

This document is the expert testimony of Washington Crossing Audubon Society's ornithologist Hannah Suthers:

The Honorable Norman Bay, Chair
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20428

7 September 2016

Re: Docket CP15-558-000 – Proposed PennEast Pipeline Draft Environmental Impact Statement (DEIS)

Dear Honorable Bay:

I am an Intervenor (ID F293091) and Stakeholder in Hopewell Township, NJ.

I was one of the biologists (Princeton University, now retired) involved as a volunteer in the initial monthly, year-around biological surveys of ten preserved or about to be preserved local areas to provide the Township, County, State and citizens' environmental groups respectively with data regarding purchase or management.

Among these are the Sourland Mountain, Alexaukin Creek WMA, The Pole Farm, and Baldpate Mountain. I was also the summer naturalist for Transco Pipeline for six summers.

I still continue as a volunteer directing 1 assisting in 6 of these, on a long-term monitoring basis: 1) Founder and Director of Featherbed Lane Bird Banding and Research Station (FLBBRS), now a National Audubon designated Important Bird Area (IBA) in the Hopewell Sourlands in its 39th Year. 17 publications.

2) Partner, monthly bio survey of St. Michael's Farm Preserve, Hopewell, 7th Year.

3) Crew member, monthly bio survey of Mt. Rose Preserve, Hopewell Township, 2nd year.

4-5) Helper, seasonal Birds of Forested Landscape (Cornell Lab. Of Ornithology) on Baldpate Mountain IBA and Sourlands Ecosystem Preserve IBA Hopewell/East Amwell, 5 years.

6) Participant in the 5-year NJDEP Herptile Atlas 2000-2005; continuing at FLBBRS.

With this background I find the DEIS woefully lacking, demonstrating no boots-on-the-ground experience. The DEIS is unacceptable in its abysmal lack of understanding of the stable, rare or declining plants, animals, birds, fish, reptiles, amphibians, invertebrates, and the effect that burgeoning through pristine, second-growth or agricultural habitat would have on them.

In the Sourland Mountain alone, PennEast pipeline would impact 200 acres of forest, 150 acres of agricultural land, 15 acres of wetlands and numerous vernal pools. Using my Bird Banding Station as an example on the Sourland Mountain it can be said that:

1) Up to 61% decline of territorial male **songbirds** of 71 species at the banding station (203 acres of second-growth woods and wooded shrubland, plus about 20.6 acres of control mature woods and 56 acres of control hayfields) reflect the national decline of 70% in the last half-century (State of North American Birds, 2016). Habitat destruction could push songbirds to the brink of extinction: there is nowhere else for them to go as more land falls to development. 30 Species (42%) of the FLBBRS breeding birds are Neotropical migrants (10 of Special Concern); 15 species (21%) are temperate migrants (1 NJ Threatened, 2 Special Concern); 26 species (37%) are resident species (1 NJ Threatened). Passage migrants total 51 species (12 Special Concern, 2 Endangered). Overwintering birds total 39 species (2 NJ threatened).

2) **Reforestation** takes 100 years or more, not just the 30 years that PennEast proposes. The 20 acre cornfield at my banding station, 60 years into succession, is in mid-succession with red maples that have yet to attain full height and girth. It has no understory, a shrub layer of multiflora rose and ground cover predominately of stilt grass. Restoration/mitigation of clear-cut woods is not possible during the lifetime of the current birds, considering the many layers of vegetation involved. The birds would go locally extinct first. The rapidly declining population of songbirds cannot sustain that loss.

3) **Deer** browse the hardwood seedlings and native shrubs. Deer don't like red maple, hence it thrives, and the composition of our forests is being seriously impacted by deer browse. Deer also don't eat roses, autumn olive, stilt grass. An exclusion fence would be necessary to protect planted trees, shrubs and seasonal wildflowers.

4) **Native vegetation** is immediately preempted by invasive species following clear-cut or mowing. Does PennEast plan to hose off all equipment brought in the area to prevent introducing noxious weeds? My growing FLBBRS list of native and introduces species has 32 tree species (1 protected), 15 shrubs (1 protected), hundreds of herbs (3 protected), 8 ferns, 27 grasses, 17 sedges and rushes, 10 mosses. Wildlife on FBBRS in addition to birds depending on native vegetation include 21 resident mammals and 1 transient (black bear), a large and growing list of identified invertebrates including 3 land snails (calcium for Wood Thrush eggs), 10 Arachnids, 36 butterflies (2 special concern), 15 moths, other insects (1 protected).

5) Sunlight from the ROW can penetrate woods 300 – 600 meters (983 – 1967 feet) (Wilcove 1986) inside the forest interior, creating the **edge effect**, ruining the deep woods that many Neotropical migratory birds and other wildlife need.

6) Roosts for **bats** in shagbark hickory would be lost (shagbark hickory is USFWS protected); bordering my bird banding station there are 19 hickories along 1180 feet of old field/wooded roadside edge, and 14 hickories along 885 feet of old field/forest edge. Forests can be expected to have a higher density. The Big Brown Bat is listed as Special Concern.

7) Destruction of **vernal pools**. Vernal pools are protected by the State of NJ. A two-year census of one of several pools at the bird banding station, a 0.25 acre State registered pool, yielded 800 Spotted Salamanders and 2500 Wood Frogs migrating in from as far as we tested, 590 feet away. The PennEast proposed 300 foot buffer is woefully inadequate to preserve such a population. It takes years to restore pool-bottom tiny decomposer organisms and detritus that feed tadpoles and efts. A bulldozed depression with tarp bottom doesn't mitigate the destruction. PennEast hasn't begun to record the vernal pools on the proposed route. Herbicides must not be used near wetlands and vernal pools; if not the herbicide itself, the surfactants and solvents can be deadly to fish and amphibians. FLBBRS has 14 amphibians (2 NJ Special Concern), and 9 reptiles (2 Special Concern) 4 of which need pools.

8) **Streams** would be polluted, destroying aquatic life, and drinking water of millions of people in Trenton and Princeton would be polluted. Tributaries of Beden's and Stony Brook that flow to Princeton's Carnegie Lake water supply are in FBBRS. Other tributaries go to the Delaware River.

Also a word to the wise from a career biologist with professional publications: little things such as misspellings (vegetation) and inconsistent statements of the length of the pipeline would in themselves evoke immediate rejection by an editor let alone the paucity of data.

I strongly request rejection of this DEIS. Seeing the species richness of habitats that the proposed pipeline would cross and the lack of need (except profit) I request 'no action' on your part.

Furthermore, doesn't the addition of material from PennEast technically make this draft a new document and therefore the commentary period thereof should start again at day zero?

References:

- Heilferty, J. 2005. Immigrating wood frogs and spotted salamanders to Vernal Pool 12527 icp, Hopewell, NJ: from how far do they migrate? 2004-2005. Unpublished.
- Institute for Bird Populations, Point Reyes Station, CA. Monitoring Avian Productivity and Survivorship. Featherbed Lane Bird Banding and Research Station is a MAPS charter station 1989 –present.
- New Jersey DEP. 2016. NJ Endangered and Nongame Species Program Species Status Listing.
- Suthers, H.B. 1988. Old Field Succession and Bird Life in the New Jersey Sourlands. Records of New Jersey Birds Vol. XIII (4):54-63.
- Suthers, H.B., J.M. Bickal, and P.G. Rodewald. 2000. Use of Successional Habitat and Fruit Resources by Songbirds during Autumn Migration in Central New Jersey. Wilson Bulletin 112(2):249-260.
- Wilcove, D.S. 1986. *In* M. Soule, Ed., Conservation Biology: The Science of Scarcity and Diversity. Sinauer Associates, University of Minnesota. Chapter on edge effect.

Sincerely,

Hannah Bonsey Suthers