



October 2, 2015

Pamela Shellenberger
U.S. Fish and Wildlife Service
110 Radnor Rd; Suite 101
State College, PA 16801

**Subject: Request for Effects Determination Concurrence
Sunoco Pipeline, L.P. - Pennsylvania Pipeline Project Multiple Counties
(Formerly part of the Mariner East 2 Pipeline Project - Project #2014-
0200)**

Dear Ms. Shellenberger:

Tetra Tech, Inc. (Tetra Tech) has been retained by Sunoco Pipeline, L.P. (SPLP) to conduct environmental field surveys and permitting services for the proposed Pennsylvania Pipeline Project (PPP) formerly part of the Mariner East 2 Pipeline Project (ME2). On behalf of SPLP, Tetra Tech is requesting effects determination concurrence from the U.S. Fish and Wildlife Service (Service)-Pennsylvania Field Office for the PPP.

On December 12, 2013 a Large Project Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Request including a large project form, project description, and preliminary project USGS topographic mapping was provided to the USFWS under the preliminary project name "Mariner East 2 Pipeline - Trans-Pennsylvania". The Mariner East 2 Project was described as traversing the state of Pennsylvania. However, after field activities began, the project was split into two separate and independent projects; the PPP and the Ohio Pipeline Project (OPP) (Attachment 1). The PPP involves the phased installation of approximately 561 miles of two parallel pipelines within a 306-mile, 50-foot-wide right-of-way (ROW) from Houston, Washington County, Pennsylvania to SPLP's Marcus Hook facility in Delaware County, Pennsylvania with the purpose of interconnecting with existing SPLP Mariner East pipelines. Initially, a 20-inch diameter pipeline would be installed within the ROW from Houston to Marcus Hook (306 miles) and a second, up to 20-inch diameter pipeline, would be installed in the same ROW. The second line is proposed to be installed from SPLP's Delmont Station, Westmoreland County, Pennsylvania to the Marcus Hook facility, paralleling the initial line for approximately 255 miles.

We received a response to our December 12, 2013 request for information dated March 19, 2014 from the Service and it is included as Attachment 2. The Service response identified the Indiana bat, northern long-eared bat, and bog turtle ESA species of concern and a number of follow-up conversations were held by phone for further clarification. One of those follow-up conversations on April 1, 2015, indicated that the northeastern bulrush was an additional species of concern. In response to USFWS survey requirements, qualified Biologists surveyed for Indiana and northern long-eared bats, bog turtle, and northeastern bulrush in appropriate locations along PPP. Indiana and northern long-eared bats, and northeastern bulrush were addressed in a previous submittal package.

As a result of these correspondences with the Service, bog turtle surveys (both Phase 1, were implemented by several Service-approved biologists. The investigations were conducted by

numerous consultants, beginning with Phase 1 (habitat) surveys by Wildlife Specialists, LLC (bog turtle Surveyor: Stan Boder) in 2013. The majority of PPP bog turtle surveys were conducted in 2014, by a survey team of three sub-consultants; Aqua-Terra Environmental Ltd. (Aqua-Terra; bog turtle Surveyor: James Drasher), Environmental Consultation Services, Inc. (ECSI; bog turtle Surveyor: Kevin Keat), and Jason Tesauro Consulting, LLC (Tesauro Consulting; bog turtle Surveyor: Jason Tesauro), and Skelly and Loy, Inc. (Skelly and Loy; bog turtle Surveyors: Ben Berra, Andy Brookens, and Logan Zugay). The 2014 surveys included Phase 1 habitat evaluations, Phase 2 presence/absence surveys and Phase 3 trapping surveys. A final round of surveys was conducted in 2015 by Aqua-Terra, Skelly & Loy, and Tesauro Consulting to investigate remaining wetlands that needed Phase 1 and/or Phase 2 surveys.

During the PPP field survey efforts, approximately 430 wetlands or complexes were investigated for suitable bog turtle habitat (Phase 1). Of these wetlands, 98 were found to have suitable habitat. Survey results for wetlands within the Project limits of disturbance (LOD) and within 300 feet of the LOD are included in Attachment 3, which also includes mapping of these areas and a table with the relevant wetlands referencing the specific report the information is contained within. As a result of the many project surveys, 20 wetlands were deemed assumed/occupied bog turtle sites and initial avoidance/minimization measures were implemented during the project design and permitting phases.

Attachment 4, the Bog Turtle Conservation Plan for the Pennsylvania Pipeline Project, provides SPLP's commitment to avoidance, minimization, and mitigation measures to prevent impacts to the bog turtle within the Project area. From the onset of the Project, SPLP has instructed project designers to consider environmental impacts in regard to all aspects of the proposed Project and to avoid and minimize wherever possible while allowing safe installation. Pipeline engineers were provided a list of restrictions, recommendations, and requirements to consider during the design phase. Major considerations were co-location with existing utility corridors, limiting the construction corridor to the minimum amount practicable, use of HDD technology, and avoidance and minimization at sensitive habitats.

During the development of the Project route, SPLP worked with routing agents and property owners to minimize and avoid forested uplands and wetlands, woodlots, and fence rows where possible. SPLP also co-located the project alignment with other similar disturbances wherever possible, and paralleled existing SPLP ROW for the majority of the route so that this existing ROW could be utilized as workspace. SPLP has co-located the Project with a currently existing SPLP right-of-way (ROW) for approximately 80% of the project. This is a significant means for avoiding new impacts to sensitive resources (i.e., forested wetlands, forest areas, streams) and for minimizing environmental impacts for the entire Project. SPLP has also co-located with foreign utility lines whenever possible when routing pulls away from the existing SPLP ROW.

In addition, SPLP has implemented a number of route variations through environmental feedback, both minor and major, to further reduce the impacts associated with the Project. Many of these route variations are driven by environmental factors such as wetland areas occupied by sensitive species such as bog turtles. One such reroute eliminated the need to cross the Marsh Creek wetland complex. A second reroute minimized the number of wetlands traversed by the Project in the vicinity of Middle Creek. After all reroutes were implemented, the number of assumed/occupied bog turtle wetlands/complexes within 300 feet of the Project were reduced from 20 to 10.

As a standard practice for avoiding impacts to the bog turtle, SPLP will conduct HDD at known occupied or assumed/occupied bog turtle wetlands during the turtle's active period (April 1 to October 1). Of the remaining 10 wetlands, surface impacts to seven (the five occupied and two assumed bog turtle wetlands) traversed by the current alignment will be eliminated using HDD methods. The other three wetlands are within 300 feet of the current LOD, but will not

be disturbed by the Project. Through the design of the project, SPLP has minimized disturbance to bog turtle wetlands as much as operationally possible by implementing pipeline reroutes around and HDD under bog turtle wetlands. The primary concern with HDD is the release of drilling mud into a sensitive resource. While the potential for inadvertent returns cannot be eliminated, SPLP has or will implement pre-construction and construction minimization measures to reduce the potential for negative indirect or direct impacts on bog turtles.

Based on the information provide herein, the attached survey reports and conservation plan, what is known about the presence and/or potential presence of ESA listed species in the vicinity of the project areas, and SPLP commitments to the protection and conservation of bog turtles, it is Tetra Tech's conclusion that the PPP is not likely to adversely affect the bog turtle. We request, on behalf of SPLP, the Service's concurrence with this determination to satisfy Federal and State permit requirements.

Thank you for your assistance in this matter and we look forward to your review and concurrence. If you have any questions regarding this request, please feel free to contact me at 412.921.8167 or preston.smith@tetratech.com.

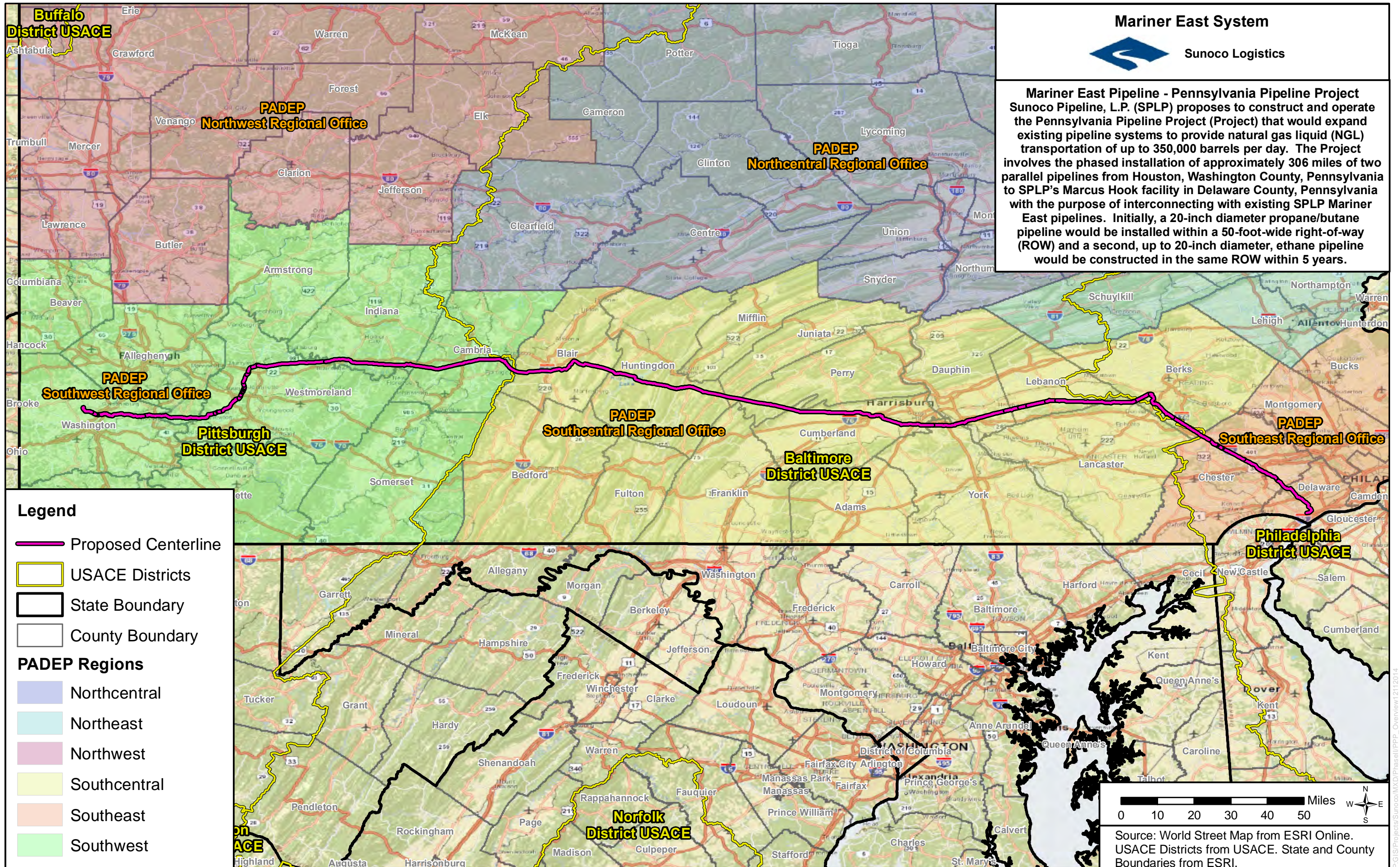
Sincerely,

Preston R. Smith
Manager, Wetlands and Ecological Services

Attachments:

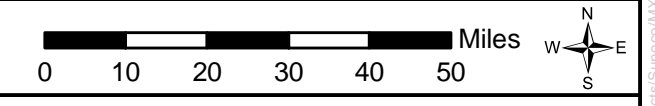
- PPP Project Overview Map (Attachment 1)
- USFWS Pennsylvania Field Office Response Letter (Attachment 2)
- Bog Turtle Survey Reports and Mapping (Attachment 3)
- Bog Turtle Conservation Plan (Attachment 4)

CC: Chris Embry, Sunoco Logistics;
Matt Gordon, Sunoco Logistics;
Monica Styles, Sunoco Logistics;
Brad Schaeffer, Tetra Tech;
Sandy Lare, Tetra Tech;
Robin Dingle, Tetra Tech;
File 112IC05958



Mariner East Pipeline - Pennsylvania Pipeline Project
 Sunoco Pipeline, L.P. (SPLP) proposes to construct and operate the Pennsylvania Pipeline Project (Project) that would expand existing pipeline systems to provide natural gas liquid (NGL) transportation of up to 350,000 barrels per day. The Project involves the phased installation of approximately 306 miles of two parallel pipelines from Houston, Washington County, Pennsylvania to SPLP's Marcus Hook facility in Delaware County, Pennsylvania with the purpose of interconnecting with existing SPLP Mariner East pipelines. Initially, a 20-inch diameter propane/butane pipeline would be installed within a 50-foot-wide right-of-way (ROW) and a second, up to 20-inch diameter, ethane pipeline would be constructed in the same ROW within 5 years.

- Legend**
- Proposed Centerline
 - USACE Districts
 - State Boundary
 - County Boundary
- PADEP Regions**
- Northcentral
 - Northeast
 - Northwest
 - Southcentral
 - Southeast
 - Southwest



Source: World Street Map from ESRI Online.
 USACE Districts from USACE. State and County Boundaries from ESRI.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, Pennsylvania 16801-4850

March 19, 2014

Preston Smith
661 Anderson Drive
Foster Plaza
Pittsburgh, PA 15220

RE: USFWS Project #2014-0200

Dear Mr. Smith:

This responds to your project information received by our office on December 13, 2013. You requested information about federally listed and proposed endangered and threatened species within the area affected by the proposed Sunoco Mariner East 2 Pipeline project located in Washington, Allegheny, Westmoreland, Indiana, Cambria, Blair, Huntington, Juniata, Perry, Cumberland, York, Dauphin, Lebanon, Lancaster, Berks, Chester, and Delaware counties, Pennsylvania. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species and the Migratory Bird Treaty Act (MBTA, 16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat. 755, as amended) to ensure the protection of migratory bird species.

Indiana bat

The project is within the range of the Indiana bat (*Myotis sodalis*), a species that is federally listed as endangered. Indiana bats hibernate in caves and abandoned mines during the winter months (November through March), and use a variety of upland, wetland and riparian habitats during the spring, summer and fall. Indiana bats usually roost in dead or living trees with exfoliating bark, crevices or cavities. Female Indiana bats form nursery colonies under the exfoliating bark of dead or living trees, such as shagbark hickory, black birch, red oak, white oak, and sugar maple, in upland or riparian areas.

Land-clearing, especially of forested areas, may adversely affect Indiana bats by killing, injuring or harassing roosting bats, and by removing or reducing the quality of foraging and roosting habitat. Therefore, to determine whether the proposed project will affect Indiana bats, we will need additional project information about how much forest disturbance will occur (area, tree species, and size classes).

Northern Long-Eared bat

The northern long-eared bat (*Myotis septentrionalis*) was proposed for listing as an endangered species on October 2, 2013. No critical habitat has been proposed at this time. Species proposed for listing are not afforded protection under the ESA; however, as soon as a listing becomes effective, the prohibition against jeopardizing its continued existence and “take”¹ applies **regardless of an action’s stage of completion**. Therefore, to avoid significant project delays we recommend that the effect of the project on northern long eared bats, and their habitat, be considered during the project planning and design. Additional information about northern long-eared bats, including ecology, habitat descriptions, listing status updates, and possible conservation measures may be found at www.fws.gov/midwest/endangered/mammals/nlba/index.html (click on Northern Long-eared Bat Interim Conference and Planning Guidance). We are available to discuss potential conservation measures specific to your project design.

Bog turtle

The project is within the known range of the bog turtle (*Clemmys muhlenbergii*), a species that is federally listed as threatened. Bog turtles inhabit shallow, spring-fed fens, sphagnum bogs, swamps, marshy meadows, and pastures characterized by soft, muddy bottoms; clear, cool, slow-flowing water, often forming a network of rivulets; high humidity; and an open canopy. Bog turtles usually occur in small, discrete populations occupying suitable wetland habitat dispersed along a watershed. The occupied “intermediate successional stage” wetland habitat is usually a mosaic of micro-habitats ranging from dry pockets, to areas that are saturated with water, to areas that are periodically flooded. Some wetlands occupied by bog turtles are located in agricultural areas and are subject to grazing by livestock.

To determine the potential effects of the proposed project on bog turtles and their habitat, begin by identifying all wetlands in, and within 300 feet of, the project area. The project area includes all areas that will be permanently or temporarily affected by any and all project features, including building, roads, staging areas, utility lines, outfall and intake structures, wells, stormwater retention or detention basins, parking lots, driveways, lawns, etc. The area of investigation should be expanded when project effects might extend more than 300 feet from the project footprint. For example, the hydrological effects of some projects (*e.g.*, large residential or commercial developments; golf courses; community water supply wells) might extend well beyond the project footprint due to the effects that impervious surfaces or groundwater pumping may have on the hydrology of nearby groundwater-dependent wetlands. Wetlands should be included on a map showing existing as well as proposed project features.

¹ As defined in the Act, take means “. . . to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” in the definition of take means an act which kills or injures wildlife. Such act may include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering (50 CFR part 17.3). “Harass” means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

If someone qualified to identify and delineate wetlands has, through a field investigation, determined that no wetlands are located in or within 300 feet of the project area (or within the expanded investigation area, as described above), it is not likely that your project will adversely affect the bog turtle. If this is the case, no further consultation with the Fish and Wildlife Service is necessary, although we would appreciate receiving a courtesy copy of the wetland investigator's findings for our files.

If wetlands have been identified in or within 300 feet of the project area (or in an expanded investigation area, as described above), assess their potential suitability as bog turtle habitat, as described under “*Bog Turtle Habitat Survey*” (Phase 1 survey) of the *Guidelines for Bog Turtle Surveys* (revised April 2006). Survey results should be submitted to the Service for review and concurrence. The survey guidelines, as well as a Phase 1 field form and report template, are available from the Service upon request.

Due to the skill required to correctly identify potential bog turtle habitat, we recommend that the Phase 1 survey be done by a qualified surveyor (see enclosed list). If the Phase 1 survey is done by someone who is not on this list, it is likely that a site visit by a Fish and Wildlife Service biologist will be necessary to verify their findings. *Due to the limited availability of staff from this office, such a visit may not be possible for some time. Use of a qualified surveyor will expedite our review of the survey results.*

If potential bog turtle habitat is found in or near the project area, efforts should be made to avoid any direct or indirect impacts to those wetlands (see enclosed *Bog Turtle Conservation Zones*). Avoidance of direct and indirect effects means no disturbance to or encroachment into the wetlands (e.g., filling, ditching or draining) for any project-associated features or activities. Adverse effects may also be anticipated to occur when lot lines include portions of the wetland; when an adequate upland buffer is not retained around the wetland (see *Bog Turtle Conservation Zones*); or when roads, stormwater/sedimentation basins, impervious surfaces, or wells affect the hydrology of the wetland.

If potential habitat is found, submit (along with your Phase 1 survey results) a detailed project description and detailed project plans documenting how direct and indirect impacts to the wetlands will be avoided. If adverse effects to these wetlands cannot be avoided, a more detailed and thorough survey should be done, as described under “*Bog Turtle Survey*” (Phase 2 survey) of the *Guidelines*. The Phase 2 survey should be conducted by a qualified biologist with bog turtle field survey experience (see enclosed list of qualified surveyors). Submit survey results to the Service for review and concurrence.

In cases where adverse effects to federally listed species cannot be avoided, further consultation with the Service would be necessary to avoid potential violations of section 9 (prohibiting “take” of listed species) and/or section 7 (requiring federal agencies to consult) of the Endangered Species Act. Information about the section 7 and section 10 consultation processes (for federal and non-federal actions, respectively) can be obtained by contacting this office or accessing the Service’s Endangered Species Home Page (<http://endangered.fws.gov>).

Assessment of Risks to Migratory Birds

The Service is the principal Federal agency charged with protecting and enhancing populations and habitat of migratory bird species. The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the MBTA has no provision for authorizing incidental take, the Service recognizes that some birds may be killed even if all reasonable measures to avoid take are implemented.

The potential exists for avian mortality from habitat destruction and alteration within the project boundaries. Site-specific factors that should be considered in project siting to avoid and minimize the risk to birds include avian abundance; the quality, quantity and type of habitat; geographic location; type and extent of bird use (*e.g.* breeding, foraging, migrating, etc.); and landscape features. Please review the enclosed information for general recommendations for avoiding and minimizing impacts to migratory birds within and around the project area. Please be aware that since these are general guidelines, some of them may not be applicable to the current project design or they may have already been included in the project design.

This response relates only to endangered and threatened species under our jurisdiction, based on an office review of the proposed project's location. No field inspection of the project area has been conducted by this office. Consequently, this letter is not to be construed as addressing potential Service concerns under the Fish and Wildlife Coordination Act or other authorities. A compilation of certain federal status species in Pennsylvania is enclosed for your information.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

If you have questions about Indiana bat please contact Pamela Shellenberger at (814) 234-4090 x 241. For questions about the bog turtle please contact Kayla Easler at (814) 234-4090 x 234. For questions regarding the Migratory bird information please contact Jennifer Siani at (814) 234-4090 x 225.

Sincerely,



Lora L. Zimmerman
Field Office Supervisor

Enclosures