United States Department of the Interior

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In Reply Refer To:
2014-I-0543a

SEP 12 2016

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: Draft Environmental Impact Statement (EIS) and Biological Assessment for the planned PennEast Pipeline Project by PennEast Pipeline Company, LLC in Hunterdon and Mercer County, New Jersey (Docket Number CP15-558-000)

Dear Secretary Bose:

The U.S. Fish and Wildlife Service (Service), New Jersey Field Office (NJFO) has reviewed the Federal Energy Regulatory Commission's (FERC) July 25, 2016 draft Environmental Impact Statement (DEIS) for the planned PennEast Pipeline Project (Project) in Hunterdon and Mercer Counties, New Jersey. The pipeline project is also proposed in Luzerne, Carbon, Northampton, and Bucks Counties, Pennsylvania. The Service's Pennsylvania Field Office will provide additional comments under separate cover for project impacts that may occur in their geographic jurisdiction.

AUTHORITY

The following comments on the proposed action are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA); the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) (FWCA); the March 2011 Memorandum of Understanding between the FERC and the Service regarding implementation of Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds,"; the Migratory Bird Treaty Act of 1918 (40 Stat. 755; 16 U.S.C. 703-712) (MBTA); the Bald and Golden Eagle Protection Act (54 Stat. 250; 16 U.S.C. 668-668d) (BGEPA); the National Environmental Policy Act of 1969 as amended (83 Stat. 852;42 U.S.C. 4321 *et seq.*) (NEPA); the Clean Water Act of 1977 (33 U.S.C. 1344 *et seq.*) (CWA), and as pre-application technical assistance under the December 22, 1993 Memorandum of Agreement among the U.S. Environmental Protection Agency, New Jersey Department of Environmental Protection (NJDEP), and the Service.

FEDERALLY LISTED SPECIES

The DEIS has made a preliminary determination of potential adverse effects to federally listed species. The FERC is also requesting that the DEIS serve as a Biological Assessment (BA) for federally listed species. The FERC's preliminary determination is based on an assumption of both direct and indirect impacts on federally listed species as a result of the Project. Provided below are comments concerning federally listed species addressed in the DEIS and FERC's preliminary determination on potential adverse effects.

Bog Turtle

The federally listed (threatened) bog turtle (*Clemmys muhlenbergii*) may occur within the action area. Bog turtles inhabit emergent and scrub/shrub wetlands such as shallow spring-fed fens, sphagnum bogs, swamps, marshy meadows, and wet pastures. During the inactive season and active season bog turtles may also use forested wetlands.

In the DEIS, PennEast proposes to conduct Phase 1 habitat surveys and Phase 2 presence/absence surveys following Service guidelines. The Phase 1 habitat surveys will be completed in all delineated wetlands that are within 400 feet of the Project. If bog turtle habitat is identified, Phase 2 surveys will be completed to determine the presence or absence of bog turtles. To date, only 52 wetlands have been delineated within the action area in New Jersey. Of the 52 wetlands that have been delineated, only 26 have completed Phase 1 surveys. The DEIS also states that only 29 percent of wetland delineations are complete for the Project.

The DEIS summarizes potential effects to the bog turtles if bog turtles occurs within the action area and notes that a bog turtle plan will be developed with the Service. The activities described in the DEIS that may affect the bog turtle include direct injury or disturbance from humans and construction vehicles, alteration of wetland habitats, increase risk of invasive species, and fragmentation.

After reviewing the DEIS on potential impacts to the bog turtle the Service recommends completing Phase 1 habitat surveys in all wetlands that are within 400 feet of the Project. If bog turtle habitat is identified, Phase 2 and potentially Phase 3 surveys should be completed to document presence or absence. Before completing presence/absence surveys, a Phase 1 bog turtle habitat survey report should be submitted to the Service for review. After reviewing the Phase 1 habitat survey report the Service will determine the minimum level of effort for presence/absence bog turtle surveys. Depending on the survey results of the presence/absence surveys, the Service also recommends that PennEast prepare a bog turtle plan to avoid and minimize impacts to bog turtles and their habitat. The bog turtle plan should be developed in coordination with the Service after all surveys are completed. Additionally, a more thorough effects analysis on the bog turtle should be described in the FERC NEPA document after surveys are completed. The effects analysis should describe all activities that may affect the bog turtle and describe in detail all the conservation measures that will be implemented to protect the bog turtle.

Indiana Bat

The federally listed (endangered) Indiana bat (*Myotis sodalis*) may occur within the action area. The Project is within the summer range of the Indiana bat. Between April and September, Indiana bats inhabit floodplain, riparian, and upland forests, roosting under loose tree bark during the day, and foraging for flying insects in and around the tree canopy at night. Prior to hibernation, Indiana bats engage in fall swarming activity and may forage and roost within 10 miles from a hibernaculum. Indiana bats may forage and roost within the action area during the spring, summer, and fall (April 1 to September 30).

The DEIS briefly describes a mist net survey that was completed in August 2015. The mist net survey was completed in portions of the action area. No Indiana bats were captured. The DEIS also states that 16 sites in New Jersey could not be surveyed due to lack of property access.

Impacts described in the DEIS that may impact the Indiana bat include the death or injury of bats by tree clearing activities and roost abandonment resulting in the decrease in reproduction and survival.

After reviewing the DEIS on the Indiana bat, the Service notes that results from the 2015 summer bat surveys are missing and incomplete. For example, there is no description of the total number of species captured, nor does the DEIS describe the sex, age, or reproductive condition of individual bats that were captured in 2015. The description of mist netting efforts also does not describe radio-telemetry, emergence surveys, or foraging telemetry results. The Service also notes that the DEIS is inconsistent with the survey efforts described in an October 7, 2015 letter from the applicants agent, URS Corporation, and a corresponding survey report by Wildlife Specialists, LLC. URS Corporation notes that 18 out of 55 mist net sites still need to be conducted. The DEIS says that 16 sites have not been surveyed due to lack of property access. Additionally, the Service finds that some of the 2015 mist net surveys were conducted outside of the action area. The stated reason for conducting the surveys outside of the action area include lack of bat habitat, less than optimal netting opportunities, or lack of reasonable access from landowners. The Service requests FERC to describe how the 2015 surveys may have failed to document presence or absence of the Indiana bat, specifically in areas where surveys were conducted outside of the action area. Furthermore, the Service recommends that all summer surveys are completed prior to finalizing the FERC NEPA document. Results of the summer bat surveys should be submitted to the NJFO for review. Without survey information from these sites, the Service cannot assess or concur with the overall affects of the Project on the Indiana bat.

The DEIS identifies 27 abandoned mines or reclaimed mines near the Project. Abandoned mines and reclaimed mines may provide habitat for the Indiana bat. If abandoned mines or reclaimed mines occur within 0.25 mile from the Project, winter surveys should be completed to determine the presence or absence of Indiana bat.

In addition to the lack of detail described in the DEIS on previous summer bat surveys, the Service also notes that the description of potential impacts to the Indiana bat is also unclear and missing. The DEIS states that death or injury to Indiana bats may occur during tree clearing activities. However, the DEIS also states that PennEast will follow time-of-year restrictions on

tree clearing activities to protect both the Indiana bat and migratory birds. The Service recommends following Service recommended time-of-year restrictions on tree clearing activities to protect the Indiana bat and migratory birds. The appropriate time-of-year restrictions on tree clearing activities to protect both Indiana bats and migratory birds is March 15 to September 30 in New Jersey. The Service also notes that a detailed effects analysis on all activities of the Project that may affect the Indiana bat is missing. After completing presence/absence surveys, the FERC NEPA document should describe all activities that may affect the Indiana bat and describe in detail all the conservation measures that will be implemented to protect the Indiana bat.

Northern long-eared bat

The Project is within the summer range of the federally listed (threatened) northern long-eared bat (*Myotis septentrionalis*) (NLEB). Similar to the Indiana bat, NLEBs roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Maternity colonies generally consist of 30 to 60 females and young. Males and non-reproductive females may occur within the breeding and foraging range of maternity colonies, but some individuals are solitary in the summer and may roost in cooler places such as caves and mines. Roosting NLEBs have also been observed in man-made structures, such as buildings, barns, sheds, cabins, under eaves of buildings, and in bat houses.

A total of 20 NLEBs were captured during summer surveys in 2015. Similar to the Indiana bat, no specific details on the survey results are provided in the DEIS. The DEIS also does not describe the distance to a documented maternity colony identified near mile post (MP) 108, nor does the DEIS describe how a pipeline re-route was identified to provide an adequate buffer to protect the NLEB maternity colony. The maternity colony at MP 108 is also the only maternity colony that is described in the DEIS. Given the results from the 2015 summer survey, additional maternity colonies may occur within the action area of the Project. The Service requests FERC further describe the results of the 2015 summer survey in the EIS, and complete a detailed effects analysis on the proposed activities that may affect the NLEB. The Service also recommends completing all summer surveys to document the presence or absence of NLEBs in New Jersey and submit the survey results to the NJFO. If abandoned mines or reclaimed mines occur within 0.25 miles of the Project, winter surveys should also be completed. Without survey information from the Project the Service cannot assess or concur with the overall affects of the Project on the NLEB.

The Service understands that the Project may affect the NLEB. However, the Service is unaware if FERC plans to rely upon the findings of the Service's Section 7 Programmatic Biological Opinion for the NLEB 4(d) rule. The Service requests FERC to clarify with the Service if the Service's Biological Opinion for the NLEB 4(d) rule will be used.

Dwarf wedgemussel

The federally listed (endangered) dwarf wedgemussel (*Alasmidonta heterodon*) may occur within the action area. The dwarf wedgemussel occurs on muddy sand, sand, and gravel bottoms in creeks and rivers of various sizes. In parts of the range, dwarf wedgemussels also occur in clay

banks and small riffle areas. This species requires areas with a slow to moderate current, little silt deposition, and well-oxygenated, unpolluted water.

The Project has the potential to result in adverse effects to the dwarf wedgemussel. However, the DEIS does not describe the extent of dwarf wedgemussel habitat within the Project. To adequately determine the impacts on dwarf wedgemussel the Service requests a habitat survey along all stream crossings in New Jersey. If dwarf wedgemussel habitat is documented, additional surveys should be completed to document presence or absence of dwarf wedgemussel. After completing all necessary surveys for the dwarf wedgemussel, the Service recommends describing all terminal activities that may affect the dwarf wedgemussel and describe in detail all the conservation measures that will be implemented to protect the dwarf wedgemussel.

Conclusion

In conclusion, upon reviewing the DEIS the Service finds inadequate survey data and information to concur with potential effects to federally listed species. Thus, the Service is unable to accept the DEIS as a BA to initiate formal consultation. Given a recent conference call with FERC on September 6, 2016, it appears the applicant may have to engage the judicial system via eminent domain to allow surveys to be completed within the action area. After surveys are completed and additional information on federally listed species is submitted to the Service, the Service will commence coordination with FERC on determining if formal consultation is necessary and determine, pursuant to the ESA, the affects of the Project on the above listed species.

ESA LISTING WORKPLAN

The Service has issued a National Listing Workplan for addressing ESA listings and critical habitat decisions for the next seven years. The workplan identifies the Service's schedule for addressing all 30 species currently on the ESA Candidate List and conducting 320 status reviews (also referred to as 12-month findings) for species that have been petitioned for federal protections under the ESA. For all the species that have been petitioned, the Service has issued a positive 90-day finding, which is the Service's determination that substantial information exists in the petition and our files indicating that listing may be warranted. For more information on the National Listing Workplan, please visit the following website:

https://www.fws.gov/endangered/improving_esa/listing_workplan_prioritization_methodology.html

The National Listing Workplan identifies several species that may occur in New Jersey and within the proposed pipeline. The Service recommends reviewing the National Listing Workplan for species that may occur within the proposed pipeline. Note that the status review for the Bicknell's thrush (*Catharus bicknelli*) is proposed in fiscal year 2017. Also, status reviews for the Brook floater (*Alasmidonta varicosa*) and yellow-banded bumble bee (*Bombus terricola*) is proposed in fiscal year 2018, and the status review for the Monarch butterfly (*Danaus plexippus plexippus*) is proposed in fiscal year 2019.

In addition to the species listed in the National Listing Workplan, the Service is conducting a status review on the rusty-patched bumblebee (*Bombus affinis*). The status review for the rusty-patched bumblebee is expected by September 30, 2016.

CONSERVATION ACTIVITIES

Section 7(a)(l) of the ESA requires all Federal agencies to utilize their authorities, in consultation with the Service, to develop and carry out programs to conserve all species listed under the ESA. Additionally, Section 2(c)(1) of the ESA declares that all Federal agencies shall utilize their authorities to further the purposes of ESA. The purpose of the ESA is to protect and recover threatened and endangered species and the ecosystems upon which they depend. To avoid future Project delays, the Service recommends coordination with the Service to fulfill this important conservation mandate.

MIGRATORY BIRDS

The DEIS identifies potential impacts to migratory birds. These impacts include mortality and injury, disturbance, loss of habitat, and displacement. The DEIS also states that PennEast is committed to following Service recommendations to conserve migratory birds and adopt best management practices (BMPs) to protect migratory birds. The BMPs include: 1) implementing a time-of-year restriction on tree clearing and maintenance activities, 2) minimize disturbance during design and construction, 3) reduce habitat fragmentation, 4) avoid areas where birds are highly concentrated, 5) conserve area-sensitive species and avoid fragmenting large tracts of contiguous habitat, and 6) develop a restoration plan.

In total, the proposed pipeline route will result in approximately 250 acres of construction and operational impacts to Important Bird Areas (IBA's) in New Jersey. IBA's are discrete sites that provide essential habitat for breeding, wintering and migrating birds. Of the seven IBA's that will be crossed by the proposed pipeline, four occur within New Jersey. Approximately 40% of the Project in New Jersey will cross IBA's.

Baldpate Mountain (West Amwell Township, Hunterdon County and Hopewell Township, Mercer County) is a significant IBA that provides habitat for a large diversity of migratory birds. Based on data collected from eBird, 170 species of birds have been observed within the Baldpate Mountain IBA. The Baldpate Mountain IBA is also a very well-known migratory stopover for Neotropical birds. From 2008-2016 the Washington Crossing Audubon Society (WCAS) conducted breeding bird studies within the Baldpate Mountain IBA. Results from the WCS breeding bird studies show that Baldpate Mountain IBA contains the highest documented density of breeding Neotropical migrants in New Jersey. The Baldpate Mountain IBA also supports a high diversity of rare birds including 61 species that have been ranked by the American Bird Conservancy as species of special concern. This includes the golden-winged warbler (*Vermivora chrysoptera*) and Bicknell's thrush, both species being evaluated for potential listing under the ESA. Similar to Baldpate Mountain IBA, Musconetcong Gorge (Holland Township, Hunterdon County), Everittstown Grassland (Alexandria Township and Kingwood Township, Hunterdon County), and Pole Farm (Hopewell Township, Mercer County) IBA's provide habitat for a rich diversity of migratory birds. Several of these birds include State-listed species such as the

bobolink (*Dolichonyx oryzivorus*) (threatened) and American kestrel (*Falco sparverius*) (threatened).

The impact of forest fragmentation on wildlife in the eastern U.S. has emerged as an important issue. Numerous studies of small woodlots in rural and suburban settings have shown major declines in forest bird populations. Migratory birds are a Federal trust resource and are the best-studied group of wildlife regarding adverse effects from fragmentation. Fragmentation generally affects birds through dispersal barriers, absence of suitable microhabitats, small population size, and edge effects. Other taxa have not been studied as thoroughly, but evidence suggests that certain mammals, amphibians, reptiles, and plants are also adversely affected by forest fragmentation as well.

After reviewing the Project and the summary of potential impacts, the Service believes the project will have significant impacts on migratory birds. The Service also finds that the BMPs to protect migratory birds are insufficient given the magnitude of disturbance proposed by PennEast. The Project will fragment large tracts of IBAs; cause prolonged disruption and disturbance to wintering, breeding, and migratory stopover sites; degrade habitat for area sensitive species; increase edge effects; and increase the risk of invasive species. Because of the large-scale disruption to migratory birds and their habitat, the Service requests FERC coordinate with the Service to re-route the proposed pipeline to protect migratory birds in highly concentrated areas. The Service also recommends a mitigation strategy and the development of a Migratory Bird Conservation Plan (MBCP) to be incorporated into FERCs NEPA analysis.

PROJECT SPECIFIC PLANS

The DEIS lists several planning documents that will be prepared to avoid and minimize impacts on listed species, species being reviewed for listing under the ESA, and migratory birds. The Service requests these draft planning documents be developed and incorporated into FERC's NEPA analysis and for the Service to meet its regulatory mandates of the ESA, FWCA, and the MBTA. The specific draft documents the Service would like to review include: 1) PennEast's Erosion and Sediment Control Plan (E&SCP), 2) FERC's Upland Erosion Control, Revegetation, and Maintenance Plan, 3) Horizontal Directional Drilling (HDD) Plan for Karst Terrain, 4) HDD Inadvertent Returns and Contingency Plan, 5) Blasting Plan, 6) Invasive Plant Species Control Plan, 7) Migratory Bird Conservation Plan, and 8) Bog Turtle Plan.

POLLINATORS

The Project involves the stabilization of the action area upon project completion. Some of the Project's components include the development of a native landscaping plan for all post construction activities. The Service recommends that all post construction revegetation efforts include plants that support pollinators into Project landscaping designs, where possible.

Pollinators contribute substantially to the economy of the United States and are vital in maintaining healthy ecosystems, yet severe losses to pollinator species from the environment, including honey bees, native bees, bats, and butterflies, have been observed over the past few decades. Honey bee (*Apis mellifera L.*) pollination alone adds more than $15 billion in value to agricultural crops each year in the United States (United States Department of Agriculture

2015)(USDA). The number of honey bee colonies declined about 50 percent from 1940s levels; and since the 2008 emergence of Colony Collapse Disorder (CCD - a phenomenon that occurs when the majority of worker bees in a colony disappear), annual losses of honey bee colonies averaged about 30.5 percent (USEPA 2014). CCD was first observed in the winter of 2006/2007 when large-scale losses of managed honey bee colonies in the United States were observed (vanEngelsdorp et. al 2009). Another pollinator species experiencing steep population decline is the monarch butterfly. The number of migrating monarch butterflies reached an all-time low in 2013-2014, reduced by 97 percent from the 1996-1997 high and by 90 percent from the 20-year average (Rendón-Salinas and Tavera-Alonso 2014).

In an effort to ensure the sustainability of food production systems, avoid additional economic impact on the agricultural sector, and protect the health of the environment, President Obama established the Pollinator Health Task Force to expand Federal efforts to reverse pollinator losses and help restore populations to healthy levels. In a June 20, 2014 memorandum, the President called on Federal agencies, including the Service, the Corps, and the USDA to "develop... plans to enhance pollinator habitat, and subsequently implement, as appropriate, such plans on their managed lands and facilities, consistent with their missions and public safety;" and for the FERC to "incorporate conservation practices for pollinator habitat improvement on ... projects across the country" (Obama 2014).

With the potential listing of the monarch butterfly for protection under the ESA, the Service has a mandate to work in collaboration with the Monarch Joint Venture (a partnership of Federal and State agencies, non-governmental organizations, and academic programs) to increase monarch butterfly habitat (milkweed and foraging food sources). It is recommended that FERC becomes a cooperative agency in the President's pollinator initiative.

NATIONAL ENVIRONMENTAL POLICY ACT

The Service respectfully declines FERC's invitation to be a cooperating agency as discussed in the DEIS. However, the Service remains committed to participating as a reviewing agency in the development of FERC's final NEPA document to ensure that the Project is sufficiently protective of fish and wildlife resources and their habitats, including federal listed species under the jurisdiction of the Service.

The FERC DEIS recognizes that the Project is also regulated by the states of New Jersey and Pennsylvania and that the Project may not proceed until the requirements of each State agency are met. The Service requests that FERC recognize in their NEPA document that there is a likelihood that the ROW may change as the applicant applies for and secures the necessary State permits and authorizations. Currently, the Service is commenting on the Project as identified in the FERC DEIS dated July 2016. Should the ROW change, additional review by the Service may be necessary, in order that we fulfill our statutory requirements of the NEPA, ESA, FWCA, MBTA, and CWA.

The Service offers the following comments and recommendations to be incorporated into FERC's NEPA document. Specifically, most of our comments are directed at Section 5.0 Conclusions and Recommendations of the DEIS.

5.1.1 Geologic Resources: The DEIS identifies "...27 abandoned or reclaimed mines along the route..." Should the Project impact any of the mine sites, it is recommended that the applicant perform survey efforts to identify the use of these mines by area wildlife. Both the federally listed Indiana bat and NLEB are known to occur along the Project and may be utilizing these abandoned mine sites to fulfill their life stage needs. As part of FERC's ESA responsibilities, it is requested that these mines be surveyed, if not done so already, to determine if either of these listed species are present. These surveys must be completed and their results be presented to the Service to continue our ongoing consultation efforts pursuant to the ESA.

The DEIS identified the Project crossing numerous water courses and waterways. Some of these waterways are classified as "C-1", the highest order of streams classified in the State of New Jersey (New Jersey Administrative Code 7:9B). It is recommended that each of these streams be traversed via HDD to minimize any impacts to the flora and fauna that utilize these specially designated habitats. Should the applicant propose mechanical open cuts of these waterways, it is recommended that "anti-seep collars" be utilized as a BMP. In addition, the applicant should obtain stream flow rates prior to and afterwards of any mechanical clearing of a "C-1" waterway to ensure that each of the anti-seep collars are performing properly and that the overall Project did not result in any unforeseen impacts to the aquatic environment (*i.e,* draining of a wetland or waterway).

5.1.2 Soils: The applicant states that they will develop a post construction monitoring plan "...until final stabilization of the site is achieved." The Service recommends that the applicant agree to a 5-year post monitoring plan to ensure success of their post construction commitments for soil stabilization and vegetation planting. This monitoring plan should identify performance measures that will evaluate the applicant's post construction efforts. The monitoring plan should also identify a corrective action should a performance measure not be met. The monitoring plan should also include a percentage threshold that would trigger an invasive species corrective action.

5.1.3.1 Groundwater: The applicant has identified five groundwater seeps along the Project's ROW. Spring seeps can be habitats for rare flora and fauna, including federal and state listed species. However, it does not appear that these seeps were surveyed and as such the Service cannot assess what, if any, impacts the Project may have on species utilizing these potentially rare habitats. The Service recommends that these spring seep areas be surveyed for rare or unique flora and fauna and that the results of these surveys be presented to the Service in determining Project impacts, if any, on fish and wildlife and their habitats. Should adverse impacts of the Project occur in these potentially rare habitats, the applicant should develop a

corrective action plan to ensure that these areas are restored to their pre-construction condition or are adequately mitigated.

5.1.3.2 Surface Waters: The Service agrees with FERC that the applicant must complete their geotechnical work (*i.e.*, drilling plan) of each of the water crossings to determine the appropriate Project construction measure required. The Service recommends that all "C-1" waterways that are proposed for crossings be accomplished via HDD rather than the preferred mechanical excavation method as identified in the DEIS. In the applicant's drilling plan, contingencies should be made in the event of a "frack-out" where drilling muds are accidently discharged into any waterbody or wetland. In addition, the Service recommends that the opinion of the NJDEP be sought by FERC in any NEPA document to determine if the Project meets the rules and regulations that regulate pipeline crossings in New Jersey. FERC and the applicant should also acknowledge in their NEPA analysis that the ROW alignment may change in order to meet the State of New Jersey's rules and regulations. The FERC NEPA document should acknowledge that NJDEP generally does not approve the mechanical crossings of "C-1" waterways and will likely request the use of HDD or a change in the Project's ROW alignment to avoid "C-1" waterways. Should the ROW alignment change, this may have additional NEPA implications (Project scope) and may require additional Service review on Project related impacts on fish and wildlife resources, including ESA listed species and their respective habitats.

The applicant identifies in the DEIS the potential use of 18 million gallons of water for hydrostatic testing. The Service agrees with FERC that the applicant must identify the final hydrostatic test water withdrawal locations, including if these water sources are associated with any sensitive aquatic habitats (*i.e.*, State or Federally listed species habitat including vernal pool habitat). FERC also requested the applicant determine if biocides are being used any hydrostatic testing. The Service recommends clarification on biocides and how they will be used.

5.1.3.3 Aquatic Resources: FERC identifies time-of-year construction windows for all stream and waterway crossings between June 1 and September 30 of any given year. The Service recommends that FERC's NEPA analysis include coordination with the NMFS and NJDEP's Division of Fish and Wildlife to ensure that the June 1 through September 1 time-of-year construction window is sufficiently protective of aquatic biota that may be impacted by the Project.

5.1.4 Wetlands: The DEIS identifies impacts to over 56 acres of wetlands, with 30 of those acres occurring in New Jersey. Pursuant to a MOA between the U.S. Army Corps of Engineers (Corps), NJDEP, and U.S. Environmental Protection Agency (USEPA), most of the regulated non-tidal portions of waters and wetlands in New Jersey were transferred to the State of New Jersey. Prior to the development of a FERC NEPA document, the Service requests that both NJDEP and the Philadelphia District Corps agree on their respective levels of jurisdiction pursuant to the CWA and the above referenced MOA. In addition, pursuant to the MOA,

activities that affect greater than five acres of wetlands would require additional review by the USEPA. The regulatory requirements of the MOA between the Corps, NJDEP and the USEPA and that of NJDEP's other regulatory permit requirements should be acknowledged in the FERC NEPA document, as these numerous regulations, rules, and MOA could likely affect the final alignment of the proposed ROW and any of the avoidance, minimization, and compensatory measures required to protect the aquatic environment.

In addition, some of the waterways affected by the Project, may also be regulated by the Corps pursuant to Section 10 the Rivers and Harbors Act of 1899 (30 Stat. 1151, as amended; 33 U.S.C 403 *et seq.*). Navigable waters of the United States are defined as "those waters of the U.S. that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past or may be susceptible to use to transport interstate or foreign commerce". The FERC NEPA document should acknowledge the regulatory requirements of Section 10 of the Rivers and Harbor Act of 1899 and seek concurrence from the Corps as to the scope of their jurisdiction of the Project.

5.1.5 Vegetation and Wildlife: The conversion of forest habitats to herbaceous habitats is considered a permanent impact and should be adequately compensated. The applicant has stated that some of the areas cleared would be allowed to "revert to its former use" however, the DEIS also states that areas in the cleared ROW would be maintained as herbaceous habitat. Forested lands that are lost permanently and the temporal loss of forested lands awaiting recovery should be adequately compensated.

The Service recommends that the applicant develop and coordinate their E&SCP and ROW maintenance plan with the appropriate local, State, and Federal government agencies and that this plan be incorporated into FERC's NEPA document. The plan should identify the time-of-year maintenance activities that would occur, timing restrictions for undertaking work to avoid potential impacts to Federal, State, or special status species, and the types of activities that may occur to implement the maintenance plan (*i.e.,* tree cutting, aerial operations, or chemical treatment).

The Service agrees with FERC that the applicant would be required to develop a MBCP pursuant to the MOA between the Service and FERC. The Service also recommends that the applicant consider impacts on the bald eagle (*Haliaeetus leucocephalus*) to determine compliance with the BGEPA. Should Project activities, including maintenance of the ROW, encroach within 660 feet of an eagle nest, the applicant must secure the necessary BGEPA permits prior to any construction or maintenance activities occurring.

5.1.6 Threatened, Endangered, and Special Status Species:

In a teleconference call with the Service on September 6, 2016, FERC instructed the applicant to not perform any construction activities, including advanced tree clearing as proposed in the DEIS, until the Service and FERC have concluded ESA consultation. Also, FERC recognized that the consultation process is predicated upon the applicant surveying the action area for listed species which has not been completed and is currently limited by lack of access to many sections of the action area. FERC also recognized that access to these un-surveyed sections of the action area may involve seeking permission through the judicial system via eminent domain. Until the surveys are complete, both FERC and the Service cannot fulfill their statutory requirements of the ESA, nor can consultation proceed. The Service awaits the required survey information so that we may perform the required effects analysis on the Project to determine if it will result in adverse affects to federally listed species under the jurisdiction of the Service.

The Service is aware of occurrences of the Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) upstream of the Project in the Delaware River. This may be considered new information that may warrant further consultation pursuant to the ESA, with the National Marine Fisheries Service (NMFS). It is recommended that the FERC and the applicant contact the NMFS to determine if this new information would warrant additional consultation pursuant to the ESA.

5.1.7 Land Use, Recreation, and Visual Resources: The DEIS identified several conservation encumbrances on land holdings that would be affected by the Project. Some of these encumbrances include conservation easements, recreation and special interest areas (*i.e.*, parklands, wildlife management areas, Green Acres lands, or Public Trust Lands), and U.S. Department of Agricultural easements. The Project should not result in the loss of a conservation easement. Some of these conservations easements were developed to protect lands from further development in perpetuity or to meet a State or Federal regulatory requirement (*i.e.*, mitigation pursuant to the CWA or New Jersey's Freshwater Wetlands Protection Act (N.J.S.A. B:9B-1 *et. seq.*)) and the siting and maintaining of a gas ROW may jeopardize the conservation status of a land holding impacted by the ROW. The Service requests that the applicant identify all conservation easements and public lands that may be impacted within the action area and to develop a mitigation program for any lands that lose a conservation status. In addition, the applicant should also coordinate with the appropriate government agencies whose lands may also be affected by the ROW (*e.g.*, New Jersey's Division or Parks and Recreation or New Jersey's Natural Lands Trust) to determine if those public lands should be compensated for in the event they are located in the action area.

SERVICE CONCLUSIONS AND RECOMMENDATIONS

The Service requests the following be incorporated into the FERC NEPA document. The Service is committed to participating in reviewing the NEPA documents to ensure that the Project is

sufficiently protective of fish and wildlife resources, including species protected under the ESA, and their respective habitats, but not as a cooperating agency.

- The applicant shall not perform any construction activities, including advanced tree clearing as proposed in the DEIS, until the Service and FERC have concluded ESA consultation.
- The applicant shall perform the necessary surveys for federally listed species in the action area and submit those results to FERC and the Service for review.
- All surveys for federally listed species should be accurately described in the FERC NEPA document.
- A detailed effects analysis containing baseline data should be described in the document with a list of appropriate conservation measures.
- A bog turtle plan should be developed in coordination with the Service.
- Determine if the Service's Section 7 programmatic biological opinion for the NLEB 4(d) rule will be used.
- In consultation with the Service, develop a conservation strategy to conserve federally listed species.
- Work with the Service to re-route the pipeline ROW to protect migratory birds in highly concentrated areas.
- FERC and the applicant should contact the NMFS to determine if the documented occurrence of the Atlantic Sturgeon upstream of the Project area would warrant additional consultation pursuant to the ESA.
- Provide the Service draft planning documents (*e.g.*, E&SCP) that will be used to complete the NEPA analysis.
- All post construction revegetation efforts should include plants that support pollinators.
- FERC should become a cooperative agency in the President's pollinator initiative.
- FERC should acknowledge that the action area may change as the applicant secures the necessary State permits and authorizations, likely necessitating additional review by the Service pursuant to NEPA, CWA, and ESA.
- The applicant shall perform flora and fauna surveys of the abandoned or reclaimed mines identified in the action area.
- The applicant shall employ the use of directional drilling of all wetlands and waterways. For any mechanical open cuts of waterways that are deemed necessary, the applicant shall employ the use of "anti-seep collars" for all waterway crossings and develop and post monitoring to ensure that the Project does not affect the base flows of any waterway crossed.
- In the applicant's drilling plan, contingencies should be made, including a mitigation plan, in the event of a "frack-out" where drilling muds are accidently discharged into any waterbody of wetland.

- The applicant shall conduct flora and fauna surveys of each of the spring seeps identified in the action area, and develop mitigation and or a corrective action plan for all unavoidable impacts to these spring seep areas.
- The NEPA document should acknowledge that NJDEP generally does not approve the mechanical crossings of "C-1" waterways and will likely request the use of directional drilling or a change in the Project's alignment to avoid "C-1" waterways.
- The applicant shall agree to a 5-year post monitoring plan to ensure success of their post construction commitments for soil stabilization and vegetation planting. The plan should identify performance measures that will evaluate Project success and also identify corrective actions, including an invasive species management plan should the need arise.
- The applicant should identify the final hydrostatic test water withdrawal locations, and determine if any of these water sources are associated with any sensitive aquatic habitats (*i.e.,* State or federally listed species habitat or vernal pool habitat). The applicant shall also confirm if any biocides will be used and for what purposes they are being used.
- The FERC NEPA document should include coordination with the NMFS and NJDEP's Division of Fish and Wildlife to ensure that the June 1 through September 1 time-of-year construction window for in-water work is sufficiently protective of aquatic biota that may be impacted by the Project.
- The NEPA document should acknowledge the transfer of the 404 of the CWA Program to the State of New Jersey pursuant to a MOA between the Corps, USEPA, and the NJDEP. In addition, pursuant to the MOA, activities that may affect greater than five acres of wetlands would require additional review by the USEPA. The FERC NEPA document should also acknowledge that implementation of the MOA and New Jersey's FWPA may affect the final alignment of the Project and the identification of any additional avoidance, minimization, and compensatory measures that were not identified in the DEIS.
- The FERC NEPA document should acknowledge the regulatory requirements of Section 10 of the Rivers and Harbor Act of 1899 and seek concurrence from the Corps as to the scope of their jurisdiction of the Project.
- The applicant shall develop a plan for all forested lands that are both temporarily or permanently impacted by the Project.
- The applicant shall develop and coordinate their ROW maintenance plan with the appropriate local, State, and Federal government agencies and that this plan be incorporated into the FERC NEPA document.
- The applicant shall complete avian surveys for the bald eagle (*Haliaeetus leucocephalus*) to determine compliance with the BGEPA. Should Project activities encroach within 660 feet of a known eagle nest, the applicant shall secure the necessary BGEPA permits prior to any construction or maintenance activities occurring.

- The applicant shall identify all conservation easements and public lands that may be impacted by the ROW and to develop a mitigation program for any lands that lose their conservation status.
- The applicant shall coordinate with the appropriate government agencies whose lands may also be affected by the ROW (*e.g.*, New Jersey's Division or Parks and Recreation or New Jersey's Natural Lands Trust) to determine if those public lands should be compensated for, in the event they are compromised by the ROW.

Thank you for the opportunity to comment on this project. We look forward to further consultation pursuant to the ESA and discussing our NEPA concerns. If you have any question regarding the Service's ESA comments, please contact Mr. Ron Popowski at Ron_Popowski@fws.gov. If you have any questions regarding our NEPA concerns please contact Mr. Steven Mars at 609-382-5267.

Sincerely,

Eric Schrading
Field Supervisor

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