



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

September 12, 2021

TO: Neil Schock (EGLE Water Management Division, Cadillac)

FROM: Fisheries Division Staff (Central Lake Michigan Management Unit, Habitat Management Unit)

SUBJECT: Permit application HP6-WPNY-PHWPX

Fisheries Division staff members have reviewed permit application HP6-WPNY-PHWPX, applicant the Carrie C. Barnes Trust. The applicant proposes to build an inland boat house, boat basin and entrance channel, entirely within available uplands, except for one small corner portion of the boat house that crosses into the adjacent wetland area. Approximately 17 cubic yards of clean fill will be discharged into 300 square feet of wetlands to make this corner area suitable for boathouse excavation (footing protection). Dredge approximately 507 cubic yards of native material from a 7,432 square foot area of existing lake bottom at depths of up to 7'8" and a width of 41", lakeward of the OHWM of Long Lake, to construct an entrance channel to navigate into the inland boathouse area. Construct an approximately 40-foot-long by 5-foot-wide boardwalk, supported by helical piers, across a portion of the inland wetland area, to provide a reliable means of future access to and from neighboring properties to the north of the applicant's property. Construct approximately 84 square feet of boardwalk-style ramp over wetlands, also supported by helical piers. These activities are being proposed for Long Lake, Grand Traverse County, in front of the Barnes Trust's riparian property.

There is important guidance that we need to consider when reviewing these types of permit applications. Fisheries Division Policy & Procedure 02.01.006 (Shoreline Modification) states in pertinent part that:

"Nearshore habitat should be protected since it performs a variety of important ecological functions and supports the life history of many species. Shallow nearshore habitats are dynamic and structurally complex including, for example, submerged aquatic vegetations and large woody debris. This aquatic vegetation provides the basis of a food web supporting aquatic microorganisms, invertebrates, and many other animals. Fish and aquatic organisms may also use shoreline vegetation as refuge from predators and as a source of food. Shallow nearshore habitats are also used as spawning and nursery areas for juvenile fish because they provide food and refuge from predators".

Furthermore, Fisheries Division Policy & Procedure 02.02.010 describes the Division's policy on dredging, stating in pertinent part that, "Dredging activity should be minimized to the extent necessary to retain current navigation uses..." Given that navigation is not currently occurring or necessary at this location, the dredging component of this project is not supported. The depth of the proposed dredging is also significantly deeper than would be required for typical watercraft on this lake.

Fisheries Division has aquatic habitat concerns with portions of the proposed project since there is proposed degradation of aquatic habitat. Fisheries Division commends the applicant for repairing features which are currently degraded on the property, as well as limiting the proposed boat well and boat house construction to the upland portions of the parcel. However, the proposed dredging within the scope of the project will negatively affect the aquatic habitat within littoral zone of Long Lake. The littoral zone is the nearshore area that supports the most diverse biological communities and biological production within lentic water bodies (Cole, 1994 and Kohler and Hubert, 1999). As such, the Department of Natural Resources has emphasized this critical habitat area as a priority in its Wildlife Action Plan. Naturally reproducing fish species such as Largemouth Bass, Smallmouth Bass, Walleye, Northern Pike, Yellow Perch, White Sucker, and various panfish species found in Long Lake rely on the productivity of this littoral zone to ensure their reproductive success, particularly in areas with good vegetative growth and woody debris recruitment. Declines in Largemouth Bass, Yellow Perch (Sass et al. 2006), Northern Pike, panfish species (Radomski and Goeman 2001), and fish diversity (Jennings et al. 1999) have been linked to littoral and riparian development such as the proposed dredging and disruption of natural littoral habitats.

The dredged channel proposed in this application will disrupt natural littoral substrates that will take years to re-establish typical vegetation, which is a concern as stated above. However, due to wave- and current-generated sediment drift along the shoreline, we conclude that the dredged channel will at least in part be filled in by natural lake processes over time. The anticipated maintenance of the channel will require additional dredging efforts, which will result in this habitat being continuously disturbed from the perspective of both substrate elevation and aquatic vegetation.

Due to the negative effects to fish and aquatic resources from the channel dredging portion of this application, Fisheries Division respectfully asks that the channel dredging portion of the application be denied.

If you have any questions, please contact:

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cc. Scott Heintzelman (Central Lake Michigan Management Unit), Jessica Mistak (Habitat Management Unit)