

Jason Tesauro Consulting Additional Survey Data

CHESTER COUNTY

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

H-1
Mentawaiak
Shamona Creek

Project/Property Name: PA Pipeline Project
Project type: Pipeline construction
Applicant/Landowner Name: Sunoco Logistics, LP
County: Chester Quad: Downingtown Township/Municipality: Uwchlan
PNDI # FWS 2014-0200 Potential conflict with USFWS species? Y N

ACTION AREA²

Action area size: _____ Does the Phase 1 survey include all wetlands in the action area? Y N³

WETLAND ID: H-1 PHOTOS TAKEN: Yes No WETLAND SIZE: _____ 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 40.065498 Long -75.684547
(approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 4/25/14 Time In: _____ Time Out: _____
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 80 % 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, roads, corporate park

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 70 PSS 10 PFO 20 POW _____

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

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

Project Name PA Pipeline Project

Wetland (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 (___" deep)
- Y N Evidence of flooding? If yes, describe indicators Storm water pools in lowest portion of site (Tyola-Pung)

Soils Mapping Unit (optional):

Field observations confirm mapped type? YES NO Unknown

Soils – PEM Portion of Wetland			
Mucky ⁴ ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	How much of it (PEM) is mucky ? <input type="checkbox"/> <10% <input checked="" 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>2</u> to <u>8</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"
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 checked="" type="checkbox"/> >70%		

Soils – PSS and PFO Portions of Wetland			
Mucky ⁴ ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	How much of it is mucky ? <input checked="" 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: Stiltgrass, Rubus

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)

Small relict patch of spring-fed sedge meadow in an otherwise heavily degraded wetland - See Table

INVESTIGATOR'S OPINION

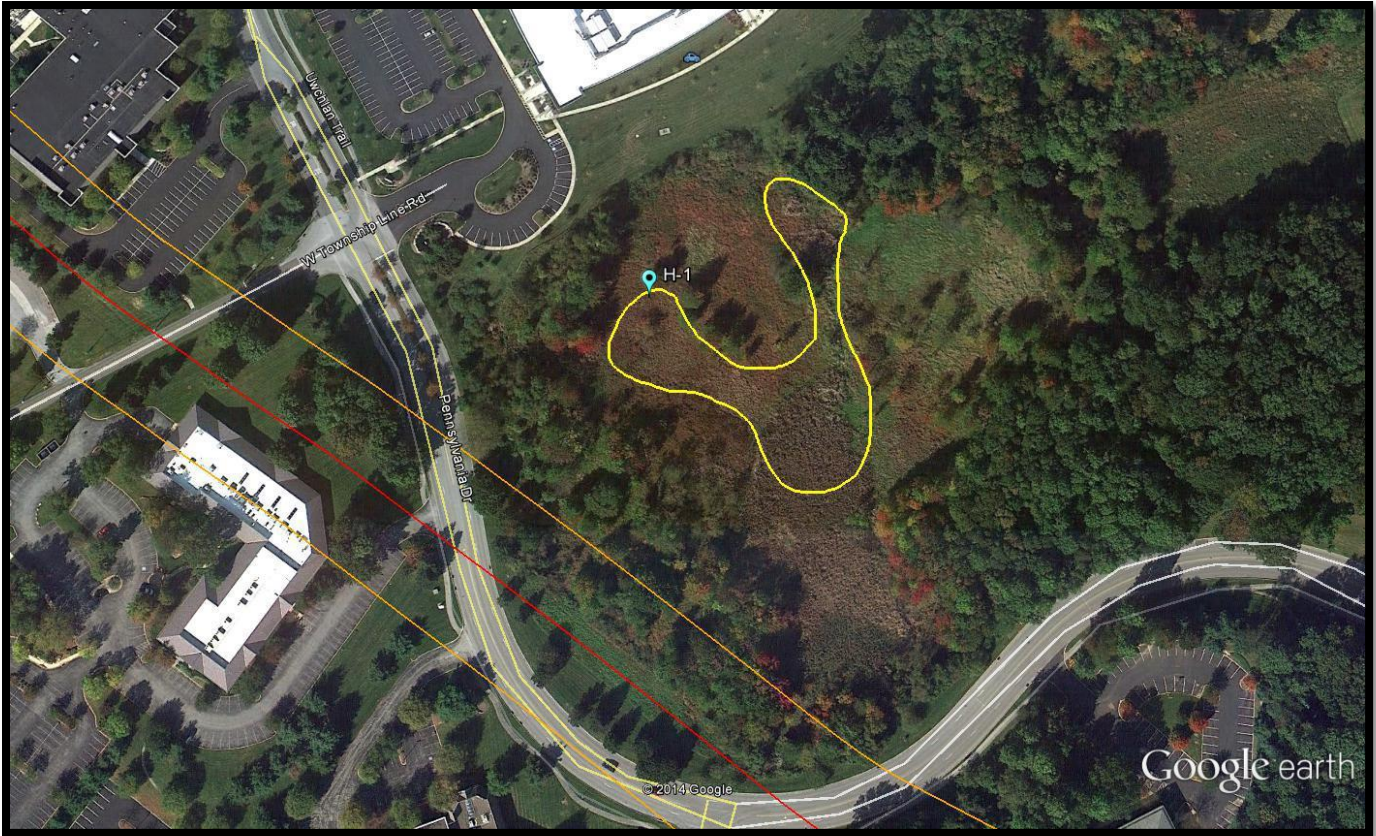
- YES NO UNSURE The hydrology criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The soils criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE The vegetation criterion⁸ for bog turtle habitat is met.
- YES NO UNSURE This wetland is potential bog turtle habitat.

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

Jason Tesauro
Investigator's Name (print)

Jason Tesauro
Investigator's Signature

4/25/14
Date



Wetland H-1, Map 176



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

C-43
Marsh Creek

Project/Property Name: PA Pipeline Project
Project type: Pipeline construction
Applicant/Landowner Name: Sunoco Logistics, LP
County: Chester Quad: Downingtown Township/Municipality: Upper Merion
PNDI # FWS 2014-0200 Potential conflict with USFWS species? Y N

ACTION AREA²

Action area size: _____ Does the Phase 1 survey include all wetlands in the action area? Y N³

WETLAND ID: C-43 PHOTOS TAKEN: Yes No WETLAND SIZE: _____ 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 40.072237 Long -75.696984
(approximate center of wetland) GPS Datum (check one): NAD 27 NAD 83 WGS 84

SURVEY CONDITIONS & LIMITATIONS

Date of survey: 4/25/14 Time In: _____ Time Out: _____
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

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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.):
Woods (south east); Ball fields + residential (northwest)

WETLAND CHARACTERISTICS

Wetland type(s) present and % cover: PEM 40 PSS 10 PFO 50 POW _____

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

Y N Are there any signs of disturbance to vegetation (mowing, pasturing, burning, etc.)? If yes, describe
[ROW maint, stormwater impets, filling]



Wetland C-43, Map 175



Grass (*Poa* sp.) and skunk cabbage-dominated seepage area within ROW



Outlet stream incised heavily by storm water inputs