

THE IMPACTS OF AGRICULTURE ON FRESHWATER ECOSYSTEMS: WILL STRENGTHENING LOCAL FOOD SYSTEMS HELP OR HURT?

The Water Center is working to enhance freshwater research activities at the University of Michigan by fostering cross-disciplinary collaborations, encouraging new linkages to freshwater issues in research and courses, and providing more opportunities to study and learn about the Great Lakes and other large freshwater systems.

Through this funding effort, the Water Center is increasing U-M's capacity to contribute solutions to the protection and restoration of freshwater systems.

FOR MORE INFORMATION

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revitalize...**PURE BLUE**

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PROJECT SUMMARY

Are strong local food systems better for the environment and freshwater resources than “conventional” food systems characterized by long-distance supply chains and very large farms? Despite growing support—among policymakers, farmers, civic groups and consumers—for locally-sourced food, surprisingly little is known about the relationship of local food systems to environmental sustainability.

Motivated by this gap in knowledge, investigators for this project will conduct four linked studies that together address the question: **Do increased opportunities to participate in local food systems lead farmers to adopt more environmentally sustainable production methods?** These studies are:

1. A large-scale survey of farmers in the Great Lakes region of North America
2. Follow-up in-depth interviews with a subsample of survey respondents in the Western Lake Erie basin
3. Assessment of the environmental impacts of local food networks in the Western Lake Erie basin using the Soil and Water Assessment Tool (SWAT)
4. Analysis of existing data on agricultural practices from the USDA Census of Agriculture

This project breaks new ground in exploring the relationship of the social movement for local food to environmental outcomes. In addition, by drawing on the expertise of a multidisciplinary research team and involving students and faculty from a range of departments and schools, this project contains multiple elements that will increase capacity for innovative freshwater research at the University of Michigan.



Photo courtesy of Dave Brenner, SNRE