

**Appendix B – Phase 1 Bog Turtle Survey
Habitat Evaluation Forms**

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form¹

(revised 06/01/2006)

Project/Property Name: Cricket Valley
 Project type: Industrial Development
 Applicant/Landowner Name: Advanced Power NA
 County: Dutchess Quad: Dover Plains Township/Municipality: Dover
 PNDI # _____ Potential conflict with USFWS species? Y N

pH ≈ 7.2

ACTION AREA²

Action area size: ≈ 131 ac, Does the Phase 1 survey include all wetlands in the action area? Y N³

WETLAND ID: 1 PHOTOS TAKEN: ⁹⁺¹⁰ Yes No WETLAND SIZE: 1.77 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° 40' 39" N Long 73° 34' 43" W
 (approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 6/23/09 Time In: 11:15 Time Out: 1:15
 Last precipitation: < 24 hours 1-7 days > 1 week unknown Drought conditions? Y N 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 wetlands located off-site and close enough to be affected by this project? Y N Unknown
 If yes, *could* they be potential bog turtle habitat? Y N Unknown

Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):

Forest, old industrial

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 85 PSS 5 PFO 5 POW 5

Y N Are there any signs of disturbance to *hydrology* (ditching, filling, ponds, roads, etc.)? If yes, describe berms, debris, dumping activity

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

Project Name Cricket Valley

Wetland 1 (con't)

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 (18" deep)
- Y N Evidence of flooding? If yes, describe indicators standing water where it looks like it doesn't belong

Soils Mapping Unit (optional): _____

Field observations confirm mapped type? YES NO Unknown

Soils – PEM Portion of Wetland			
<i>Mucky</i> ⁴ ? <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 ⁵ : <input type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"
<i>Non-mucky</i> ⁶ ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	How much of it (PEM) is non-mucky ? <input type="checkbox"/> <10% <input type="checkbox"/> 10-29% <input type="checkbox"/> 30-49% <input type="checkbox"/> 50-70% <input type="checkbox"/> >70%		

Soils – PSS and PFO Portions of Wetland			
<i>Mucky</i> ⁴ ? <input type="checkbox"/> YES <input checked="" 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 ⁵ : <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 ash
- Additional dominant species: unidentified fern, equisetum

Herptiles

Were any bog turtles observed? YES⁷ NO If yes, how many? _____

Other herptiles observed previously observed: _____

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

open water area

INVESTIGATOR'S OPINION

- YES NO UNSURE The hydrology criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The soils criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The vegetation criterion⁸ 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.

Sarah Shute
Investigator's Name (print)

Sarah L. Spent
Investigator's Signature

6/23/09
Date

Contact info: TES, Inc. (315) 695-7228

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form¹

(revised 06/01/2006)

Project/Property Name: Cricket Valley
 Project type: Industrial Development
 Applicant/Landowner Name: Advanced Power NA
 County: Dutchess Quad: Dover Plains Township/Municipality: Dover
 PNDI # _____ Potential conflict with USFWS species? Y N

ACTION AREA²

Action area size: ≈ 131 ac, Does the Phase 1 survey include all wetlands in the action area? Y N³

WETLAND ID: 2 PHOTOS TAKEN: Yes No WETLAND SIZE: 8.76 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°40'45" N Long 73°34'53" W
 (approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 6/23/09 Time In: 1:15 Time Out: 3:30
 Last precipitation: < 24 hours 1-7 days > 1 week unknown Drought conditions? Y N 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 wetlands located off-site and close enough to be affected by this project? Y N Unknown
 If yes, *could* they be potential bog turtle habitat? Y N Unknown

Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):

Forest, old industrial, railroad tracks

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 85 PSS 5 PFO 5 POW 5

Y N Are there any signs of disturbance to *hydrology* (ditching, filling, ponds, roads, etc.)? If yes, describe
possible filling, railroad grade, berms

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

Project Name Cricket Valley

Wetland 2 (con't)

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)
- Y N rivulets (___" deep) larger pools/ponds (18" deep)
- Y N Evidence of flooding? If yes, describe indicators _____

Soils Mapping Unit (optional): _____

Field observations confirm mapped type? YES NO Unknown

Soils - PEM Portion of Wetland			
<i>Mucky</i> ⁴ ? <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: <u>1</u> to <u>4</u> "	Most of the mucky part(s) of the wetland can be probed ⁵ : <input checked="" type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"
<i>Non-mucky</i> ⁶ ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	How much of it (PEM) is non-mucky ? <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 PFO Portions of Wetland			
<i>Mucky</i> ⁴ ? <input type="checkbox"/> YES <input checked="" 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 ⁵ : <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 *iris*
- Additional dominant species: green ash, shrubby cinquefoil

Herptiles

Were any bog turtles observed? YES⁷ NO If yes, how many? _____

Other herptiles observed previously observed: Hog-nosed snake, green frog, bullfrog, water snake, turtle egg shells

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

INVESTIGATOR'S OPINION

- YES NO UNSURE The hydrology criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The soils criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The vegetation criterion⁸ 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.

Sarah Shute Investigator's Name (print) Sarah L Shute Investigator's Signature 6/23/09 Date

Contact info: TES, Inc. (315) 695-7228

USEWS / PFBC Bog Turtle Habitat Evaluation Field Form¹
(revised 06/01/2006)

Project/Property Name: Cricket Valley
Project type: Industrial Development
Applicant/Landowner Name: Advanced Power NA
County: Dutchess Quad: Dover Plains Township/Municipality: Dover
PNDI # _____ Potential conflict with USFWS species? Y N

ACTION AREA²
Action area size: ≈ 131 ac. Does the Phase 1 survey include all wetlands in the action area? Y N³

WETLAND ID: 3 PHOTOS TAKEN: ⁶⁷⁻⁷⁰ Yes No WETLAND SIZE: 0.57 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° 40' 29" N Long 73° 34' 53" W
(approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 6/23/09 Time In: 1:25 Time Out: 1:40
Last precipitation: < 24 hours 1-7 days > 1 week unknown Drought conditions? Y N 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)?
N/A 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)?
N/A all of it part of it (at least _____ acres) none of it

Are there any wetlands located off-site and close enough to be affected by this project? Y N Unknown
If yes, *could* they be potential bog turtle habitat? Y N Unknown

Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):
Forest, abandoned industrial, railroad tracks

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 90 PSS _____ PFO 10 POW _____

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

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

Project Name Cricket Valley

Wetland 3 (con't)

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 _____

Soils Mapping Unit (optional): _____

Field observations confirm mapped type? YES NO Unknown

Soils - PEM Portion of Wetland			
<i>Mucky</i> ⁴ ? <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 ⁵ : <input type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"
<i>Non-mucky</i> ⁶ ? <input type="checkbox"/> YES <input type="checkbox"/> NO	How much of it (PEM) is non-mucky ? <input type="checkbox"/> <10% <input type="checkbox"/> 10-29% <input type="checkbox"/> 30-49% <input type="checkbox"/> 50-70% <input type="checkbox"/> >70%		

Soils - PSS and PFO Portions of Wetland			
<i>Mucky</i> ⁴ ? <input type="checkbox"/> YES <input checked="" 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 ⁵ : <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: *Equisetum*

Herptiles

Were any bog turtles observed? YES⁷ NO If yes, how many? _____

Other herptiles observed previously observed: _____

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

a RR ditch dam. by Phrag, skunk cabbage, equisetum
interior is PFO; very small wetland.

INVESTIGATOR'S OPINION

- YES NO UNSURE The hydrology criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The soils criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The vegetation criterion⁸ 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.

Sarah Shute Investigator's Name (print) Sarah L. Shute Investigator's Signature 6/23/09 Date

Contact info: TES, Inc. (315)695-7228

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form¹
(revised 06/01/2006)

Project/Property Name: Crickett valley
 Project type: Industrial Dev.
 Applicant/Landowner Name: Advanced Power NA
 County: Dutchess Quad: Dover Plains Township/Municipality: Dover
 PNDI# _____ Potential conflict with USFWS species? Y N

ACTION AREA²
 Action area size: ≈ 131 ac. Does the Phase I survey include all wetlands in the action area? Y N³

WETLAND ID: 4 PHOTOS TAKEN: Yes No WETLAND SIZE: 47.12 acres *- this is wetland 4+5's total acreage because they connect*
 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° 40' 42" N Long 73° 35' 01" W
 (approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 6/24/09 Time In: 9:00 AM Time Out: 11:15 AM
 Last precipitation: < 24 hours 1-7 days > 1 week unknown Drought conditions? Y N Unknown
above avg. rain for season. Sprinkled today. 100% overcast and high humidity today (in 70°F)

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
other side of Swamp River (floodplain marshland PFO)

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 .5 acres) none of it

Are there any wetlands located off-site and close enough to be affected by this project? Y N Unknown
 If yes, *could* they be potential bog turtle habitat? Y N Unknown

Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):
Swamp River, Old Industrial, Rt. 22 corridor, DFU, DFW
Metrol North RR track

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 10 PSS _____ PFO 90 (POW Swamp River)
 Y N Are there any signs of disturbance to *hydrology* (ditching, filling, ponds, roads, etc.)? If yes, describe
eastern of this edge due to presence of RR, a culvert connects
 Y N Are there any signs of disturbance to *vegetation* (mowing, pasturing, burning, etc.)? If yes, describe

PFO - red maple, swamp oak, ^{shag} hickory, green ash, poison ivy, jack-in-pulpit, sensitive fern, royal fern, asters, ree creeper
 EW - phrag, RCG, J. effusus, bur reed, skunk cabbage, cattail, sens fern, royal fern

Project Name Cricket valley

Wetland 4 (con't)

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 (<4" deep) " "
- rivulets (___" deep) larger pools/ponds (___" deep)
- Y N Evidence of flooding? If yes, describe indicators _____

Floodplain Forest

Soils Mapping Unit (optional): _____

Field observations confirm mapped type? YES NO Unknown

Soils - PEM Portion of Wetland			
<i>Mucky</i> ⁴ ? <input type="checkbox"/> YES <input 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 ⁵ : <input type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"
<i>Non-mucky</i> ⁶ ? <input type="checkbox"/> YES <input type="checkbox"/> NO	How much of it (PEM) is non-mucky ? <input type="checkbox"/> <10% <input type="checkbox"/> 10-29% <input type="checkbox"/> 30-49% <input type="checkbox"/> 50-70% <input type="checkbox"/> >70%		

Soils - PSS and PFO Portions of Wetland			
<i>Mucky</i> ⁴ ? <input type="checkbox"/> YES <input checked="" 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 ⁵ : <input type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"

only in portions of drain

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: Eln

Other: royal fern, interrupted goldenrods/asters, honeysuckle
(at two locations)

Herptiles

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

Other herptiles observed previously observed: green frogs, bullfrog

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

INVESTIGATOR'S OPINION

- YES NO UNSURE The hydrology criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The soils criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The vegetation criterion⁸ 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.

Sarah Shute

Investigator's Name (print)

Sarah F. Shute

Investigator's Signature

6/24/09

Date

Contact info: TES, Inc. (315) 695-7228

USFWS / PFBC Bog Turtle Habitat Evaluation Field Form¹

(revised 06/01/2006)

Project/Property Name: Cricket valley

Project type: Industrial Development

Applicant/Landowner Name: Advanced Power NA

County: Dutchess Quad: Dover Plains Township/Municipality: Dover

PNDI # _____ Potential conflict with USFWS species? Y N

ACTION AREA²

Action area size: ≈ 131 ac. Does the Phase 1 survey include all wetlands in the action area? Y N³

WETLAND ID: 5 PHOTOS TAKEN: Yes No WETLAND SIZE: 47.12 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° 40' 25" N Long 73° 34' 58" W

(approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 6/24/09 Time In: 11:45 Time Out: 1:20

Last precipitation: < 24 hours 1-7 days > 1 week unknown Drought conditions? Y N Unknown

above avg. rain for season - very high water level
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 wetlands located off-site and close enough to be affected by this project? Y N Unknown

If yes, *could* they be potential bog turtle habitat? Y N Unknown

Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):

same as wetland 4

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 5 PSS 5 PFO 90 POW _____

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

eastern edge is bordered by RR

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

PEM - mostly phrag.
some areas more lg. sedge, cattail, sens. fern, royal fern
bordered by narrow bend of shrubs - dogwood, NFRose,
barberry, honeysuckle
mostly PFO
see list for wetland 4
spicebush, willow, alder

Project Name Cricket Valley

Wetland 5 (con't)

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 1"-30"
- Y N Water visible on surface? Check all that apply: small puddles/depressions (___" deep) rivulets (___" deep) larger pools/ponds (___" deep) closer to river
- Y N Evidence of flooding? If yes, describe indicators water stained leaves, inundation

Soils Mapping Unit (optional): _____

Field observations confirm mapped type? YES NO Unknown

Soils - PEM Portion of Wetland			
Mucky ⁴ ? <input type="checkbox"/> YES <input 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 ⁵ : <input type="checkbox"/> 3-5" <input type="checkbox"/> 6-8" <input type="checkbox"/> 9-11" <input type="checkbox"/> ≥12"
Non-mucky ⁶ ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	How much of it (PEM) is non-mucky ? <input type="checkbox"/> <10% <input type="checkbox"/> 10-29% <input type="checkbox"/> 30-49% <input type="checkbox"/> 50-70% <input type="checkbox"/> >70%		

Soils - PSS and PFO Portions of Wetland			
Mucky ⁴ ? <input type="checkbox"/> YES <input checked="" 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 ⁵ : <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: _____

Herptiles

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

Other herptiles observed previously observed: Painted turtle (2), green frog

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

Survey crew saw hognosed snake, snapping turtle, painted turtle and wood turtle along KR tracks

INVESTIGATOR'S OPINION

- YES NO UNSURE The hydrology criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The soils criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The vegetation criterion⁸ 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.

Sarah Shute Investigator's Name (print) Sarah J Shute Investigator's Signature 6/24/09 Date

Contact info: TES, Inc. (315) 695-7228