

SCREENING FORM FOR DETERMINING LOW-EFFECT HABITAT CONSERVATION PLANS

Proposed Quad Cities Nuclear Station Habitat Conservation Plan

I. Project Information

A. Project name: Habitat Conservation Plan (HCP) to support issuance of an Incidental Take Permit (ITP) for the federally endangered Higgins eye pearly mussel, (*Lampsilis higginsii*), and the candidate sheepnose mussel, (*Plethobasus cyphus*), related to the operations of the Quad Cities Nuclear Station (QCNS).

B. Affected species: Higgins eye pearly mussel (*Lampsilis higginsii*), sheepnose mussel (*Plethobasus cyphus*) (candidate)

C. Project size: 1,173 acres

D. Brief project description including minimization and mitigation plans: This HCP describes measures that will be implemented by the QCNS to monitor, minimize, and mitigate potential impacts of three activities (Section 3.2): 1) implementation of an alternate thermal standard; 2) periodic maintenance dredging in front of the QCNS intake forebay; and 3) the removal of Edison Pier. Measures to minimize impacts include: 1) continued use of the diffuser pipe to direct heated discharge away from the Cordova mussel bed; 2) survey for mussels prior to and relocating them away from harm close to any construction activities; and 3) continued mussel bed monitoring program with an added temperature monitoring component. Mitigation measures include free release of fish artificially infested with glochidia on the affected mussel bed or other agreed upon locations or measures, temperature monitoring and related mussel effects studies, and/or a contribution of \$15,000 per year to a Mitigation Fund administered by the National Fish & Wildlife Foundation to support conservation and recovery of Higgins eye and sheepnose mussels.

II. Does the HCP fit the low-effect criteria in the HCP Handbook?

A. Are the effects of the HCP minor or negligible on federally listed, proposed, or candidate species and their habitats covered under the HCP?

Yes. QCNS, operating under the proposed alternative thermal standard (ATS), is not expected to take adult Higgins eye or sheepnose mussels. Downstream mussel beds are expected to experience periods of thermal stress during the summer that are similar to that which has occurred since the change in operations at QCNS in 1984 (though to a higher degree per the ATS limits described in Section 3.2.1 of the HCP). The anticipated take for the ATS is one year class during extreme events (estimated occurrence of once every five years) by potential reduced recruitment. These levels of take are not expected to be measurable beyond natural fluctuations of the population as can be detected by customary quantitative and qualitative mussel bed monitoring methods such as used by QCNS. The reduced recruitment would be due to vulnerabilities of juveniles and host fish to warm water stresses, as described above. Take will be monitored by an ongoing mussel monitoring program that began in 2004 and

continues today. This program compares all the local beds to each other above and below QCNS.

B. Are the effects of the HCP minor or negligible on other environmental values or resources (e.g. air quality, geology and soils, water quality and quantity, socio-economic, cultural resources, recreation, visual resources, etc.) prior to implementation of the mitigation plan?

Yes. Other effects of the HCP are expected to be minor. Fish in the vicinity of the diffuser may move to avoid the discharge area during maximum periods of high temperature and use of excursion hours. The effects are not expected to result in fish mortality. Proposed dredging will result in short term impacts with negligible effects to natural resources.

C. Would the impacts of this HCP, considered together with the impacts of other past, present and reasonably foreseeable similarly projects not result, over time, in cumulative effects to environmental values or resources which would be considered significant?

Yes. No other entities are known to be discharging heated effluent in the local vicinity, nor are any known to be proposed in the future.

III. Do any of the exceptions to categorical exclusions apply to this HCP? Would implementation of the HCP (refer to 516 DM 2.3, Appendix 2):

A. Have significant adverse effects on public health or safety?

No. Changes to the way the company (Exelon) utilizes their excursion hours will not have adverse effects on public health or safety.

B. Have adverse effects on such unique geographic characteristics as historic or cultural resources, park, recreation or refuge lands, wilderness areas, wild or scenic rivers, sole or principal drinking water aquifers, prime farmlands, wetlands, floodplains, or ecologically significant or critical areas, including those listed on the Department's National Register of Natural Landmarks?

No. There are no historic or cultural resources, park, recreation or refuge lands, wilderness areas, wild or scenic rivers, sole or principal drinking water aquifers, prime farmlands, wetlands, floodplains, or ecologically significant or critical areas, including those listed on the Department's National Register of Natural Landmarks that will be impacted by this project.

C. Have highly controversial environmental effects?

No. The affected states (Iowa and Illinois) have been notified of the proposed project/HCP. However, they did not respond to a request for formal comments on an early draft document. Members of the QCNS Steering Committee meeting and the Mississippi River Mussel Ad Hoc committee have not voiced concerns.

D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?

No. Much is known about the effects of temperature on the aquatic environment. Additional site specific studies will be conducted as a result of this HCP.

E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?

No. Effects of the action are not expected to rise above normal population fluctuations under most conditions.

F. Be directly related to other actions with individually insignificant but cumulatively significant environmental effects?

No – See IIC above.

G. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places?

No. The proposed change in excursion hours will have no effect on properties eligible for listing on the National Register of Historic Places.

H. Have adverse effects on listed or proposed species, or have adverse effects on designated Critical Habitat for these species?

No. The effects of the QCNS HCP on federally listed mussels (and one candidate species) is expected to result in improved recovery at the Cordova bed, a Higgins eye essential habitat, with mitigation measures implemented. In the absence of the mitigation, a worst case scenario where temperature excursions are maximized year after year could result in adverse effects to the Cordova Higgins eye and sheepsnose mussel populations.

I. Have adverse effects on wetlands, floodplains or be considered a water development project thus requiring compliance with either Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?

No. These environmental laws and the Fish and Wildlife Service's response to these are considered under the Corps of Engineers Section 404 permit process.

J. Threaten to violate a Federal, State, local or tribal law or requirement imposed for the protection of the environment?

No. All permits and or other authorizations related to the taking of state-listed species will be obtained prior to implementation of the HCP/ITP.

IV. ENVIRONMENTAL ACTION STATEMENT (EAS)

If the proposal fits the above criteria for a low-effect HCP, the proposal can be categorically excluded from the NEPA documentation in accordance with 516 DM 6, Appendix 1.4C (1) and (2). The following EAS should be prepared to provide an administrative record of the decision to categorically exclude the proposal in accordance with 550 FW 3.3C.

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record. Based on the analysis above, the QCNS HCP qualifies as a "Low Effect" HCP as defined in the U.S. Fish and Wildlife Service Habitat Conservation Planning Handbook (November 1996). Therefore, this action is a categorical exclusion as provided by 516 DM 2, Appendix 1 and 516 DM 6, Appendix 1 and no further NEPA documentation will be made.

Other supporting documents:

Habitat Conservation Plan

Incidental Take Permit Application

Implementing Agreement

Signature Approval:



August 26, 2009

Richard C. Nelson, Field Supervisor
U.S. Fish and Wildlife Service
1511 – 47th Avenue
Moline, Illinois 61265

