

April 2, 2020

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NDDB DETERMINATION NUMBER: 202004727

Project: REPLACEMENT OF MAIN ST BRIDGE OVER PODUNK RIVER, MAIN STREET @PODUNK RIVER, SOUTH WINDSOR, CT

Expiration: April 2, 2021

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding this project. According to our records, the following State-listed species (RCSA Sec. 26-306) are in waterways within the impact zone of this project.

Freshwater mussels including:

Dwarf wedge mussel	<i>Alasmidonta heterodon</i>	State, Federallly Endangered
Tidewater mucket	<i>Leptodea ochracea</i>	Special Concern

General best practices are included to help protect state listed freshwater mussel species in this area in general.

Freshwater mussels are aquatic animals that play an important role in our environment. These sedentary organisms live in sediments on the bottom of streams and rivers and provide a service to all by filtering water and removing bacteria and phytoplankton. It is because they are filter-feeding animals that they are very susceptible to sediments and pollutants in the water in which they live. The greatest diversity of freshwater mussels in the world is found in Eastern North America. Freshwater mussels are one of the most endangered groups of animals with almost three-quarters of the native mussels in North America imperiled. The disappearance of freshwater mussels is a reliable indicator of chronic water pollution. The following considerations will help protect and benefit these species.

- Adhere strictly to water quality standards at your project site.
- Pay special attention and address specific monitoring targets for sediment, water temperature, copper, and ammonia (TAN).
- No vegetation should be removed from the 100ft buffer of waterways.
- Turf grass and impervious surface should be minimized in the surrounding watershed.
- Reconnect waterways that are disconnected by perched, undersized, or shallow stream culverts.
- Ensure precautions are taken to avoid direct kill of freshwater mussels during any instream construction or modification.
- Employ precautions to prevent the introduction and spread of invasive plants and bivalves.

- Take action to reduce non-point source pollution and educate the surrounding community about how to reduce non-point source pollution. More information can be found in our resources for Low Impact Development here:
 - www.ct.gov/deep/cwp/view.asp?a=2719&q=464958&deepNav_GID=1654

This is determination is valid for two years.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, independent conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated in the NDDB as it becomes available.

Please contact me if you have any questions (shannon.kearney@ct.gov). Thank you for consulting with the Natural Diversity Data Base and continuing to work with us to protect State-listed species.

Sincerely,

/s/ Shannon B. Kearney
Wildlife Biologist

Cc: Jeffrey Doolittle (Town of South Windsor)