



USDA-CSREES 2007 National Water Quality Conference

[Successes and lessons learned from Extension supported TMDL phosphorus reduction program](#)

Since 1998, Michigan State University Extension (MSUE) has provided leadership, research, education and organizational support to the stakeholder driven Lake Allegan/Kalamazoo River P phosphorus TMDL Committee. The Kalamazoo River Watershed is a rural watershed draining 2,020 square miles in Southwest Lower Michigan. It has a legacy of industrial and nutrient pollution, including significant enrichment of Lake Allegan, the target of the TMDL for phosphorus (P). Starting in 2001, MSUE began providing full-time, dedicated support to the TMDL through funding from first USEPA, and later from USDA/CSREES for integrated research, education and extension. This presentation will: report on the accomplishments of this nationally recognized citizen effort to restore a traditionally polluted and underappreciated major river system; discuss the lessons learned in trying to reduce P via mostly voluntary actions; and project the sustainability of these efforts when MSUE support stops in July, 2007. Accomplishments include: voluntary reductions by point sources; activities and reductions from non-point source land uses shaped by stakeholder led sub-committees; reductions of P in water bodies documented by CSREES funded research; volunteer monitoring network and training; educational efforts addressing the watershed, various sub-watersheds and specific non-point issues; and public forums, stewardship development and decision maker involvement. Difficulties encountered and lessons learned include: coordinating a big program in a large watershed; voluntary reductions vs regulatory requirements; sustaining a comprehensive program run by volunteers; tracking and reporting of P reductions; need for scientific basis for the TMDL and other actions; and potential for volunteers to use transparency tubes to measure phosphorus. Sustainability of the program appears good: formation and funding of a watershed-wide "umbrella" group to continue TMDL support and coordination; creation of a network and electronic data base of some 300 groups working on behalf of the watershed; progress in raising the public's positive image of the river through Kanoë the Kazoo and designation as a Michigan Heritage Water Trail; role of the Gun Lake Tribe under its targeted watershed grant (USEPA); volunteer stream monitoring programs and network; and opportunities for additional phosphorus cycling research.

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