

## ASSESSMENT OF ECOSYSTEM SERVICE MARKET POTENTIAL TO ADDRESS WATER QUALITY IN THE MAUMEE RIVER BASIN AND SEDIMENT ISSUES IN TOLEDO HARBOR, OHIO

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With funding from the Joyce Foundation, American Farmland Trust commissioned a preliminary analysis of the potential market-based programs in the Maumee River watershed by Kieser & Associates, LLC. As part of this study, K&A examined how market-based programs could serve as an additional funding source for Great Lakes restoration efforts in the Maumee River watershed. The study found that protection of surface water and groundwater in the Maumee River basin is an important issue for municipalities, Toledo Harbor and the port authority, industry, agriculture, and the Western Lake Erie basin as a whole. The rationale for protecting water quantity and quality is both environmental and economic.

K&A evaluated current environmental conditions, needs, and programs in the Maumee River basin in order to gain a better understanding of how the watershed could benefit from the consideration and use of environmental market-based applications. Based on the environmental concerns and impairments identified in the report, nine potential market-based approaches were explored. The potential markets were evaluated for:



- *Relevant Environmental Issues* – linking potential environmental market applications to specific environmental issues present in the basin
- *Regulatory or Market Drivers* – analyzing potential drivers that could spur development of trading for each potential market
- *Supply and Demand* – identifying potential buyers and sellers within the watershed that could potentially participate in a trading market
- *Potential Funding Opportunities* – identifying potential stakeholders and funding sources for each trading market

The result of the assessment was a preliminary framework for a viable environmental services market in the Maumee River basin. Results showed that the most viable markets suitable for trading in the basin were sediments and nutrients. A trading framework provided detail on market structure, potential commodities, and trading policy. This framework can be used to guide future considerations for developing market-based programs in the Maumee River basin.