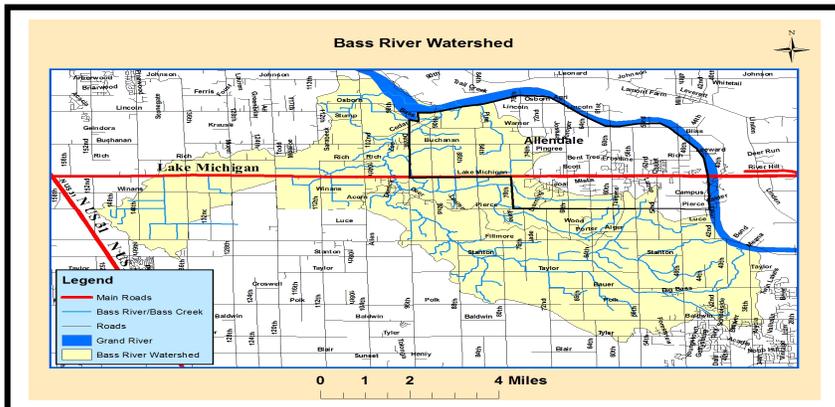




## Bass River/Deer Creek Restoration Project

November 1, 2013 - June 30, 2016

The Bass River and Deer Creek watersheds were historically high-quality fisheries. More recently, water testing showed impairments due to *E. coli* and sediment in Bass River and Deer Creek, as well as dissolved oxygen and phosphorus in Deer Creek. Failing septic systems and agricultural runoff were identified as the primary contributors to the problem. The project had two strategies designed to reduce *E. coli* and improve water quality in these watersheds. Strategy 1 involved a Septic Assistance Program which offered cost-share funding for eligible landowners to repair or replace failing septic systems on their properties. Strategy 2 focused on information and education outreach to agricultural producers and other stakeholders. Staff provided technical assistance to farmers and promoted management practices to protect water quality. Project accomplishments included deploying a specialized canine team to detect sources of human *E. coli* inputs to the watershed, and implementing three residential septic systems replacements through the Septic Assistance Program.



### I&E Activities:

- Visited landowners at identified sites in the watersheds to provide information about the Septic Assistance Program (SAP).
- Produced and distributed post card mailers, door hangers, and septic awareness brochures.
- Developed and implemented an educational watershed awareness program for students, residents, and organizations.
- Provided informational programs for a farm organization.
- Demonstrated an interactive watershed model (EnviroScape®).
- Produced and distributed comprehensive information and application folders for the Septic Assistance Program (SAP).



**Grant Amount: \$ 132,900.00**

**Match Funds: \$ 45,900.00**

**Total Amount: \$ 178,800.00**

**Partners involved:**

- Michigan DEQ
- Annis Water Resources Institute
- Ottawa County GIS
- Ottawa County Water Resources Commission
- Grand Valley Metro Council - LGROW
- Chester Township
- Polkton Township
- Allendale Township
- City of Coopersville
- Natural Resources Conservation Service
- Blendon Township
- Ottawa County Farm Bureau

**Best Management Practices:**

- 3 Septic System Replacements

**Annual Load Reductions:**

- Sediment- 0.207 tons
- Phosphorus - 30 lbs.
- Nitrogen - 84 lbs.



**Warner Street Before:** The drain field on this site was in failing condition. It was not properly treating effluent, causing untreated waste water to drain into the nearby creek.



**Warner Street After:** A new septic tank and a raised mound drain field were installed to properly store and treat waste water.



**Garfield Street Before:** The septic tank on this site was structurally compromised and the drain field was saturated. This caused both surface discharge and groundwater discharge of untreated sewage into the nearby creek.



**Garfield Street After:** New septic tanks and a raised mound pressurized drain field were installed, allowing all waste water to be properly stored and treated.