



# EcolSciences, Inc.

Environmental Management & Regulatory Compliance

May 5, 2021

Mark Herrmann, PE, CFM  
Princeton Hydro LLC  
1108 Old York Rd  
Ringoes, New Jersey 08551

Re: Environmental Impact Statement  
Hillandale  
Block 100, Lot 17.03  
Township of Mendham  
Morris County, New Jersey

Dear Mr. Herrmann:

In a letter dated March 16, 2021, Princeton Hydro LLC requested additional information to be addressed by the Environmental Impact Statement (EIS). Below is a list of those items and the requested information.

*1.1 The application submitted to the Planning Board includes an Environmental Impact Study (EIS), prepared by Gladstone Design, Inc. dated 12 February 2021. The EIS is basically complete and was prepared in keeping with the guidance provided in the Township's Land Development Ordinances, §17-3.1.*

No response needed.

*1.2 The EIS briefly describes the topography and slope of the site but it does not show various slope characteristics on any of the included maps or as tables. This shall be included in the EIS as required by §17-3.1a(5).*

The slope table and mapping are included on Sheet 3 (Existing Conditions and Environmental Constraints Plan) of the site plans prepared by Gladstone Design Inc.

*1.3 The area's soils are thoroughly characterized in the EIS in Table 1 as well as the soils map in Figure 4. However, soil logs were not included in the EIS to help further illustrate the soil throughout the site. The Applicant shall include the soil logs in the EIS as required in §17-3.1a(4).*

The soil logs are included in Appendix H of the Stormwater Management Report as prepared by Gladstone Design Inc.

1.4 *The Applicant has noted that a search of the site from the NJDEP Natural Heritage Program has been requested; results are still pending. On-site analysis has been conducted to provide a complete inventory of avian terrestrial and aquatic flora and fauna species as outlined in §17-3.1a(11). The Applicant shall provide a complete Natural Heritage Program query results in compliance with this ordinance.*

A copy of the Natural Heritage Program letter dated February 24, 2021 is enclosed. The Natural Heritage Program corresponds to the New Jersey Department of Environmental Protection (NJDEP) Landscape Project (Version 3.3) habitat mapping of threatened, endangered, and special concern wildlife species as described in the EIS.

1.5 *The EIS states that visual observations were made of likely big brown bats emerging from the main building on the site. However the results of the survey were not presented. It is requested that these results be included.*

EcolSciences conducted a night emergence survey on August 13, 2014. As part of the survey, EcolSciences utilized a bat detector that enhances the frequencies that bats emit when they are echolocating (hunting for insects) so they can be heard by the human ear. Two observers were stationed on either side of the building, 30 minutes prior to sunset. No activity was observed in the front of the main building and within the courtyard. However, the bat detector picked up several bats at the rear of the main building and the landscaped lawn area immediately southwest. This landscaped area includes several of the mature tree species that can provide bat roosting habitat described above. At least five to six bats emerged either from the main building or from the mature trees were located in this landscaped area. Of the individuals observed, the bats were determined to be of a relatively large size, and probably were all big brown bats (*Eptesicus fuscus*). Big brown bats are common denizens of buildings during the active season. The emerging bats were all solitary, confirming the results of the internal examination of the building that there is no large bat colony occupying the buildings. However, it does support that bats use the main building and immediate surrounds. The bats were detected for several hours after dark likely foraging in the tree tops of the mature trees in the landscaped area.

1.6 *There are 199 trees proposed for removal but the EIS indicates that the landscape plan, which will include a mix of trees, shrubs, and ground covers, will mitigate the loss of vegetation. However, the Summary Chart in Chapter IV, Section O indicates no mitigation measures for vegetation; clarification on this discrepancy is requested. It is also requested that mitigation plans as noted in Chapter IV, Section G 'Vegetation' should be explained in more detail to better understand the full impact to the vegetation of the area (number of trees proposed to be used for replacement, consideration of native species, etc.) especially due since the removal includes 17 heritage trees (trees of 24" + DBH).*

The details on the trees to be used for replacement and species list of proposed plantings (identified as a plant schedule) are included on Sheet 17 (Landscaping Plan) of the site plans as prepared by Gladstone Design Inc. The Landscaping Plan sheets also include a table of the trees to be removed. A total of 199 trees of varying sizes are to be removed, the Township Ordinance requires that a

minimum of 228 trees be planted as compensation. The plan proposes planting 264 trees at the minimum required size of 2.5” – 3” caliper. In addition to the trees for shrubs and ground covers are proposed around the development. The plant species proposed for the development are native or naturalized plant species to the area. In addition to the plantings around the development the three (3) proposed bio-retention stormwater basins will be planted in accordance with NJDEP regulations. Below is the revised portion of the Summary Chart table:

Resource	SHORT TERM					LONG TERM								
	Impact					Mitigation		Impact					Mitigation	
	1	2	3	4	5*	Yes	No	1	2	3	4	5*	Yes	No
Vegetation	1					No		1					Yes	(see plans)

Short Term = Construction Related

Long Term = Use Related

\* Indicate the level of impact on the scale of 1 to 5 (Assuming that 1 is the least impact/5 is greatest impact)

1.7 The application must receive Soil Erosion and Sediment Control certification from the Morris County Soil Conservation District. The Applicant shall seek certification and supply the certification to the Planning Board and experts upon receipt.

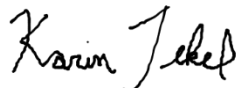
The applicant will seek the certification and forward to the Planning Board and experts upon receipt.

1.8 There is no clear information on the proposed septic system beyond existing and proposed flow rates. There are facilities shown on the site plans that indicate sewage treatment but it is not clear how wastewater will be managed. It is requested that the Applicant clarify details about the proposed system and associated loading relative to the previous system and load, though we ultimately defer to the Board’s Engineer on this matter.

This is to be addressed during testimony by Mr. Robert Moschello of Gladstone Design, Inc.

Very truly yours,

EcolSciences, Inc.



Karin Tekel  
Assistant Vice President

KT/bms  
Enclosure



## State of New Jersey

MAIL CODE 501-04

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF PARKS & FORESTRY

NEW JERSEY FOREST SERVICE

OFFICE OF NATURAL LANDS MANAGEMENT

P.O. BOX 420

TRENTON, NJ 08625-0420

Tel. (609) 984-1339 Fax (609) 984-0427

PHILIP D. MURPHY  
*Governor*

SHEILA Y. OLIVER  
*Lt. Governor*

SHAWN M. LATOURETTE  
*Acting Commissioner*

February 24, 2021

Karin Tekel  
EcolSciences, Inc.  
75 Fleetwood Drive, Suite 250  
Rockaway, NJ 07866

Re: EN21-017 Pinnacle-Mendham  
Block(s) - 100, Lot(s) - 17.03  
Mendham Township, Morris County

Dear Ms. Tekel:

Thank you for your data request regarding rare species information for the above referenced project site.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.3) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Natural Heritage Data Request Form into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1 and 2 (attached) to determine if any priority sites are located on or in the immediate vicinity of the site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html>. If suitable habitat is present at the project site, the species in that list have potential to be present.

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from [http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes\\_2010.pdf](http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf).

Beginning May 9, 2017, the Natural Heritage Program reports for wildlife species will utilize data from Landscape Project Version 3.3. If you have questions concerning the wildlife records or wildlife species mentioned in this response, we

NHP File No. 21-4007466-21395

recommend that you visit the interactive web application at the following URL, <https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=0e6a44098c524ed99bf739953cb4d4c7>, or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

For additional information regarding any Federally listed plant or animal species, please contact the U.S. Fish & Wildlife Service, New Jersey Field Office at <http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html>.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Robert J. Cartica', with a long horizontal flourish extending to the right.

Robert J. Cartica  
Administrator

c: NHP File No. 21-4007466-21395

**Table 1: On Site Data Request Search Results (6 Possible Reports)**

<b><u>Report Name</u></b>	<b><u>Included</u></b>	<b><u>Number of Pages</u></b>
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites On Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.3	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

**Rare Wildlife Species or Wildlife Habitat on the  
Project Site Based on Search of  
Landscape Project 3.3 Species Based Patches**

<b>Class</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Feature Type</b>	<b>Rank</b>	<b>Federal Protection Status</b>	<b>State Protection Status</b>	<b>Grank</b>	<b>Srank</b>
<i>Aves</i>								
	Barred Owl	Strix varia	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Veery	Catharus fuscescens	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G4	S3B,S4N
<i>Mammalia</i>								
	Bobcat	Lynx rufus	On Road	4	NA	State	G5	S2
	Indiana Bat	Myotis sodalis	Active Season Sighting	5	Federally Listed Endangered	State	G2	S1
	Indiana Bat	Myotis sodalis	Maternity Colony	5	Federally Listed Endangered	State	G2	S1
	Indiana Bat	Myotis sodalis	Roost Site	5	Federally Listed Endangered	State	G2	S1
	Northern Myotis	Myotis septentrionalis	Active Season Sighting	5	Federally Listed Threatened	NA	G1G2	S1
<i>Reptilia</i>								
	Wood Turtle	Glyptemys insculpta	Occupied Habitat	3	NA	State Threatened	G3	S2

**Table 2: Vicinity Data Request Search Results (6 possible reports)**

<b><u>Report Name</u></b>	<b><u>Included</u></b>	<b><u>Number of Pages</u></b>
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites within the Immediate Vicinity	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.3	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included



<p><b>Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches</b></p>
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Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Strank
<i>Aves</i>								
	Barred Owl	Strix varia	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Veery	Catharus fuscescens	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G4	S3B,S4N
<i>Mammalia</i>								
	Bobcat	Lynx rufus	On Road	4	NA	State Endangered	G5	S2
	Indiana Bat	Myotis sodalis	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	Myotis sodalis	Maternity Colony	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	Myotis sodalis	Roost Site	5	Federally Listed Endangered	State Endangered	G2	S1
	Northern Myotis	Myotis septentrionalis	Active Season Sighting	5	Federally Listed Threatened	NA	G1G2	S1
<i>Reptilia</i>								
	Wood Turtle	Glyptemys insculpta	Occupied Habitat	3	NA	State Threatened	G3	S2