

Appendix 14-E
Bog Turtle Survey Results

USFWS/PFBC Bog Turtle Habitat Evaluation – Field Form (revised 1/12/2005)

Project/Property Name: CPV Valley Energy Project
 County: Orange Quad: Middletown
 Township/Municipality: Wawayanda
 Investigator: Colin Duncan Affiliation: TRC
Mike Wierbonics

WETLAND ID: Eastern PEM PHOTOS TAKEN: Yes No WETLAND SIZE: 31.35 acres
 Wetland size estimation – If actual acreage is not known at time of investigation, check one:
 < 0.1 acre 0.1-0.5 acre >0.5 to <1 acre 1-2 acres 2-4 acres 5+ acres 10+ acres

WETLAND LOCATION: Lat 41 24' 45" Long 74 26' 10"
 (approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 7/2/08 Time In: 10:30 am Time Out: 2:30 pm
 Air temp. 80 °F. Last precipitation: < 24 hours 1-7 days > 1 week unknown
 Drought conditions? YES NO Unknown

How much of this wetland is located *off-site* (i.e., outside the property boundaries or right-of-way)?
 none of it – the entire wetland is within the property boundaries (skip next 2 questions)
 some of it – _____ acres or _____ % of the wetland appears to be located off-site.

If part of this wetland continues off-site, how much of the *off-site portion* was surveyed (on foot)?
 none of it all of it part of it (_____% or _____ acres of the off-site portion)

How much of the *off-site portion* of this wetland is visible (e.g., from the subject property or from a public road)? all of it part of it (at least _____ acres) none of it

Are there any *adjacent* wetlands located *off-site*? YES NO Unknown
 If yes, *could* they be potential bog turtle habitat? YES NO Unknown

Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):
The property is bounded by roads and consists of patches of agricultural fields, forest and red maple swamp.

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 100% PSS _____ PFO _____ POW _____

Y N Are there any signs of disturbance to *hydrology* (ditching, filling, ponds, roads, etc.)? If yes, describe Road crossing with culvert

Y N Are there any signs of disturbance to *vegetation* (mowing, pasturing, burning, etc.)? If yes, describe _____

Hydrology

Y N Springs or seeps visible or likely? Watercress present? Yes No
 Y N Spring houses in or adjacent to wetland?
 Y N Saturated soils present? If yes, year-round? Likely Unlikely Unknown
 Y N Water visible on surface? Check all that apply: small puddles/depressions (____" deep)
 rivulets (____" deep) larger pools/ponds (____" deep)
 Y N Evidence of flooding? If yes, describe indicators _____

Project Name CPV Valley Energy Project

Wetland Eastern PEM (con't)

Soils Mapping Unit: Ma - Madalin silt loam

Field observations confirm mapped type? YES NO Unknown

Soils - PEM Portion of Wetland			
Mucky/Muddy ¹ ? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	How much of it (PEM) is mucky? <input type="checkbox"/> <10% <input type="checkbox"/> 10-29% <input type="checkbox"/> 30-49% <input type="checkbox"/> 50-70% <input type="checkbox"/> >70%	Mucky soils range in depth from: _____ to _____"	Most of the mucky part(s) of the wetland can be probed ² : <input type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"
Firm/Hard ³ ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	How much of it (PEM) is firm/hard? <input type="checkbox"/> <10% <input type="checkbox"/> 10-29% <input type="checkbox"/> 30-49% <input type="checkbox"/> 50-70% <input checked="" type="checkbox"/> >70%		

Soils - PSS and/or PFO Portions of Wetland (if wetland is 100% PFO and/or PSS, omit this section)			
Mucky/Muddy ¹ ? <input type="checkbox"/> YES <input type="checkbox"/> NO	How much of it is mucky? <input type="checkbox"/> <10% <input type="checkbox"/> 10-29% <input type="checkbox"/> 30-49% <input type="checkbox"/> 50-70% <input type="checkbox"/> >70%	Mucky soils range in depth from: _____ to _____"	Most of the mucky part(s) of the wetland can be probed ² : <input type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"

Wetland Vegetation (characterize the wetland as a whole)

Check (X) if present (≥ 5% areal coverage), and also circle if dominant (≥ 20% coverage).

- sedges rushes skunk cabbage cattail sweet flag jewelweed sphagnum moss
- sensitive fern rice cutgrass tearthumb reed canary grass *Phragmites* purple loosestrife
- alder dogwood red maple willow poison sumac multiflora rose _____

Additional dominant species: goldenrod (Solidago sp.), Tartarian honeysuckle (Lonicera tatarica), Meadowsweet (Spiraea latifolia)

Herptiles

Were any bog turtles observed? YES⁴ NO If yes, how many? _____

Other herptiles observed previously observed: one Chrysemys picta picta (Painted turtle)

Additional Comments/Observations: (use additional sheets if necessary)

INVESTIGATOR'S OPINION

- YES NO UNSURE The hydrology criterion⁵ for bog turtle habitat is met.
- YES NO UNSURE The soils criterion⁵ for bog turtle habitat is met.
- YES NO UNSURE The vegetation criterion⁵ for bog turtle habitat is met.
- YES NO UNSURE This wetland is potential bog turtle habitat.

I certify that to the best of my knowledge, all of the information provided herein is accurate and complete.

Col. P. ...
Field Investigator's Signature

7/21/08
Date

1. Soils are considered "mucky/muddy" if one can probe them to a depth of ≥ 3".
2. Probing is done with an approximately 1" diameter, blunt-ended pole (e.g., a wooden broom handle).
3. Soils are considered "firm/hard" if one can probe them to a depth of < 3".
4. Report observations of bog turtles to the USFWS and PFBC within 48 hours.
5. See attached "BOG TURTLE HABITAT CRITERIA"