MONWEALTH OF PENNSYLVANIA **ZPENNSYLVANIA GAME COMMISSION**

2001 Elmerton Avenue Harrisburg, PA 17110-9797

Wildlife Habitat Management 717-787-6818

July 28, 2017

PGC ID Number: 201403110501 Revision

Justin Zoladz Ecology and Environment, Inc. Buffalo Corporate Center 368 Pleasant View Drive Lancaster, NY 14086 JZoladz@ene.com

Re: Transcontinental Gas Pipe Line Company, LLC-Atlantic Sunrise Expansion Project-Revision State Game Lands Nos. 84, 132, and 206 Large Project PNDI Review

Clinton, Lycoming, Susquehanna, Wyoming, Luzerne, Columbia, Northumberland, Schuylkill, Lebanon, and Lancaster Counties, PA

Dear Mr. Zoladz,

Thank you for submitting your revised Pennsylvania Natural Diversity Inventory (PNDI) Large Project Environmental Review request. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only. This letter is an update to the letter issued on September 19, 2016 based on additional information provided to the PGC.

Potential Impact Anticipated

PNDI records indicate species or resources of concern are located in the vicinity of the project. The PGC has received and thoroughly reviewed the information that you provided to this office as well as PNDI data, and has determined that potential impacts to threatened, endangered, and species of special concern may be associated with your project. Therefore, additional measures are necessary to avoid potential impacts to the species listed below:

Scientific Name	Common Name	PA Status	Federal Status
Myotis sodalis	Indiana Bat	ENDANGERED	ENDANGERED
Myotis septentrionalis	Northern Long-eared Bat	THREATENED	THREATENED
Neotoma magister	Allegheny Woodrat	THREATENED	N/A
Myotis leibii	Eastern Small-footed Bat	THREATENED	N/A
N/A	Winter Bat Colony	SPECIAL CONCERN	N/A

Next Steps

Indiana and Northern Long-eared Bats

Indiana and northern long-eared bats are a federally listed species under the jurisdiction of the U.S. Fish and Wildlife Service. As a result, our agency defers comments on potential impacts to Indiana and northern long-eared bats to the U.S. Fish and Wildlife Service.

Allegheny Woodrat

Allegheny woodrat habitat surveys were conducted on the project area in 2015 and 2016 to identify and delineate suitable woodrat habitat. Two areas surveyed contained suitable habitat with evidence of previous woodrat occupation with the vicinity of the proposed project area. Mitigation for impacts to these two areas will consist of revegetation plantings and replacement travel corridors following the details described in the mitigation plan approved by the PGC on May 27, 2016.

Eastern Small-footed Bat and Winter Bat Colony

Summer Roost Habitat: Eastern small-footed bat habitat assessments were conducted on the project area in 2015 and 2016 to identify and delineate suitable woodrat habitat. Rocky areas deemed suitable for eastern small-footed bat day roosts were identified within the project area. Mitigation for impacts to these two areas will consist of construction and monitoring of alternate roost structures following the details described in the mitigation plan approved by the PGC on May 27, 2016.

Hibernacula: Surveys conducted in spring 2017 identified 12 potential bat hibernacula, at three different locations that had not been previously identified. Acoustics surveys were conducted at these portals in the spring of 2017. A total of 287 potential bat calls were recorded within the cluster of 8 portals (M — M) in Northumberland County located in proximity to MP and associated with Vein Number. No calls were recorded at the other 4 portals surveyed. Of the 287 bat calls recorded at the 8 portal bat hibernaculum complex, 105 were of a minimum frequency level of ≥35 kilohertz (kHz), indicating they originated form one of the five *Myotis* species, including eastern small-footed bats. As such, the following avoidance and minimization measures, mitigation, and monitoring are to be implemented:

Avoidance:

- o No blasting year round within 0.25 mile of the subsurface limits of the Months portal complex (MP to MP).
- O No tree clearing between April 1st and November 15th within a 0.25-mile radius surrounding the M portal complex.
- Construction activities involving ground disturbance within 0.25-mile radius of the portal complex will be restricted between November 15th and March 31st.

• Minimization:

o All work between MP will be completed within a two week period to minimize impacts on the hibernacula.

- Tree clearing within 250 feet of portals Ma -Ma is to be minimized to the greatest extent possible.
- o The bypass access road is to be utilized to move construction equipment around strip mine trench and away from portals M and M.
- The strip mine trench is to be backfilled and the prefabricated pipeline is be installed within the fill material eliminating the need to excavate directly above the portion of Vein Number where it is closest to the surface.
- O Bat gates will be installed over portal M and M prior to construction (see Mitigation below) which will block any large materials from entering the portals during construction and help maintain the structural integrity of the portals, prevent human entry, and leave a permanent marking denoting the importance of the site port-construction.
- O Construction fencing will be installed to block smaller material from entering the portals and to ensure a buffer is maintained between the portals and construction activities.
- Three trees identified as important to maintaining the slope adjacent to the M portal (a mature chestnut oak, bigtooth aspen, and black birch) will be preserved.
- O Non-mechanized equipment (e.g., hand-fell) will be used to removal trees within 250 feet of the M and M portals in a manner that will prevent structural damage to the portals.
- Erosion control measures will be installed to stabilize and protect the slopes adjacent to the portals.
- o. All construction activities within 250 feet of the portals will be monitored.
- Mitigation: Bat friendly gates will be installed on portals Man and Man prior to the start of construction, between August 15th and September 30th, and under the direction of a qualified bat surveyor. Bat gate final design plans are to be submitted to the PGC for review and approval prior to installation. In addition, the PGC will be given access to the gates for future monitoring activities.

• Monitoring:

- o Fall bat trapping survey will be completed in 2017 (year construction is to occur) and 2018 (post-construction).
- o Spring bat acoustics will be completed in 2018 (post-construction).
- o Meteorological conditions will be monitored within the portal to confirm the hibernaculum is continuing to function as suitable habitat following construction.
- All survey reports will be submitted to the PGC no later than 120 days after each survey has been completed.

State Game Lands

Portions of the proposed project are located on State Game Lands Nos. 84, 132, and 206. Please contact Mr. Michael Beahm, Northeast Land Management Supervisor, at 570-675-1143 to discuss and coordinate the project on SGL 84 and 206, and Mr. Dave Mitchell, Southeast Region Land Management Supervisor, at 610-926-3136 to discuss and coordinate the project on SGL 132.

Conservation Measures

National Wetland Inventory Mapping (NWI) and/or aerial photos suggest that wetlands are located within the requested review throughout the proposed project. The PGC is requesting that the final project avoid, or at least minimize to the greatest practical extent, any adverse impacts to these resources and their associated wildlife habitat.

In addition, portions of the project are located in areas where the abundance and species richness of various area-sensitive forest bird species are among the highest in the state. Area-sensitive forest bird species are those species that require a large expanse of relatively contiguous (unfragmented) forest to maintain their populations. The species found in these areas are listed as species of greatest conservation need in Pennsylvania's Wildlife Action Plan (WAP). The WAP was designed to proactively manage and safeguard the state's declining fish and wildlife resources, and sets a framework to conserve Pennsylvania's diverse wildlife, maintain their role in ecological processes, and protect and enhance species of conservation concern (not just imperiled species). Although these area-sensitive forest bird species are not currently listed as threatened or endangered, and do not produce potential conflicts for projects reviewed using the on-line PNDI Environmental Review Tool, their populations and requisite habitat are either in decline, or are vulnerable to decline in the state.

As a result, the PGC is recommending the following conservation measures be implemented, to the greatest extent practicable, to minimize impacts to these area-sensitive forest bird species and minimize additional fragmentation of forested tracts throughout the project area:

- Co-locate the pipeline and associated facilities with existing roads and other disturbed areas.
- Minimize the width of the temporary construction right-of-way (ROW), and avoid grubbing where possible to encourage the re-establishment of woody vegetation.
- Minimize the width of the permanent, maintained ROW to only that which is absolutely necessary to maintain the integrity of the pipeline.
- Maximize the rotation of mowing and/or clearing along that maintained ROW to allow for the establishment of more beneficial wildlife habitat.
- Perform initial tree clearing for the project between August 15th and April 15th.
- Use the following seed mixes, or similar herbaceous seed mixes that will minimize competition with volunteer woody plant species, while offering additional wildlife habitat and food sources along the reclaimed ROW:

Steep Slopes	Other Areas	
I bushel/acre Annual Cereal Grain (oats in spring, grain rye or wheat in fall)	1 bushel/acre Annual Cereal Grain (oats in spring, grain rye or wheat in fall)	
10 lbs/acre Timothy	5 lbs/acre Timothy	
3 lbs/acre Birdsfoot Trefoil	5 lbs/acre Birdsfoot Trefoil	
4 lbs/acre Little Bluestem	4 lbs/acre Little Bluestem	
3 lbs/acre Alsike Clover	2 lbs/acre Indiangrass	
3 lbs/acre Ladino Clover	1 lb/acre Side-oats Grama	
Straw Mulch, NO HAY	1 lb/acre Switchgrass	
	1/4 lb/acre Black-eyed Susan	
	1/4 lb/acre Lance-leaved Coreopsis	
	Straw Mulch, NO HAY	

 Perform any future mowing and/or clearing along the maintained ROW between August 15th and April 15th.

This response represents the most up-to-date summary of the PNDI data files and is <u>valid for two</u> (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). If the proposed work has not changed and no additional information concerning listed species is found, the project will be cleared for PNDI requirements under this agency for two additional years.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,

Tracey Librandi Mumma

Tracey Librardi Munma

Division of Environmental Planning & Habitat Protection

-6-

Bureau of Wildlife Habitat Management Phone: 717-787-4250, Extension 3614

Fax: 717-787-6957

E-mail:tlibrandi@pa.gov

A PNHP Partner



TLM/tlm

Pamela Shellenberger, U.S. Fish and Wildlife Service cc:

Glick

Dingman

Ross

Beahm

Figured

Wenner

Metz

Mitchell

Morgan

Laroche

Brauning

Turner

Havens