

Market-based Incentives for Ecosystem Restoration in Lake Erie's Maumee River Basin

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The Maumee River Watershed draining to Lake Erie covers portions of three states: Michigan, Indiana and Ohio. The Ohio portion represents seventy-four percent of the watershed. Much of this land was once deemed the Great Black Swamp and since has been drained and converted into much of the most robust agricultural production land in Ohio. The pressures on the environment resulting from these efforts have been identified and are substantial. One of the most recognizable outcomes has been the loss of soils into the Maumee River where millions are spent each year dredging Toledo Harbor sediments originating from upstream agriculture. Existing stormwater infrastructure along with urban sprawl around the greater Toledo area exacerbates these water quality issues.

With billions required to address these and other looming water quality issues in the Great Lakes, private capital investment and ecosystem markets are being examined as a potentially viable, regional-scale opportunity to finance needed restoration. Funded by the Joyce Foundation, an 18-month effort is: 1) assessing the potential to harness large scale public and private capital for Great Lakes restoration projects; and, 2) creating a blueprint for market-based programs in the Maumee River watershed.

A panel of finance experts is convening to identify regional financing opportunities. Capital providers, investment bankers, bonding authorities, and financial service organizations will help identify financial products that can be leveraged for restoration activities and determine how best to structure specific projects for implementation.

A separate market analysis is identifying private markets that enable farmers or others to stack and sell nutrient, sediment, carbon and water cooling credits. The analysis includes mitigation banking options. Most of the elements necessary to set up market-based programs are already in place in Ohio: state-wide water quality trading rules and stream mitigation banking rules which provide the framework for trades and regulations like total maximum daily loads (TMDLs) that provide the motivation for entities to address problems. Buyers and aggregators are also being identified. This presentation will highlight identified financial and market-based incentives on a regional scale that can address water quality and ecosystem restoration goals. Investment opportunities will be presented and transferable market applications discussed.