <td>4. short herb:</td> </tr> <tr> <td><input checked="" type="checkbox"/> 2</td> <td>5. tall herb:</td> </tr> <tr> <td><input type="checkbox"/> 1</td> <td>6. dwarf shrub:</td> </tr> <tr> <td></td> <td>7. short shrub:</td> </tr> <tr> <td></td> <td>8. tall shrub:</td> </tr> <tr> <td></td> <td>9. sapling:</td> </tr> <tr> <td></td> <td>10. tree:</td> </tr> </table>	Number of Layers	% Cover	<input type="checkbox"/> 6 or > (actual #)	1. submergents:	<input type="checkbox"/> 5	2. floating:	<input type="checkbox"/> 4	3. moss-lichen:	<input type="checkbox"/> 3	4. short herb:	<input checked="" type="checkbox"/> 2	5. tall herb:	<input type="checkbox"/> 1	6. dwarf shrub:		7. short shrub:		8. tall shrub:		9. sapling:		10. tree:
Number of Layers	% Cover																						
<input type="checkbox"/> 6 or > (actual #)	1. submergents:																						
<input type="checkbox"/> 5	2. floating:																						
<input type="checkbox"/> 4	3. moss-lichen:																						
<input type="checkbox"/> 3	4. short herb:																						
<input checked="" type="checkbox"/> 2	5. tall herb:																						
<input type="checkbox"/> 1	6. dwarf shrub:																						
	7. short shrub:																						
	8. tall shrub:																						
	9. sapling:																						
	10. tree:																						
Plant Species Diversity:	<input type="checkbox"/> Low 1-2 plots sampled <input type="checkbox"/> Medium 3-4 plots sampled <input checked="" type="checkbox"/> High 5 or more plots sampled																						
Proportion of Animal Food Plants:	<input type="checkbox"/> Low (5-25% cover) <input type="checkbox"/> Medium (25-50% cover) <input checked="" type="checkbox"/> High (>50% cover)																						
Cover Distribution:	<input type="checkbox"/> Continuous Cover <input type="checkbox"/> Small Scattered Patches <input type="checkbox"/> 1 or More Large Patches; Parts of Site Open <input checked="" type="checkbox"/> Solitary, Scattered Stems																						
Dead Woody Material:	<input type="checkbox"/> Abundant (>50% of wetland surface) <input type="checkbox"/> Moderately Abundant (25-50% of surface) <input checked="" type="checkbox"/> Low Abundance (0-25% of surface)																						
Interspersion of Cover and Open Water:	<input type="checkbox"/> 26-75% Scattered or Peripheral <input type="checkbox"/> >75% Scattered or Peripheral <input type="checkbox"/> <25% Scattered or Peripheral <input checked="" type="checkbox"/> 100% Cover or Open Water																						
Stream Sinuosity:	<input type="checkbox"/> Highly Convoluted (index 1.50 or >) <input type="checkbox"/> Moderately Convoluted (index 1.25-1.50) <input checked="" type="checkbox"/> Straight/Slightly Irreg. (index) 1.10-1.25																						
Presence of Islands:	<input type="checkbox"/> Several to Many <input type="checkbox"/> One or Few <input checked="" type="checkbox"/> Absent																						

* Max Depth - >10'

* Average Depth - ?

Appendix F-3
Hydrogeologic Assessment

**HYDROGEOLOGIC ASSESSMENT
EPT CONCORD RESORT PROPERTY – SOUTHEAST REGION
TOWN OF THOMPSON
SULLIVAN COUNTY, NEWYORK**

Prepared For:

AKRF Engineering, P.C.

May 2012

(Via Electronic Transmission)

Prepared By:

LBG Engineering Services, P.C.
4 Research Drive, Suite 301
Shelton, CT 06484

TABLE OF CONTENTS

	<u>Page #</u>
INTRODUCTION	1
HYDROGEOLOGIC SETTING	1
Surface Water Features	2
Surficial Geology	3
Bedrock Geology	4
Fracture-Trace Analysis	4
PRECIPITATION AND GROUNDWATER RECHARGE	5
Direct Recharge to the Stratified-Drift Deposits	6
Bedrock Groundwater Recharge	7
EXISTING ONSITE WELLS	7
Active Wells	7
Inactive Wells	9
POTENTIAL AREAS OF GROUNDWATER QUALITY CONCERN	11
PROPOSED TEST WELL LOCATIONS	13
INVESTIGATIONS OF EXISTING WELLS	14
WELL TESTING AND PERMITTING	15
CONCLUSIONS	15

LIST OF FIGURES
(at end of report)

Figure

- 1 Site Location Map
- 2 Surficial Geology
- 3 Bedrock Geology
- 4 Photographs of Bedrock Outcrops on Study Property
- 5 Precipitation Frequency Analysis Based on Data from Rock Hill 3SW Climate Station
- 6 Photographs of Existing Wells 12 and 14 on Former Mountainview Bungalow Property, Thompsonville Road
- 7 Photographs of Existing Well 20 and Spring 2

Plate
(at end of report)

Plate

- 1 Site Map – Existing Conditions

**HYDROGEOLOGIC ASSESSMENT
EPT CONCORD RESORT PROPERTY – SOUTHEAST REGION
TOWN OF THOMPSON
SULLIVAN COUNTY, NEWYORK**

INTRODUCTION

LBG Engineering Services, P.C. (LBGES) has completed the following Hydrogeologic Assessment for the EPT Concord Resort located in the Town of Thompson, New York as one of the initial tasks in the development of the water supply for the first phase of site development. The goal of this assessment was to review the existing hydrogeologic conditions on the southeast region of the site, where the first phase of development has been proposed, to select suitable test well locations to assess groundwater availability in this region of the property.

As part of this study, LBGES reviewed published geologic and hydrogeologic maps and information for the study area, as well as in-house data records and reports provided by AKRF Engineering, P.C. (AKRF) pertaining to previous studies and well testing completed at the site. Following completion of the data review, a site visit to the property was conducted by LBGES to confirm the presence of favorable geologic features identified in the in-house data review process and to assess the suitability of the potential test well sites initially selected.

HYDROGEOLOGIC SETTING

The EPT Concord Resort site is a 1,538+ acre property located in the Town of Thompson in Sullivan County, New York (figure 1, Plate 1). The project site consists of three golf courses (one active, two inactive); support facilities for the golf course (maintenance facility, Pro Shop, modular building); a small inactive ski area; several vacant summer bungalow colonies and rental homes; and large areas of undeveloped land.

The topography at the site is variable (Plate 1). Topographic highs occur on the eastern and western portions of the site in the range of 1,460 ft msl (feet above mean sea level) to 1,560 ft msl. The highest topography occurs on the parcel located north of Kiamesha Lake Road, on the northwest corner of the property. The topographic low region of the property is the centrally located Kiamesha Creek valley, which turns east at Kiamesha Lake Road and then flows along the northeastern property line. Topographic elevations along the Creek range from

1,340 ft msl at the southern property line to 1,170 ft msl on the eastern property boundary near County Route 161.

Surface Water Features

The project site is located in the Delaware River Basin Watershed. The major surface water feature is Kiamesha Creek, which flows centrally through the property from south to north. The Creek turns to flow east at Kiamesha Lake Road and then turns southeast to flow along the northeastern property line. Kiamesha Creek receives water from two small tributary streams near the southern property boundary. Based on the New York State Department of Environmental Conservation (NYSDEC) surface water classification system, the surface water in Kiamesha Creek is Class C, which is defined as suitable for fisheries and non-contact activities, both not for use as drinking water or for contact recreation such as swimming.

Several ponds are located in the Kiamesha Creek valley in the area of the onsite golf courses. The ponds are reportedly used as the source of irrigation water for the golf courses and, when the water level in the irrigation ponds are low, water is pumped from Kiamesha Creek to fill the ponds and supplement the irrigation demand.

In addition to the ponds along Kiamesha Creek, there are two man-made ponds on the southeast region of the site along Joyland Road. These ponds appear to have been formed by damming portions of the small tributary stream which flows through this area. The ponds are both reported to be very shallow, in the range of 5 feet to 10 feet at their deepest points.

Several wetland features are also located on the study property in and near the Kiamesha Creek valley and on the east/southeastern portion of the property. The wetlands along the southern reach of Kiamesha Creek are mapped as NYSDEC regulated wetlands MO-58, MO-57 and MO-56. Activities such as drilling or construction within a NYSDEC wetlands or the 100-foot adjacent buffer area require permitting from the NYSDEC.

Wetlands that are not regulated by the NYSDEC are under the jurisdiction of the Town of Thompson (i.e., local wetlands). In either case, a permit from the Army Corp of Engineers may be needed depending on the nature and extent of the work planned in the wetlands. Wetland jurisdiction on the project site should be confirmed prior to undertaking construction and/or other activities in the existing wetland features.

Two springs were observed during the site visit conducted by LBGES. Spring #1 is located on the former Mountainville Bungalow Property that is north of Thompsonville Road (tax parcel 15-1-25) and flows from the side of the hill on that parcel. A pump house and two cisterns were observed during the site visit at the location of Spring #1. It is likely Spring #1 was used as potable water-supply source for the former bungalow colony. The spring was flowing into one of the cisterns at a rate of about 5-10 gpm (gallons per minute) at the time of the site visit.

Spring #2 is located on the former Greenburg Property (tax parcel 23-2-10) near the existing Well 18 (Plate 1). Spring #2 is a small seep which had been lined with rocks by a former property owner. Spring #2 drains into the large wetland feature on the southeastern portion of the project site.

Surficial Geology

The New York State Geological Survey, Surficial Materials Map – Lower Hudson Sheet (1997) was reviewed to identify the types of unconsolidated deposits on the property.

A stratified-drift glacial deposit, known as a kame deposit, has been mapped along the Kiamesha Creek valley. Kame deposits consist of stratified layers of silt, sand and/or gravel material. Stratified glacial deposits have potential for the development of high-yielding wells depending on the areal extent of the deposit, the saturated thickness of the deposit and the predominant grain-size within the deposit (i.e., silt versus gravel). Based on information from the NYSDEC Unconsolidated Aquifers Map (2008), the yield potential for wells drilled in the kame deposit on the property is between 10 to 100 gpm. During the site visit completed by LBGES, the Golf Maintenance Manager, Mr. Chris Hummel, stated that several borings were drilled under the supervision of C.A. Rich in 2006 on the southern portion of the property in the vicinity of the mapped kames deposits, however, records of the drilling activities were not available for review by LBGES.

The remaining area of the property is covered by glacial till. Glacial till consists of non-sorted, non-stratified sediments deposited by glacial activity. The sediments contain varying proportions of clay, silt, sand, gravel and boulders. Till is generally not suitable for public supply well development because, as a result of the unsorted character of the material, it does not

transmit water in sufficient quantities to support a well. A map of the surficial geology underlying the project site is shown in figure 2.

The thickness of the unconsolidated deposits (overburden) above bedrock is variable throughout the project site. Bedrock outcrops were observed on the northwest corner of the property, near the intersection of Concord Road and Kiamesha Lake Road and also along the access road to the Chalet/Pro Shop off of Chalet Road. However, in the absence of well or boring logs, the thickness of the overburden on the remaining areas of the property cannot be estimated.

Bedrock Geology

Based on the New York State Geological Survey, Bedrock Geology Map – Lower Hudson Sheet (1999), two sedimentary bedrock formations underlie the site: the Lower Walton Formation on the eastern region of the site; and the Upper Walton Formation to the west. The bedrock contact between the two formations runs generally southwest to northeast through the Kiamesha Creek valley in the central region of the project site. Both bedrock formations are sedimentary rock types containing layers of shale, sandstone and conglomerate. A fault line has also been mapped to the south of the project site near Route 17, however, no bedrock faults are mapped at the study property. The bedrock geology for the property and surrounding area is shown on figure 3.

As described above, bedrock outcrops were observed on the northwest corner of the property, near the intersection of Concord Road and Kiamesha Lake Road, and along the access road to the Chalet/Pro Shop off of Chalet Road during LBGES's site visit. The bedrock on the northwest corner of the project site consisted of red shale which was thinly bedded and friable. The bedrock on the access road to the Pro Shop was grey in color and more massive, however, some bedding planes were observed in this rock formation as well. Pictures of the bedrock outcrops observed on the project site are shown on figure 4.

Fracture-Trace Analysis

LBGES completed a fracture-trace analysis of the project site using the existing USGS topographic quadrangle to identify and delineate linear features that are indicative of potential faults, fracture joint systems, old river and stream courses, and major unconformities underlying the study property. These features frequently are indications of fractured or weathered zones

within the bedrock and their identification is useful for identifying major fracture conduits for groundwater recharge and in selecting favorable well sites to develop higher yield wells. The lineations represent a potential series of multiple fracture zones in the underlying bedrock which radiate in various directions both vertical and horizontal; not just a single large-scale fracture in the bedrock.

Wells placed on or near the intersection of two or more linear features generally produce higher yields, but successful results can be found along the trend of a single linear feature. It should be noted that fracture-trace analysis is a method for improving the likelihood of obtaining better-than-average well yields as compared to randomly or conveniently located wells. The assurance of obtaining a successful well located along a linear feature cannot be guaranteed.

The most prominent feature identified is the lineation along the Kiamesha Creek valley. However, several other fracture-trace lineations were identified on and near the project site which also appear suitable to target as bedrock test well locations. The fracture-trace lineations are shown on Plate 1.

PRECIPITATION AND GROUNDWATER RECHARGE

Groundwater in unconsolidated and bedrock aquifers is a renewable resource that is continually replenished by precipitation on the local watersheds. Of the precipitation which falls on a watershed, about half the amount is returned to the air through evaporation and transpiration processes; the remaining half is available to become surface-water runoff, which discharges to surface-water bodies within a watershed, and groundwater recharge to the underlying aquifers. A portion of the groundwater recharge that infiltrates the soil and overburden (unconsolidated) material eventually seeps down to recharge the bedrock fracture system and becomes available for capture by bedrock wells for water-supply use.

Reviewing the precipitation recharge estimate of a site is useful for obtaining preliminary information regarding groundwater availability, however, the drilling and testing of wells to determine the feasibility of development of groundwater sources on a property is necessary. Data collected during the completion of pumping tests on bedrock and overburden wells, specifically the demonstration of stabilized yield and water-level drawdown, is the measure by

which to gauge whether the groundwater resources of a property are capable of sustaining the proposed groundwater withdrawals.

Direct Recharge to the Stratified-Drift Deposits

The annual volume of recharge from precipitation to the unconsolidated stratified-drift aquifer depends upon several factors, including the extent of the coarse-grained materials, the annual precipitation rate, the type of surface cover present, and the topographic slope of the land surface. The estimated average recharge rate for the area ranges from 0.8 mgd/mi² (million gallon a day per square mile) to 1.1 mgd/mi² (MacNish and Randall, 1982). Recharge to the stratified-drift material at the study parcel under “normal” recharge conditions was estimated by multiplying the lateral extent of the deposits by the average recharge rate.

Precipitation is an important and the largest source of recharge to the overburden and bedrock aquifers. The quantity of recharge available to the groundwater system is dependent upon the amount of precipitation. The long-term 30-year average annual precipitation for the Rock Hill 3 SW climate station located near the EPT Concord Resort is 49.34 inches.

Based on the New York State Geological Survey, Surficial Materials Map (1997), the same deposit underlying the EPT Concord Resort covers approximately 272 acres. Under normal precipitation conditions, recharge to this 272-acre area of stratified-drift deposits would range, on average and over the long term, from approximately 0.340 mgd to 0.468 mgd, which is equal to about 236 gpm to 325 gpm.

During drought periods, groundwater recharge and available water supply would be reduced. Using data from the Rock Hill 3 SW climate station, a precipitation probability graph was created (figure 5) to estimate the 1-year-in-30-year low precipitation (drought) for the region. Drought precipitation (one-year-in-30 event) is approximately 34.5 inches or about 70% of the average annual precipitation. Assuming groundwater recharge decreases at the same rate as precipitation during periods of diminished rainfall, the estimated average recharge rate would decrease about 30 percent to 0.248 mgd and 0.328 mgd, or about 172 gpm to 228 gpm, during a 1-year-in-30 drought.

Additional sources of recharge to stratified-drift aquifers include infiltration from surface-water bodies (i.e., stream, ponds, wetlands) and recharge from upland till and bedrock areas adjacent to the aquifer. However, because there is limited information available regarding

the aerial extent, type of material present, and the thickness of the kame deposits, only direct precipitation recharge to the stratified-drift has been reviewed in this report.

Bedrock Groundwater Recharge

According to the Water Resources Investigation Report of the U.S. Department of the Interior, Geological Survey "Ground-Water Appraisal of the Fishkill-Beacon Area, Dutchess County, New York" (Snively, 1980), recharge to till-covered metasedimentary bedrock is approximately 400,000 gpd/sq. mi. (gallons per day per square mile), which is equal to about 8 inches annually or 625 gpd/acre (gallons per day per acre). Based on this recharge rate, the 1,538+-acre EPT Concord Resort receives about 0.961 mgd (million gallons per day) or about 668 gpm of direct precipitation recharge under average precipitation conditions to the bedrock aquifer underlying the property.

During drought periods, groundwater recharge and available water supply would be reduced. Assuming the rate of groundwater recharge also decreases by 30% during a 1-year-30 drought, the groundwater recharge to the bedrock aquifer under drought conditions would be about 0.673 mgd or about 467 gpm.

EXISTING ONSITE WELLS

Thirty-one existing wells are reported on the project site (Plate 1). Preliminary information regarding the existing wells was provided in the 2006 Hydrogeologic Evaluation report by C.A Rich. During the site visit, LBGES and Mr. Hummel located 24 of the existing wells. The wells were mainly drilled to supply the golf course facilities, former bungalow colonies, and vacant rental properties. Several test wells were also identified which were reportedly drilled as part of the previous onsite groundwater supply investigations. No well completion logs or drilling reports were available for any of the onsite wells.

Active Wells

There are two active bedrock wells which currently operate to supply water to the Golf Course Maintenance Building, Modular Building which replaced the Monster Clubhouse, and the Pro Shop/Chalet building. Well #1 is located in a well pit directly behind the Golf Course

Maintenance building. A short-term yield test completed on the well in 1999 by LBG measured the potential yield of the well at 50 gpm. A 72-hour pumping test was reportedly completed at a later date on this well which verified this yield estimate, however, the information for the 72-hour pumping test was not available for review.

Water samples for NYSDOH Part 5, subpart 5-1 analyses were collected from Well #1 in 1998 and volatile organic compound (VOC) samples were collected again in 1999 during the short-term well test. All parameters were reported to meet drinking water standards from these analyses.

The second active supply well, Well #2, is located on the west side of Kiamesha Creek near the Golf Maintenance Building. The well is completed with a stick-up casing (i.e., the casing is set above grade). The well is reported to be 423 feet deep and have a safe yield of 32 gpm. However, the well testing data for Well #2 was not available to LBGES for review to verify this reported yield information.

Bedrock Wells #1 and #2 supply water to the Golf Course Maintenance Building, the Modular Building, and the Pro Shop/Chalet building. The water from the wells receives Ultraviolet (UV) treatment at the Pro Shop/Chalet. A third well was also drilled in the vicinity of Maintenance Building, however, the yield of the well was reportedly very low and it is not currently in use.

The potential for future continued use of Wells #1 and #2 under the proposed development plan is limited. Although the yields of the wells are sufficient, the land use in the vicinity may result in regulatory (Health Department and/or NYSDEC) restriction on their continued use. The proximity of the wells to the Golf Maintenance Facility poses concern regarding current chemical (fertilizer, pesticide, herbicide) storage and gasoline/fuel underground storage tanks (USTs) usage. Additionally, soil and groundwater contamination near the Golf Maintenance Building may also be a concern based on historic spills and land use activities. Review of the locations by the regulatory agencies and possibly additional yield and/or water-quality testing may be needed to determine their potential for continued use under the new proposed development.

A third active well was located on the EPT Concord Resort during the site visit. Well #23 is currently being used to supply the one bungalow residence that remains in use on the Breezy Corners Bungalow parcel at the corner of Joyland Road and Thompsonville Road. The

well is located in a well pit adjacent to the house. The construction details for the well, such as total depth and yield, are unknown.

Inactive Wells

The remaining existing onsite wells are currently not in use. Many of the wells are located in well pits and the well pumps and appurtenance (if any are present) are old, damaged or nonfunctioning. LBGES briefly assessed the condition of the existing wells located during the site visit along with their location in regard to the proposed future test well sites. Photographs of some of the inactive wells are shown on figures 6 and 7.

Wells #3 and #4 are located west of the Golf Maintenance Building. Well #3 is located at the base of the International Golf Course Green #2 and has a stick-up casing and a well cap with an H.W. Goetz Well Drilling logo. Well #4 is a very short stick-up well with a piece of metal plate laid over top, however, the plate was not secured with any bolts. The depth of Well #4 was reported to be 530 feet by Mr. Hummel, but no well log was available. The metal plate covering the well was askew when the well was observed during the site visit, and the open borehole was exposed. Mr. Hummel reported that one or both of these wells were yield tested by Mr. Goetz approximately 6 years ago, however, the well testing data were not available for review.

Wells #6 and #8 are located in well pits next to vacant residential homes (rental properties). The wells were still equipped with pumps, but it is unknown if the pumps still function. Both homes are vacant and there is no power service to the properties. Well #7 is located on a vacant parcel on the west side of Chalet Road. The well is located in a well pit and is still equipped with a pump. The condition of the pump could not be determined. The well was formerly used to supply a mobile trailer on the parcel, but the trailer is now gone.

Wells #9, #13 and #20 are residential wells that were reported to have supplied former single-family rental property homes which have been torn down. The pumps have been removed from Wells #9 and #20. Well #13 could not be located during the site visit under the snow cover on the ground. Well #9 had a well cap, however, the cap for Well #20 was missing and the top of the well was open and exposed (figure 7).

Wells #10, #11, #12, #14 and Spring #1 were reportedly used as water-supply sources for the former Mountainville Bungalow Colony on Thompsonville Road. The bungalow colony is no longer active and all buildings associated with it have been torn down. Well #10 was not

located during the site visit. Well #11 was found in a concrete well pit, however, the well pit was flooded and the top of the well could not be seen under the water to assess its condition. Well #12 is a very short stick-up well on the west side of the bungalow property (figure 6). There was no pump in Well #12 and the older style cap, which has a hole in the center to suspend the well pump, was open leaving the well exposed. Well #14 is a taller stick-up well on the east side of the bungalow property (figure 6). Well #14 still has its pump and some piping present, however, there was no electrical service and the overall condition of the equipment was poor.

Wells #15, #16, #17 and #18 are located on the former Greenburg Property on the south side of Thompsonville Road. Well #18 was located during the site visit. Mr. Hummel stated that a caretaker had lived in the home associated with Well #18 until recently and the well had been in use until the home was vacated. Well #18 had no pump and no well cap; leaving the top of the well casing exposed. Well #18 also had a noticeable dent in the side of the casing where it appears to have been hit by a vehicle. The location of the well pit containing Well #15 was identified during the site visit, however, the covering of the well pit had rotted and collapsed. Therefore, the well inside the pit was not observed during the site visit. Wells #16 and #17 were not located under the snow cover during the site visit. All of the homes are reported to be vacant on the property and Mr. Hummel stated that several buildings have been torn down on the property.

Wells #19 and #31 are located on the former Green Property on the east side of Joyland Road. The wells were reported to be a former supply well for a summer camp on the site. All buildings on the property have been torn down. Well #19 is a stick-up well which had some wiring present, but it appeared the column pipe holding the pump had broken and the pump may have fallen down the well. The well was overall in very poor condition with holes rotted in the side of the well casing and portions of the well cap were open leaving the well exposed. Well #31 is located in a well pit inside a small building on the property. There was no cap on this well and there was no pump or other appurtenance present.

Wells #21, #22, and #23 were supply wells for the former Breezy Corners Bungalow Colony property. All three wells are located in well pits. Wells #21 and #22 are not in service although both appeared to still be equipped with pumps. Well #23 remains in use as described in the above section.

Wells #24 and #25 are former supply wells for vacant residential homes (rental properties) on the project site. Well #24 was reported to be located in the basement of the rental house. The house was not entered during the site visit because of safety concerns. Well #25 is a stick-up well in the woods north of the vacant rental home on Rock Ridge Road. The well was equipped with a well pump, but no electric service.

Well #26 is located on the Lakeside Villa property. The well is a stick-up well, with rusty casing and a H.W. Goetz logo well cap. LBGES did not open the well to determine whether a pump was present. All buildings on the property appeared vacant, therefore, it is likely the well is not currently in use.

Wells #27, #28 and #29 appear to be supply wells for the Silvers Apartments. The buildings were run down and it was unclear whether any were currently occupied or whether the wells were in use. Wells #28 and #29 were stick-up wells in relatively good condition. The wells were not opened to determine whether they were equipped with pumps. Well #27 was located in a well pit adjacent to Well #28. There was no pump in Well #28 and the building, which had been constructed over the well pit, was dilapidated and crumbling.

Well #30 is the supply well for the single-family home on the Cohen property. The well was not located during the site visit.

As discussed above, wells which were not found during the site visit include Wells #5, #10, #13, #16, #17, #24 and #30. Well #5 is reported to be located along the access road to the Chalet/Pro Shop. Mr. Hummell stated that he has looked for this well several times in the past and has been unable to find it. He believes the well was destroyed or covered at some point in the past. The remaining wells are likely still present on the study property, and once the snow cover has melted, another search for them will be completed.

POTENTIAL AREAS OF GROUNDWATER QUALITY CONCERN

There are several areas of concern (AOC) on the property which could pose potential issues (i.e., siting of new well locations) related to groundwater contamination. Based on information provided by AKRF, areas of the site and adjacent Concord Hotel property are involved in the Brownfield Cleanup Program. The main areas of concern are: the former Concord Hotel site (off property); the former Gas Station and the former International Golf Club

on the northwestern region of the property near Concord Road; the existing Golf Maintenance Building/Disposal Area on Chalet Road; and the disposal area on the International Golf Course on the northern region of the property.

Potential constituents of concern related to these AOCs include PCBs, pesticides, VOCs, semi-volatile organic compounds (SVOCs) and metals. Limited data are available regarding the potential or existing impacts of these sites on the local groundwater quality.

In addition to these areas in the Brownfield Cleanup Program, several other existing land uses on the project site should be noted as posing a potential concern for groundwater quality. Several reported USTs and above ground storage tanks (ASTs) are reported to still be in operation at the property, most notably by the existing Golf Maintenance Building. In addition, chemical storage (herbicide, pesticide, etc.) for the golf course is also located at the Golf Maintenance Building. The presence of ASTs/USTs and chemical storage will limit the areas to be considered for test well siting because of NYSDOH offset distance requirements for public water-supply wells.

Another potential groundwater quality concern is the historic and ongoing application of herbicides, pesticides, and other turf management products to the onsite golf courses. The ongoing use of the chemicals may influence regulatory approval of test well sites near the golf courses and may result in additional preliminary groundwater quality analyses to assess the potential impacts.

No AOC were identified on the southeast portion of the property which was the focus of this report, however, the existing land uses and known AOC on other areas of the property described above may impact the selection of future well sites on other portions of the study property. This factor may potentially limit the capacity of the groundwater resources which can be developed on the site by preventing drilling and water-supply development in certain areas which may be geologically favorable. Additionally, although the AOCs and chemical storage and application areas are not located in the southeastern area of the site, once groundwater contaminations has occurred, contaminants can migrate via groundwater flow to other areas beyond the spill/application area. Also, the pumping of wells can potentially change the direction of groundwater flow and increase both the rate and spread of contaminant migration in the aquifer.

PROPOSED TEST WELL LOCATIONS

LBGES has selected seven proposed bedrock test well locations on the southeastern region of the study property (Plate 1). The proposed well locations were selected based on a review of available geologic and hydrogeologic data for the study property and to meet regulatory offset distance requirements from known potential sources of contamination.

The well sites have been positioned to accommodate the New York State Department of Health (NYSDOH) well siting guidelines requiring a 100-foot radius of land ownership and a 200-foot radius of sanitary control around a public water-supply well based on the preliminary site development plan provided by AKRF. Should the site plan layout be modified, the revised layout will need to maintain the sanitary offset distances (which are listed in the NYSDOH Sanitary Code Appendix 5-D) to preserve the well locations or make allowances to construct wells at new locations. In addition, the proposed test wells that are located in proximity to wetlands identified as being regulated by NYSDEC have been sited outside of the 100-foot adjacent buffer area.

The proposed bedrock test well locations should be reviewed with the Sullivan County Health Department (SCDOH) prior to drilling and local well drilling permits from the Town of Thompson will also need to be obtained. The locations of the onsite wetland boundaries should be confirmed and reflagged, if necessary.

LBGES recommends that four of the seven test well locations be drilled initially, followed by the completion of short-term yield tests and preliminary testing of the groundwater quality. Based on the results of the preliminary well drilling and testing program, one or more of the other proposed test well locations may need to be drilled in order to develop the required supply.

Based on information provided by AKRF, at full build-out of the property the planned development would require approximately 1.1 mgd (million gallons per day) to meet the projected water demand. To obtain this quantity of water, the drilling of wells on other areas of the study property, in addition to those in the southeast region of the study property proposed herein, and the use of existing wells on the site, if permissible by the Health Department, will likely be needed. In addition, groundwater exploration of the unconsolidated, stratified-drift

kame deposits along the Kiamesha Creek valley may be warranted as part of the exploration program to develop sufficient capacity to meet the project's water demand.

INVESTIGATION OF EXISTING WELLS

Several of the existing onsite wells were located in close proximity to LBGES's proposed test well sites, including Wells #9, #10, #11, #12, #13, #14, #15, #16, #17, #18, #19 and #20. It is not likely that these wells can be reused as supply wells for the proposed development because of their poor conditions, unknown construction details and inability to meet Health Department sanitary control radius requirements. However, the wells have the potential to provide useful information during the completion of the groundwater resource investigation at the site.

LBGES recommends that the existing wells be used as water-level monitoring locations during the proposed well yield tests on the new bedrock test wells. The added monitor well locations will provide useful information regarding well interference under pumping conditions and help determine suitable locations for drilling additional test wells. The information will also be useful in obtaining the regulatory approvals that will eventually be needed to put a supply well into service.

Consideration should also be given to conducting preliminary yield tests (8 to 10 hours) on one or more of the existing wells to access the overall yield potential of wells on the southeastern region of the property. However, prior to using any of the wells as water-level monitoring points or conducting preliminary yield testing, the total depths of the wells will need to be measured, and in some cases, the existing pumps/appurtenances will need to be removed.

As discussed above, several of the wells are missing caps, have holes in the casing or other conditions such as flooding which represent potential sources for contamination to the bedrock aquifer on the property. LBGES is recommending that the condition of these wells be addressed as we move forward with the development of the onsite groundwater supply to prevent the creation of water-quality concerns from these unsecured wells such as bacterial contamination of the aquifer from surface water runoff into the open wells. Existing wells that will not serve a permanent function with the water-supply system for the development will need to be abandoned in accordance with Health Department regulations.

WELL TESTING AND PERMITTING

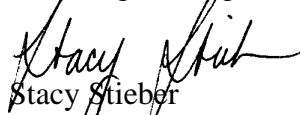
Once the test well drilling program has been completed and there is sufficient available capacity to meet the water demand for the Phase I portion the proposed development, a 72-hour pumping test program will need to be completed to confirm the stabilized yield of the wells. The testing program will include monitoring of existing onsite and offsite wells, if applicable, to determine potential interference under pumping conditions, monitoring of nearby surface-water features to determine potential impacts, water-quality sample collection for the NYSDOH Sanitary Code Part 5, Subpart 5-1 parameters for public water-supply wells, and collection of microscopic particulate analysis samples for wells located within 200 feet of a surface water body for an assessment of GWUDI (groundwater under the direct influence of surface water). The results of the pumping test, monitoring program and water-quality analyses will be used to support applications to the NYSDEC, NYSDOH, SCDOH and DRBC (Delaware River Basin Commission) for approval of the proposed water supply.

CONCLUSIONS

- Seven bedrock test well locations have been identified in the Phase I construction area on the southeastern area on the EPT Concord Resort based on LBGES's review of the onsite geology.
- LBGES recommends that four of the seven well locations be drilled initially and that preliminary yield tests and water-quality analysis be conducted. Based on the results of the preliminary well drilling and testing program, additional test well locations shown on the attached plan may need to be drilled.
- The existing land uses and known Brownfield AOCs could impact the selection of future well sites on other portions of the property. This factor may potentially limit the capacity of the groundwater resources which can be developed on the site by preventing drilling and water-supply development in certain areas which may be geologically favorable.

- The existing onsite wells can potentially be used to provide additional information through expanded water-level monitoring and/or yield testing. However, the overall condition of the wells is poor and they also pose a potential concern for groundwater quality in their current condition.
- Investigation of stratified-drift kame deposits along the Kiamesha Creek valley may be warranted as part of the groundwater exploration program to develop sufficient capacity to meet the project's demand.

LBG Engineering Services, P.C.



Stacy Stieber
Senior Hydrogeologist

Reviewed by:



William K. Beckman, P.E.
Principal

etn

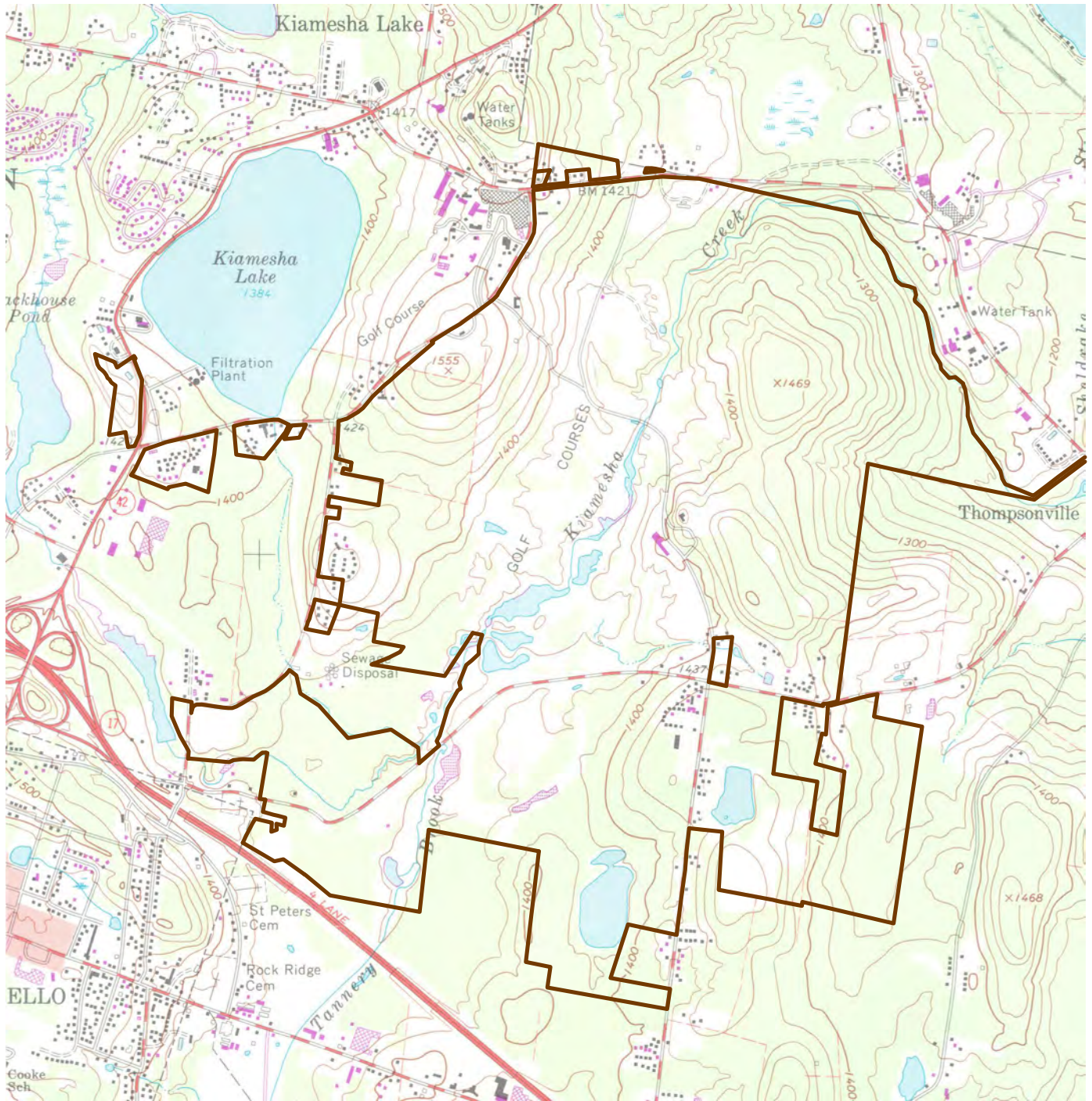
May 4, 2012

H:\AKRF\2012\Hydrogeologic Assessment final.doc

REFERENCES

- Caldwell, D. H., 1989, "Surficial Geologic Map of New York, Lower Hudson Sheet".
- Cornell University, Northeast Regional Climate Center, <http://climod.nrcc.cornell.edu/>
- Fisher, Donald W., Y.W. Isachsen, L.V. Rickard, 1970, reprinted 1995, "Bedrock Geologic Map of New York, Lower Hudson Sheet".
- MacNish, R.D. and Randall, A.D., 1982, "The Stratified-Drift Aquifers in the Susquehanna River Basin, New York", New York Department of Conservation Bulletin 75, 68p.
- New York State Department of Environmental Conservation, Division of Water, Bureau of Water resources Management, February 29, 2008, "Unconsolidated Aquifers at 1:125,000-main-Upstae NY (NYSDEC).
- New York State Department of Health, Bureau of Public Water Supply Protection, April 2001, Revised July 2011, "New York State Aquifers".
- New York State Geological Survey, 1999, "Bedrock Geology-Lower Hudson Sheet", New York State Museum Map and Chart Series Number 15.
- New York State Geological Survey, 1997, "Surficial Geology-Lower Hudson Sheet", New York State Museum Map and Chart Series Number 40.
- Snively, Deborah S., 1980, "Ground-Water Appraisal of Fishkill-Beacon Area Dutchess County, New York", U.S. Geological Survey, Open File Report 80-437.
- Soren, Julian, 1961, "The Ground-Water resources of Sullivan County, New York", U.S. Geological Survey, New York State Water Resources Commission, Bulletin GW-46.
- Wolcott, Stephen W., 1987, "Potential Well Yields from Unconsolidated Deposits in the Lower Hudson and Delaware River Basins, New York", U.S. Geological Survey, Water-Resources Investigations Report 87-4042.

FIGURES



SOURCE: USGS TOPOGRAPHIC QUADRANGLE MONTICELLO, NEW YORK (PHOTOREVISED 1982).

LEGEND

— PROPERTY BOUNDARY



QUADRANGLE LOCATION

0 2000

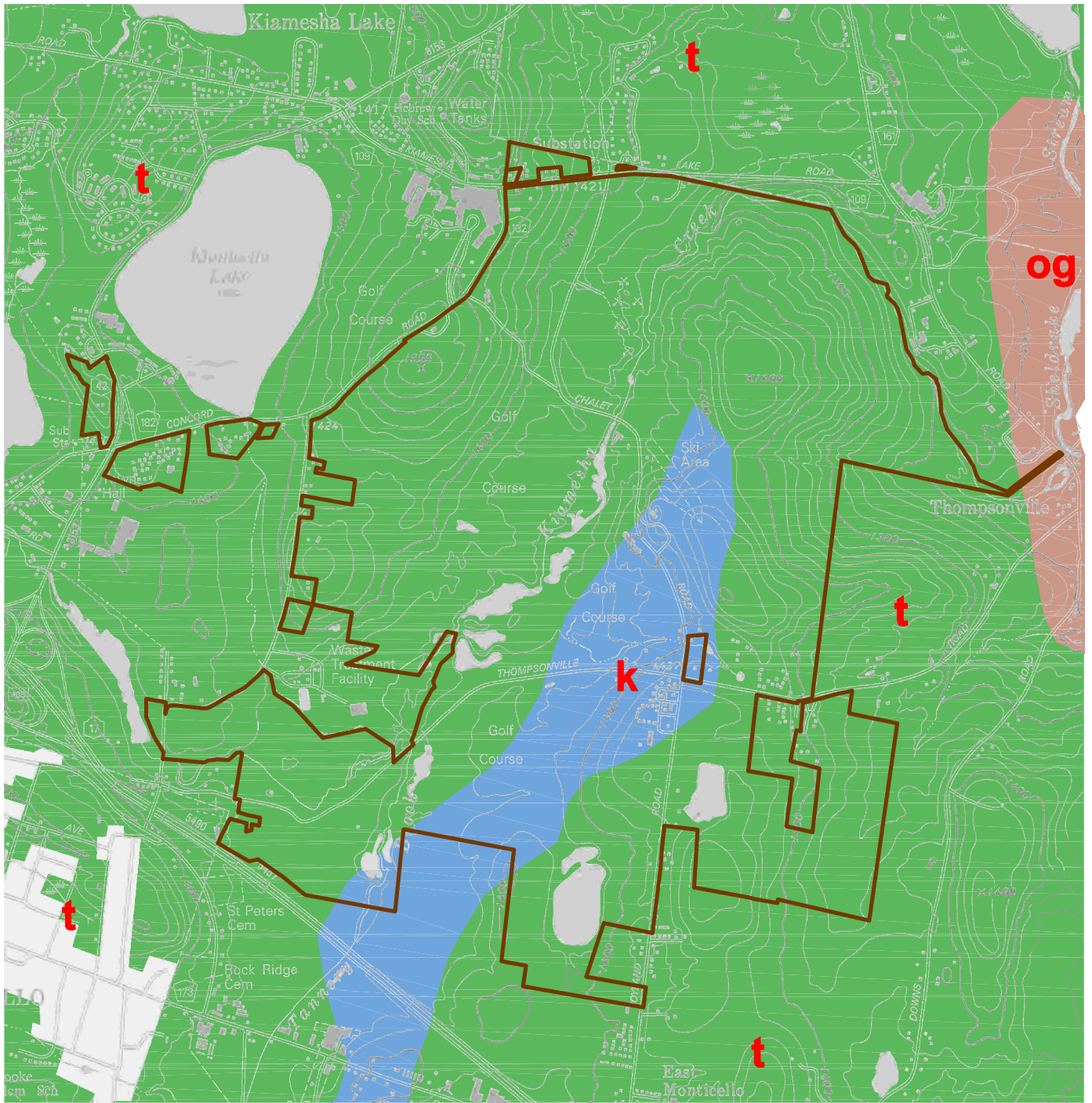
SCALE IN FEET

CONCORD RESORT TOWN OF THOMPSON SULLIVAN COUNTY, NEW YORK

SITE LOCATION MAP

DATE	REVISED	PREPARED BY:
		LBG ENGINEERING SERVICES, P.C.
		Professional Environmental and Civil Engineers
		4 Research Drive
		Suite 301
		Shelton, Connecticut 06484
		(203) 929-8555
DRAWN:	RAC	CHECKED: SS
		DATE: 03/13/12
		FIGURE: 1





SOURCES:

- NEW YORK STATE GEOLOGICAL SURVEY, 1997, "SURFICIAL GEOLOGY - LOWER HUDSON SHEET", NEW YORK STATE MUSEUM MAP AND CHART SERIES NUMBER 40.
- USGS TOPOGRAPHIC QUADRANGLE MONTICELLO, NEW YORK (GIS VERSION).
- BASE MAPS FOR CONCORD RESORT PROVIDED BY AKRF, INC.

LEGEND

PROPERTY BOUNDARY

KAME DEPOSIT

GLACIAL TILL

OUTWASH SAND AND GRAVEL



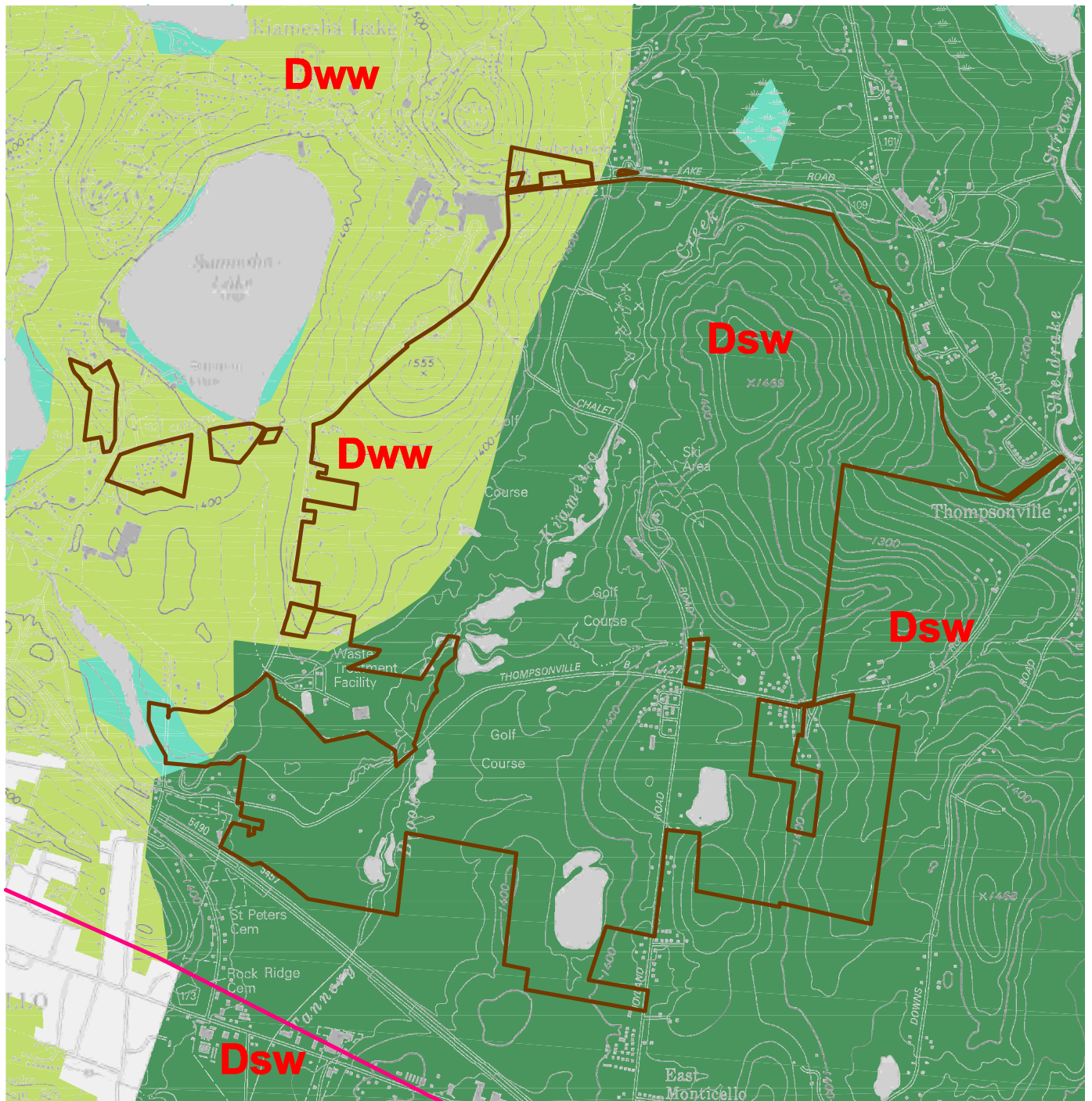
0 2000
SCALE IN FEET

**CONCORD RESORT
TOWN OF THOMPSON
SULLIVAN COUNTY, NEW YORK**

SURFICIAL GEOLOGY

DATE	REVISED	PREPARED BY:
		LBG ENGINEERING SERVICES, P.C.
		Professional Environmental and Civil Engineers
		4 Research Drive
		Suite 301
		Shelton, Connecticut 06484
		(203) 929-8555
DRAWN:	RAC	CHECKED: SS
		DATE: 03/13/12
		FIGURE: 2





SOURCES:

- NEW YORK STATE GEOLOGICAL SURVEY, 1999, "BEDROCK GEOLOGY - LOWER HUDSON SHEET", NEW YORK STATE MUSEUM MAP AND CHART SERIES NUMBER 15.
- USGS TOPOGRAPHIC QUADRANGLE MONTICELLO, NEW YORK (GIS VERSION).
- BASE MAPS FOR CONCORD RESORT PROVIDED BY AKRF, INC.

LEGEND

- PROPERTY BOUNDARY
- MAPPED FAULT LINE
- Dww** UPPER WALTON BEDROCK FORMATION
- Dsw** LOWER WALTON BEDROCK FORMATION



0 2000
SCALE IN FEET

CONCORD RESORT TOWN OF THOMPSON SULLIVAN COUNTY, NEW YORK

BEDROCK GEOLOGY

DATE	REVISED	PREPARED BY:
		LBG ENGINEERING SERVICES, P.C.
		Professional Environmental and Civil Engineers
		4 Research Drive
		Suite 301
		Shelton, Connecticut 06484
		(203) 929-8555
DRAWN:	RAC	CHECKED: SS
		DATE: 03/13/12
		FIGURE: 3





1. BEDROCK OUTCROP ON COHEN PROPERTY NEAR CORNER OF CONCORD ROAD AND KIAMESHA LAKE ROAD. BEDROCK CONSISTS OF RED, THINLY BEDDED SHALE.



2. BEDROCK OUTCROP ON ACCESS ROAD TO CHALET/PRO SHOP. BEDROCK WAS GRAY WITH LOCALIZED BEDDING PLANES INTERSPERSED WITH DENSE, UPFRACTURED ROCK.

CONCORD RESORT TOWN OF THOMPSON SULLIVAN COUNTY, NEW YORK

PHOTOGRAPHS OF BEDROCK OUTCROPS ON STUDY PROPERTY

DATE	REVISED	PREPARED BY:	LBG ENGINEERING SERVICES, P.C. Professional Environmental and Civil Engineers 4 Research Drive Suite 301 Shelton, Connecticut 06484 (203) 929-8555			
DRAWN:	RAC	CHECKED:	SS	DATE:	03/13/12	FIGURE: 4



CONCORD RESORT
TOWN OF THOMPSON
SULLIVAN COUNTY, NEW YORK

Precipitation Frequency Analysis Based on Data from Rock Hill 3SW Climate Station

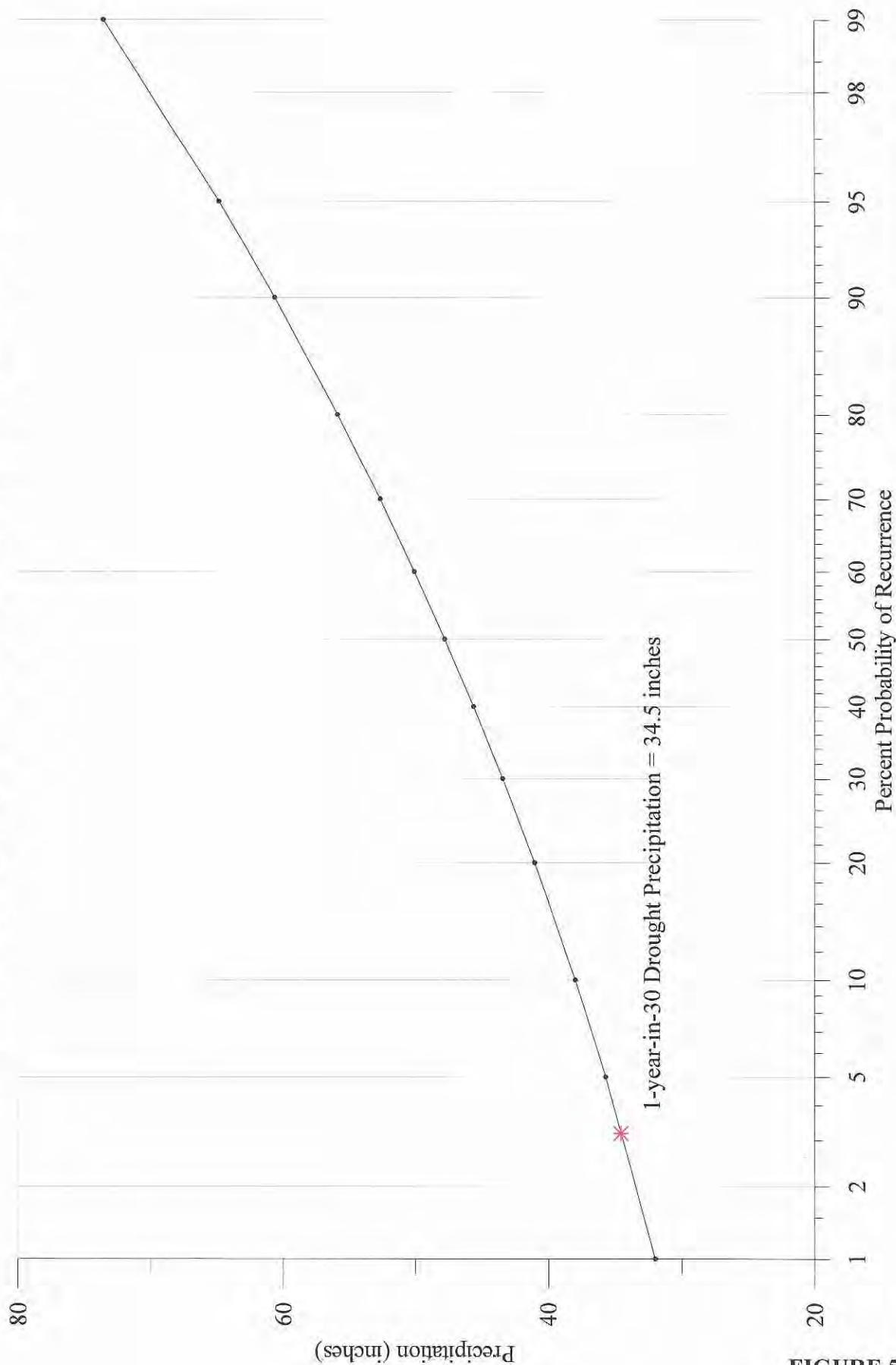


FIGURE 5



1. EXISTING WELL 12 ON MOUNTAINVIEW BUNGALOW PROPERTY, THOMPSONVILLE ROAD.



2. EXISTING WELL 14 ON MOUNTAINVIEW BUNGALOW PROPERTY, THOMPSONVILLE ROAD.

CONCORD RESORT TOWN OF THOMPSON SULLIVAN COUNTY, NEW YORK

PHOTOGRAPHS OF EXISTING WELLS 12 AND 14 ON FORMER
MOUNTAINVIEW BUNGALOW PROPERTY, THOMPSONVILLE ROAD

DATE	REVISED	PREPARED BY:
		LBG ENGINEERING SERVICES, P.C.
		Professional Environmental and Civil Engineers
		4 Research Drive
		Suite 301
		Shelton, Connecticut 06484
		(203) 929-8555
DRAWN:	RAC	CHECKED: SS
		DATE: 03/13/12
		FIGURE: 6




1. EXISTING WELL 20 ON EAST SIDE OF JOYLAND ROAD, NO WELL PUMP AND NO WELL CAP.

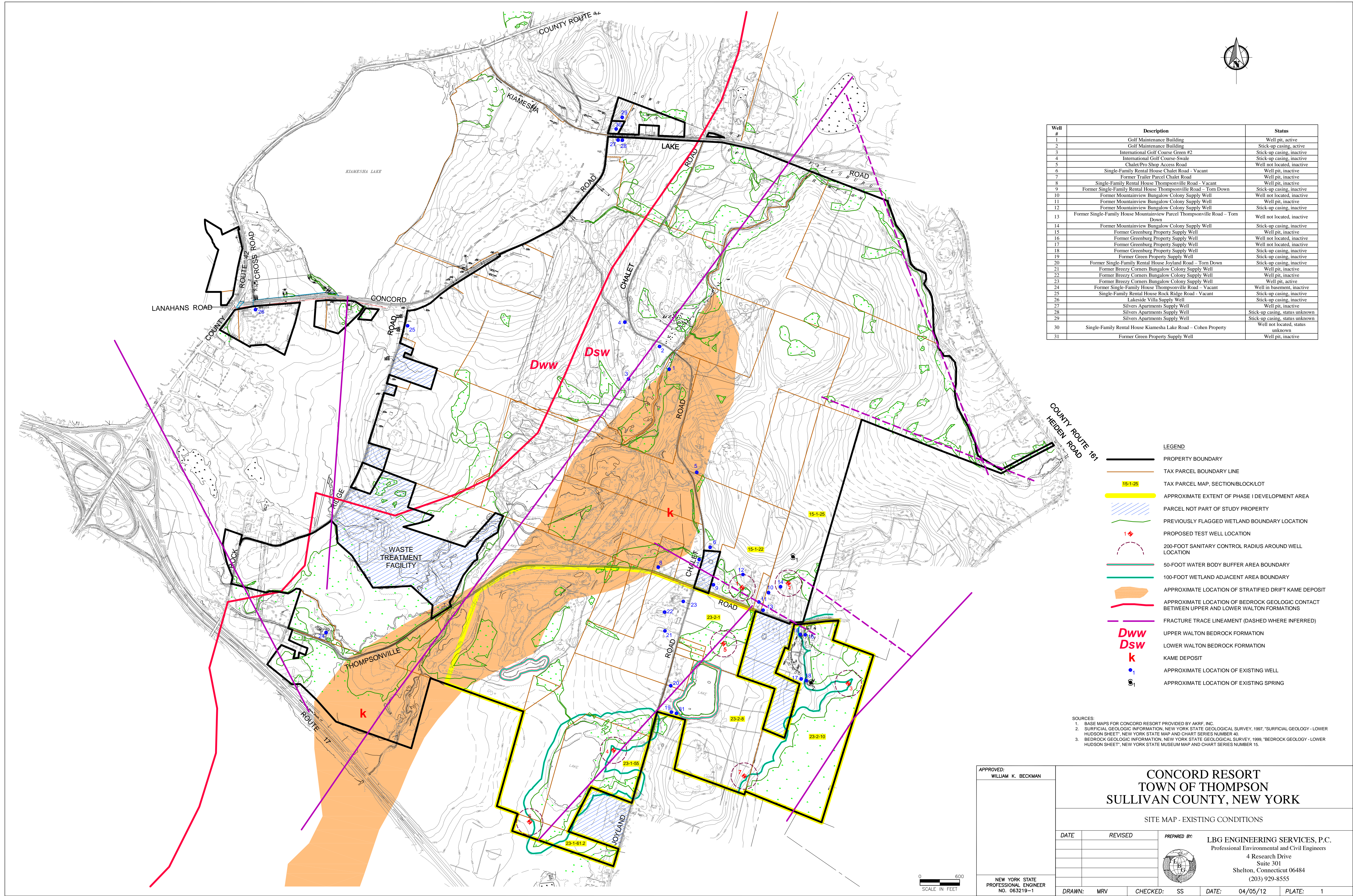


2. SPRING 2 LOCATED ON FORMER GREENBURG PROPERTY, THOMPSONVILLE ROAD.

**CONCORD RESORT
TOWN OF THOMPSON
SULLIVAN COUNTY, NEW YORK**

PHOTOGRAPHS OF EXISTING WELL 20 AND SPRING 2

DATE	REVISED	PREPARED BY: LBG ENGINEERING SERVICES, P.C. Professional Environmental and Civil Engineers 4 Research Drive Suite 301 Shelton, Connecticut 06484 (203) 929-8555
DRAWN:	RAC	
CHECKED:	SS	DATE: 03/13/12
		FIGURE: 7



APPROVED:
WILLIAM K. BECKMAN

NEW YORK STATE
PROFESSIONAL ENGINEER
NO. 063219-1

CONCORD RESORT
TOWN OF THOMPSON
SULLIVAN COUNTY, NEW YORK

SITE MAP - EXISTING CONDITIONS

DATE	REVISED	PREPARED BY:
		LBG ENGINEERING SERVICES, P.C.
		Professional Environmental and Civil Engineers
		4 Research Drive
		Suite 301
		Shelton, Connecticut 06484
		(203) 929-8555

DRAWN:	MRV	CHECKED:	SS	DATE:	04/05/12	PLATE:	1
--------	-----	----------	----	-------	----------	--------	---

