

**Title: Poterfield Creek Livestock Exclusion Project**

Michigan AUID Number: 040301080801-02

GRTS Number: The cattle exclusion portion of this project was not funded with Section 319 funds nor used as match for another project, so it is not in the GRTS system. Section 319 funds were used for the monitoring described below.

Opening Paragraph: Poterfield Creek is a tributary to the Little Cedar River in Menominee County, in Michigan's Upper Peninsula. An 8.3 mile reach of Poterfield Creek and an unnamed tributary are on Michigan's 303(d) list for excess algae growth and high phosphorus concentrations, believed to be due to uncontrolled livestock access at a dairy farm.

Problem: An 8.3 mile reach of Poterfield Creek and an unnamed tributary are on Michigan's 303(d) list for excess algae growth and high phosphorus concentrations, believed to be due to uncontrolled livestock access at a dairy farm.

Project Highlights: The Michigan Department of Agriculture assisted the land owner with installing fencing to exclude cattle from the stream, at the farmer's expense. Section 319 funds were used for the monitoring described below.

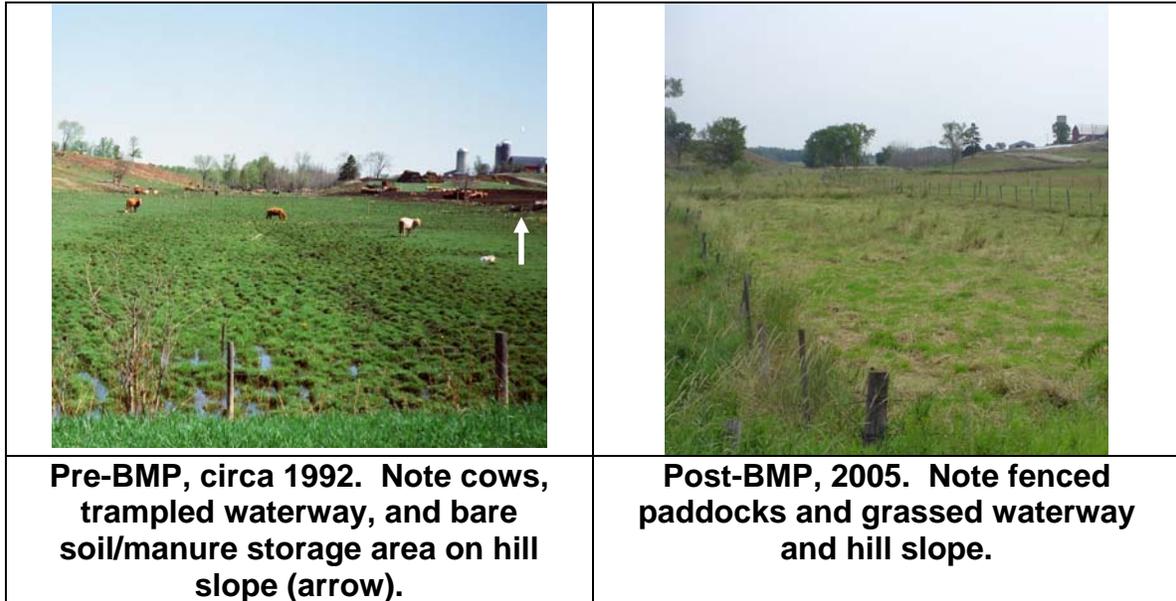
Results: This water body was placed on Michigan's 303(d) list based on observations of nuisance algae growths attributed to agricultural runoff. Post-BMP monitoring found:

- An absence of nuisance algae growths that had been documented previously.
- Substantially lower total phosphorus concentrations downstream of the farm, comparable to an upstream reference reach (Table 1).

Since the nuisance algae conditions are no longer present in this reach of Poterfield Creek, MDEQ staff are recommending that it be removed from the 303(d) list in 2010.

Partners and Funding: The Michigan Department of Agriculture assisted the land owner with installing fencing to exclude cattle from the stream, at the farmer's expense. Section 319 funds were used for a portion of the post-BMP monitoring.

Photographs:



Data:

**Table 1. Phosphorus Concentrations (mg/L), Pre-BMP and Post-BMP**

	<b>Upstream of BMPs</b>	<b>Downstream of BMPs</b>
Pre-BMP (1992)	Not sampled	1.1 (n = 1)
Post-BMP (2008)	0.052 (n = 1)	0.047 (n = 1)

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