The Michigan Department of Environmental Quality (DEQ) and the United States Environmental Protection Agency (EPA) have partnered to address an oil seep that has been observed discharging to a canal known as Fenner's Ditch, a 0.34 mile long canal on the north side of Bear Lake in Laketon Township. Oil sheens and slicks have been observed on Fenner's Ditch for many years. Oil containment booms have been used to control the venting oil; however, this is not considered to be an adequate long-term strategy. The purpose of this project is to implement a remedy to control the venting oil, including the construction of Non-Aqueous Phase Liquids (NAPL) trapping cap. This work will be conducted by the DEQ and their approved consultants and contractors. Costs for the work will be administered by the EPA from a funding source made available from the Oil Pollution Act.

PROJECT BACKGROUND

Previous investigations have concluded that the likely source of the oil seep is a historic oil well that was drilled and "plugged" around 1930. It is possible that crude oil is migrating up the old borehole and venting to the surface water. Attempts to locate the borehole have been unsuccessful, in part because the upper portion of steel casing used during well construction was removed when the well was abandoned. In 2015-2016, a feasibility study was conducted to identify the best investigation options and potential solutions to address the venting oil. This project will be focused on implementing the findings of that study.

FOR ADDITIONAL INFORMATION
PLEASE CONTACT:

Michigan Department of Environmental Quality
Remediation and Redevelopment Division

David Bandlow
DEQ Project Manager
BandlowD@michigan.gov
616-745-5337

Grand Rapids District Office
350 Ottawa Ave NW Unit 10
Grand Rapids MI 49503

5-25-2018
PROPOSED CONSTRUCTION

The MDEQ Project Team determined the most feasible and cost-effective approach to managing the venting oil long term was the construction of a NAPL Trapping Cap (see example below) to contain the crude oil. The cap collects the venting oil and prevents it from entering the surface water. The oil is contained in the structure until either it degrades, or if necessary, is removed and disposed. Once installed, the cap will be at the same elevation as the current base of the ditch, so boat access and other uses of the ditch will not be affected.

WHAT YOU NEED TO KNOW

- Construction of the cap is proposed to start in June 2018 and take 3 to 4 weeks.
- Construction equipment and materials will be temporarily staged at the Laketon Township's Horton Beach Park for access to Fenners Ditch. This will not significantly affect the public’s use of the park.
- Boat traffic in Fenners Ditch will be suspended during construction to allow work to be completed quickly and safely – we hope to be complete by the middle of July.

ENVIRONMENTAL CONCERNS

The oil seep is preventing home owners and other users from enjoying the natural resources of the canal. There is potential that the oil is accumulating on vegetation and in sediments, which could have adverse effects on the local ecosystem. Contact with oil slicks on the water surface should be avoided. No petroleum constituents were detected in residential drinking water wells that were previously sampled in the area of the oil seep.