



Pennsylvania Fish & Boat Commission

Division of Environmental Services
Natural Diversity Section
450 Robinson Lane
Bellefonte, PA 16823
814-359-5237

October 8, 2014

IN REPLY REFER TO
SIR# 43172

James M. Becker
Pacific Northwest National Laboratory
P.O. Box 999
Richland, WA 99352

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
Bell Bend Nuclear Power Plant Project - Bell Bend, Humboldt, Seedco, and Montour sites
Pennsylvania**

Dear Mr. Becker:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

The following tables list PFBC species of concern within a 21 mile radius of the four sites (Bell Bend, Humboldt, Seedco, and Montour) and describe appropriate follow-up actions, if any:

1. Bell Bend

Common Name	Species Name	Status
Northern Cricket Frog	<i>Acris crepitans</i>	Endangered
Timber Rattlesnake	<i>Crotalus horridus</i>	Candidate
Green Floater	<i>Lasmigona subviridis</i>	Rare
Yellow Lampmussel	<i>Lampsilis cariosa</i>	Rare
Elktoe	<i>Alasmidonta marginata</i>	Rare
Alewife Floater	<i>Anodonta implicata</i>	Rare
Triangle Floater	<i>Alasmidonta undulata</i>	Rare
Eastern Mudminnow	<i>Umbra pygmaea</i>	Candidate
Spotted Turtle	<i>Clemmys gutatta</i>	Rare
Eastern Hognose Snake	<i>Heterodon platirhinos</i>	Rare

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To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

Northern Cricket Frog (*Acris crepitans*, Endangered)

Earth disturbance activities associated with the Bell Bend project will most likely impact potential habitat for the state endangered Northern Cricket Frog (*Acris crepitans*). An unvouchered audio report of Northern Cricket Frog has been reported from the vicinity of Bell Bend (PFBC, *unpublished data*) and confirmed Northern Cricket Frog occurrences have been documented in close proximity of Bell Bend. Therefore, to avoid any adverse impacts to the species of concern listed above, we request that a Northern Cricket Frog presence/absence survey be conducted in the project area. This survey should be completed by a qualified biologist (list enclosed) in accordance with the Pennsylvania Fish & Boat Commission's enclosed survey guidelines. Upon the completion of the survey, the qualified biologist is to submit a report to this office for review and comment.

Rare mussel species (Green Floater, Yellow Lampmussel, Elktoe, and Triangle Floaters) have been previously documented by Biodiversity and Normandeau biologists in the vicinity of Bell Bend and downstream of Bell Bend. These rare mussels may benefit by make up water released from Cowanesque and the Rushton mine to mitigate for Bell Bend's consumptive use of 43 cfs – these releases may result in a net benefit to mussels during low flow periods. These rare mussels, and the Northern Hogsucker (*Hypentelium nigricans*), should be considered during finalization of the Consumptive Use Mitigation Plan by the Susquehanna River Basin Commission (SRBC).

2. Humboldt

Common Name	Species Name	Status
Northern Cricket Frog	<i>Acris crepitans</i>	Endangered
Eastern Pearlshell	<i>Margaritifera margaritifera</i>	Endangered
Timber Rattlesnake	<i>Crotalus horridus</i>	Candidate
Green Floater	<i>Lasmigona subviridis</i>	Rare
Alewife Floater	<i>Anodonta implicata</i>	Rare
Triangle Floater	<i>Alasmidonta undulata</i>	Rare
Yellow Lampmussel	<i>Lampsilis cariosa</i>	Rare
Elktoe	<i>Alasmidonta marginata</i>	Rare
Spotted Turtle	<i>Clemmys gutatta</i>	Rare
Wood Turtle	<i>Glyptemys insculpta</i>	Rare

3. Seedco

Common Name	Species Name	Status
Timber Rattlesnake	<i>Crotalus horridus</i>	Candidate
Green Floater	<i>Lasmigona subviridis</i>	Rare
Yellow Lampmussel	<i>Lampsilis cariosa</i>	Rare
Elktoe	<i>Alasmidonta marginata</i>	Rare
Alewife Floater	<i>Anodonta implicata</i>	Rare
Triangle Floater	<i>Alasmidonta undulata</i>	Rare
Allegheny Cave Amphipod	<i>Stygobromus allegheniensis</i>	Rare
Spotted Turtle	<i>Clemmys gutatta</i>	Rare
Wood Turtle	<i>Glyptemys insculpta</i>	Rare

4. Montour

Common Name	Species Name	Status
Eastern Spadefoot Toad	<i>Scaphiopus holbrooki</i>	Threatened
Timber Rattlesnake	<i>Crotalus horridus</i>	Candidate
Green Floater	<i>Lasmigona subviridis</i>	Rare
Yellow Lampmussel	<i>Lampsilis cariosa</i>	Rare
Elktoe	<i>Alasmidonta marginata</i>	Rare
Alewife Floater	<i>Anodonta implicata</i>	Rare
Triangle Floater	<i>Alasmidonta undulata</i>	Rare
Allegheny Cave Amphipod	<i>Stygobromus allegheniensis</i>	Rare
Spotted Turtle	<i>Clemmys gutatta</i>	Rare
Eastern Hognose Snake	<i>Heterodon platirhinos</i>	Rare

The following table lists reptiles and amphibians that could possibly occur within or downstream of Cowanesque Lake and could potentially be adversely affected by Cowanesque Lake drawdowns. Reptiles and amphibians, in general, can be affected by lake level fluctuations particularly during brumation or hibernation periods where exposure of would make them susceptible to mortality via freezing. Most herpetafauna begin to emerge from brumation/hibernation around April 15 or when the water temperatures reach approximately 50 degrees (F).

Common Name	Species Name	Status
Snapping Turtle	<i>Chelydra serpentina</i>	None
Painted Turtle	<i>Chrysemys picta</i>	None
Wood Turtle	<i>Glyptemys insculpta</i>	Rare
Bull Frog	<i>Lithobates catesbeiana</i>	None
Green Frog	<i>L. clamitans</i>	None
Pickerel Frog	<i>L. palustris</i>	None
Northern Leopard Frog	<i>L. pipiens</i>	None
American Toad	<i>Anaxyrus americanus</i>	None
Spring Peeper	<i>Pseudacris crucifer</i>	None
Grey Tree Frog	<i>Hyla versicolor</i>	None
Red-spotted Newt	<i>Notophthalmus viridescens</i>	None
Northern Dusky Salamander	<i>Desmognathus fuscus</i>	None
Mountain Dusky Salamander	<i>D. ochrophaeus</i>	None
Two-lined Salamander	<i>Eurycea bislineata</i>	None
Long-tailed Salamander	<i>E. longicauda</i>	None
Northern Spring Salamander	<i>Gyrinophilus porphyriticus</i>	None

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or

proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Nevin Welte at 412-586-2334 and refer to the SIR # 43172. Thank you for your cooperation and attention to this important matter of rare species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink that reads "Christopher A. Urban". The signature is written in a cursive style with a large, prominent initial "C".

Christopher A. Urban, Chief
Natural Diversity Section

CAUNTW/dn

Cc: M. Hartle, PFBC
P. Naugle, SRBC

Enclosure