

December 19, 2013

Mr. Nick Conrad
New York Natural Heritage Program
Information Services
625 Broadway 5th Floor
Albany, NY 12233-4757

Dear Mr. Conrad:

SUBJECT: REQUEST FOR FEDERALLY LISTED SPECIES AND CRITICAL HABITATS, STATE-LISTED SPECIES, AND STATE-RANKED SPECIES AND COMMUNITIES FOR THE ENVIRONMENTAL REVIEW OF THE CONSUMPTIVE USE MITIGATION PLAN FOR THE BELL BEND NUCLEAR POWER PLANT COMBINED LICENSE APPLICATION

Pacific Northwest National Laboratory (PNNL) has been contracted by the U.S. Nuclear Regulatory Commission to assist in its review of an application submitted by PPL Bell Bend, LLC (PPL) for a combined license for the construction and operation of one new commercial nuclear power reactor at the Bell Bend Nuclear Power Plant (BBNPP) site, located west of the existing Susquehanna Steam Electric Station site in Luzerne County, Salem Township, Pennsylvania. The BBNPP site is situated near the west bank of the North Branch of the Susquehanna River, approximately 5 miles northeast of the town of Berwick, Pennsylvania (Figure 1).

The NRC's review extends to an examination of PPL's plan for mitigating the proposed plant's consumptive use of water from the North Branch of the Susquehanna River. PPL has proposed a primary and a secondary consumptive use mitigation option. An overview of the portions of the primary and secondary options of the consumptive use mitigation plan that affect waters of the state of New York is provided in Figure 1. A background summary of the portions of the two mitigation options that affect the water courses in Figure 1 is provided below.

The primary mitigation option includes releasing water from the existing Cowanesque Lake (Figure 2). (It also includes releases of water from other downstream sources in Pennsylvania not affecting New York). The secondary option consists solely of releasing water from the Tioga-Hammond Reservoir project located just to the south of Cowanesque Lake (Figure 2). In either option, mitigation water would be released

during periods of low flow that may occur from May through October. Low flow would be determined at the U.S. Geological Survey Wilkes-Barre stream gage, located on the North Branch Susquehanna River upstream of the proposed Bell Bend site, using flows set by the Susquehanna River Basin Commission. The mitigation water from Cowanesque Lake would follow the Cowanesque River to its confluence with the Tioga River in New York just north of Lawrenceville, Pennsylvania (Figure 2). The mitigation water from the Tioga Reservoir would follow the Tioga River to its confluence with the Cohocton River where the two form the Chemung River just west of Corning, New York (Figure 2).

The flow that would be released from either Cowanesque Lake or the Tioga-Hammond Reservoir project for consumptive use mitigation for the proposed Bell Bend plant would be 43 cfs. The NRC is in the process of determining the likely timing, duration, and frequency of mitigation releases from Cowanesque Lake or the Tioga-Hammond Reservoir project. However, to aide in the requested review, the following hypothetical example of flow duration is provided. Based on flows at the Wilkes Barre gage from 1981 through 2013, had the proposed Bell Bend plant been operating under the proposed SRBC pass-by flow requirements for the plant, a release of 43 cfs would have occurred in 1991 and 1998 that would have lasted from late June through early August and from mid-July through early September, respectively. Note also that consumptive use mitigation for the adjacent, existing Susquehanna Steam Electric Station (SSES) amounts to 74 cfs, which is currently released from Cowanesque Lake at a lesser passby flow requirement at the Wilkes Barre gage than that proposed for Bell Bend. Thus, the 74 for SSES is currently released less frequently than the 43 cfs would be for Bell Bend. However, when the passby flow requirements for both plants are exceeded simultaneously, up to around 117 cfs could be released.

The NRC requests a listing of federally listed species and critical habitats; state-listed species; and state-ranked species and communities in and around the water courses highlighted and labeled in Figure 2. Please segregate the species and community occurrence information as follows:

- Cowanesque River (less than one mile of which flows in New York) and Tioga River
- Chemung River

Please return correspondence to me preferably by e-mail, or alternatively at the address below, at your earliest convenience. If further clarifying information is needed, please contact me at 509-371-7186 or james.becker@pnnl.gov. Your assistance is greatly appreciated.

Sincerely,

Jim Becker



Figure 1. Bell Bend Nuclear Station proposed site location and overview of the portions of the primary and secondary options of the consumptive use mitigation plan that affect waters of the state of New York.

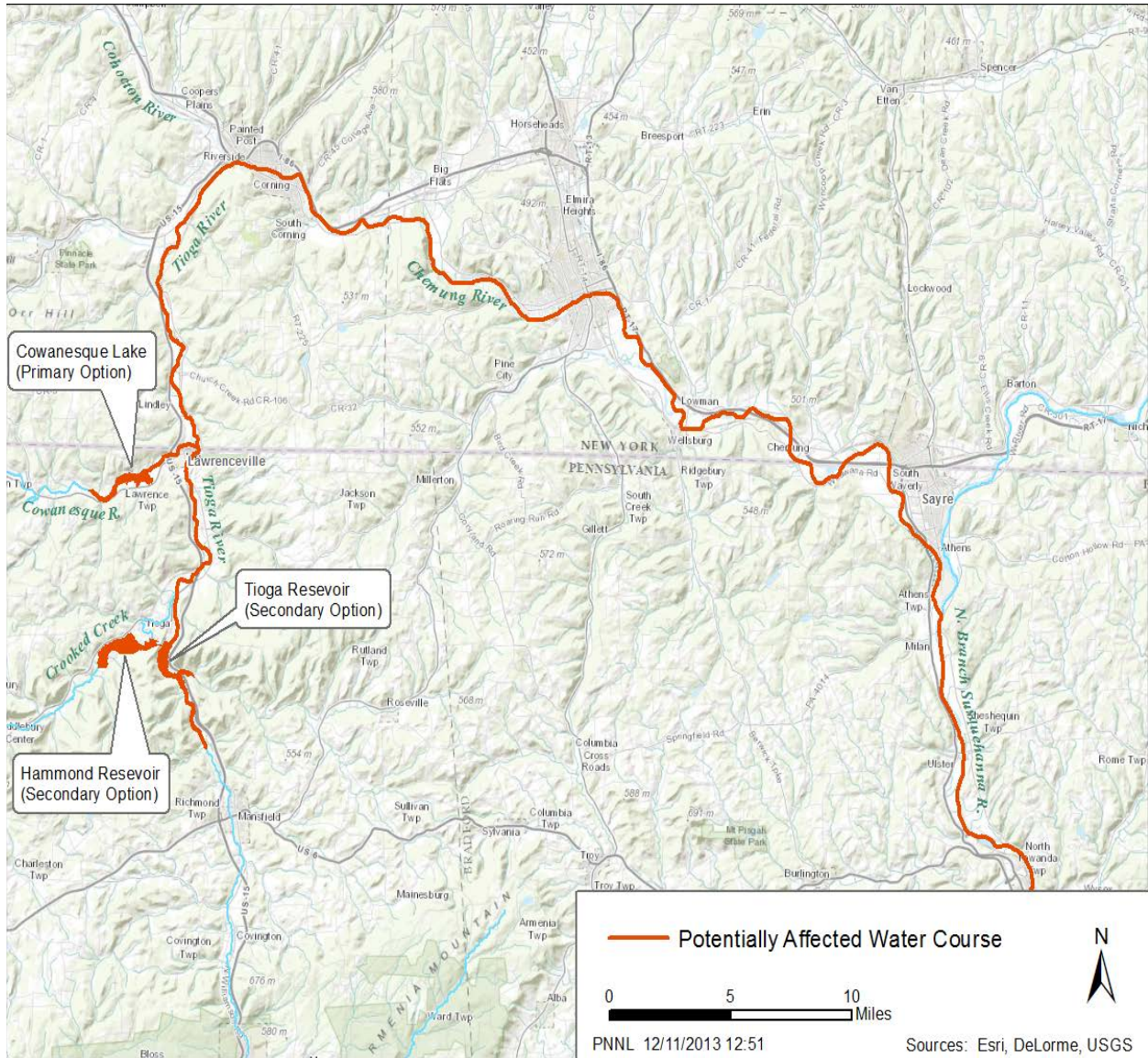


Figure 2. North portion of the primary and secondary mitigation options.