



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Director

November 6, 2015

Kathryn Herzog
U.S. Army Corps of Engineers
Rock Island District
PO Box 2004 Clock Tower Building
Rock Island, IL 61204

RE: Boston Bay HREP Project
Project Number(s): 1604715
County: Mercer

Dear Ms. Herzog:

The Illinois Department of Natural Resources (Department) has received the request for comments regarding the proposed Habitat Rehabilitation and Enhancement Project (HREP) at Boston Bay located in Mercer County, IL. Boston Bay has been adversely impacted by sedimentation and water level fluctuations, which have impaired water quality, reduced deep water refuge for fish, reduced aquatic vegetation, and isolated the bay from Mississippi River seasonal low flows. Project restoration efforts may include:

1. Backwater dredging and construction of a low berm to deflect Mississippi River sediment.
2. Tree planting, selective thinning and berm placement to promote reforestation and aquatic vegetation.
3. Rerouting discharge water and sediment loads from the Bay Island Levee and Drainage District.
4. Riprapping critical erosion areas.
5. Construction of water control structures and sediment trap features.
6. Performing a temporary, small-scale drawdown to increase aquatic vegetation.
7. Creating wildlife protection zones.

The Department offers the following natural resource occurrences and concerns to consider during project planning:

Concerns

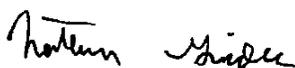
1. The Department has no ownership interest in the property and we request clarification on why the Department is listed as a "project sponsor." Our role to date has been a cooperative agreement to manage fishing and hunting and providing technical assistance during HREP project planning. We will continue to provide technical assistance during project planning.

2. The Department is interested in how agricultural sediment sources within the watershed will be addressed to avoid compromising restoration efforts. Rerouting discharge water from the levee district, a low berm to deflect Mississippi River Sediment, and utilizing sediment traps are mentioned as possible restoration options to consider. Who will be responsible for operation and maintenance of these structures? Sediment sources in the watershed should also be studied and addressed.

Natural Resource Occurrences

1. The largest great blue heron rookery in the state occurred at this site in past decades. However, surveys show a decline in heron use in recent years likely attributed to habitat decline within Boston Bay. Efforts should be taken to preserve and enhance rookery habitat during project implementation.
2. Boston Bay is designated as an Illinois Natural Area Inventory (INAI) site for its:
 - I. High quality natural community and natural community restorations.
 - II. Specific suitable habitat for state-listed species, or state-listed species relocations.
3. Records of state-threatened mussels black sandshell (*Ligumia recta*) and butterfly (*Ellipsaria lineolate*) occur at the confluence area of Boston Bay and the Mississippi River. It is unclear to what extent they may occur within Boston Bay, but are not likely to be abundant due to degradation of the site from sediment deposition. Proposed dredging may affect these resources and should be considered in future project planning. A mussel survey of the project area should be conducted to determine the extent of these resources and mitigate adverse impacts.
4. Based on recent fish surveys by IDNR staff, the site has good potential for improved fisheries habitat and fishing recreational opportunities with a restoration project.

Thank you for the opportunity to comment. We look forward to further coordination on this project.



Nathan Grider
Impact Assessment Section
217-785-5500

cc: Kathleen Kowal – USEPA
Rob Hilsabeck – IDNR, Fisheries
Kevin Oller – IDNR, Wildlife
Russel Blogg – IDNR, DNH
IDNR, Office of the Director
Kraig McPeck - USFWS