

LOCI RECEIVES RECOVERY/REINVESTMENT FUNDING TO PURSUE TMDL PLANNING FOR IMPAIRED TRIBUTARIES TO LAKE ONTARIO

What is the project?

LOCI, in partnership with the Great Lakes Commission, applied for and has been granted Clean Water Act Section 604(b) Project and American Recovery and Reinvestment Act funds in the amount of \$254,695 to carry out TMDL analysis on several streams listed as impaired and tributary to Lake Ontario. Though TMDLs have been prepared for lakes, embayments and ponds In New York State, none have been prepared for streams, so LOCI is breaking new ground with this project.

What is TMDL? TMDL= Total Daily Maximum Load

Section 303(d) of the Clean Water Act, as amended in 1987, requires each state to identify those waters within its boundaries not meeting water quality standards for any given pollutant applicable to the water's designated uses as impaired.

Section 303(d) requires EPA and the states to establish a formal process to develop TMDLs for all pollutants violating or causing violation of applicable water standards for each impaired water body.

Informed by the best available information and using a scientific approach, a TMDL determines the maximum amount of pollutant ("load") that a water body is capable of assimilating while continuing to meet the existing water quality standards.

Such "loads" of pollutants are established for all the point and nonpoint sources of pollution that cause the impairment and then "adjusted" so that the water will meet the applicable standards with consideration given to seasonal variations and a margin of safety.

TMDLs provide the framework to allow states to establish and implement pollution control and management plans to meet the goals of the Clean Water Act: "Water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water, wherever attainable."

Which streams will be assessed and why?

LOCI's plan of work includes Black Creek (tributary to the Genesee in Monroe, Genesee and Orleans Counties); Upper Oak Orchard Creek in Genesee County; Mill Creek and Shipbuilder's Creek in Webster, Monroe County; Lower Otter Creek in Orleans County; and Lower Genesee River in Monroe County and Middle Genesee River in Monroe and Livingston Counties. The eight stream segments have been identified as impaired by

excessive nutrients, especially phosphorus, in testing. They are on the NYS DEC Priority Waterbodies List.

Most of these streams have been the subject of public concern, and general watershed planning efforts have already begun. LOCI's TMDL project will incorporate and use existing information to the fullest possible extent, cooperate with other citizen- and agency-led water quality improvement efforts, and develop pertinent new information necessary to the process. TMDL analysis should be considered a tool in the toolbox of watershed planning.

What is involved for these streams?

Eight steps to be carried out in the next 12 to 18 months:

- 1) Characterize their watersheds and pollution sources
- 2) Quantify watershed's land uses and land use management practices
- 3) Describe the hydrologic characteristics of the streams
- 4) Identify through selected in-stream monitoring and/or model the loads from all sources (point and nonpoint)
- 5) Select a publicly available computer model and tie pollutant loads to water quality objectives and targets
- 6) Develop pollutant allocation scenarios attributable to current and future pollution sources in their watersheds
- 7) Assess seasonal variation of pollutant loads in the streams to meet water quality objectives
- 8) Facilitate the development of implementation plans for the watersheds

Goal

The goal of this project is to carry out the technical assessment, interact with the watershed communities, and develop a TMDL plan for each that allows unimpaired use of its waters of all classes for fish, shellfish, wildlife and humans.