A MATTER OF BALANCE:

Perceptions, Engagement and Partnerships for On-Farm Conservation SEMINAR PRESENTATION ABSTRACTS

Title: Meta-Review of Barriers and Motivations for Farmers to Adopt Conservation Practices

Dr. Linda Prokopy, Professor

Department of Forestry and Natural Resources and Co-Director of the Natural Resources and

Environmental Science interdisciplinary undergraduate program

Purdue University

This talk will present results from a completed review and meta-analysis of 35 years (1982-2017) of quantitative and qualitative social science research papers that have examined motivations of and barriers to adoption of conservation practices in US agriculture. This study study updates and greatly expands on previous work that has reviewed BMP adoption. This meta-analysis: (1) reviews all appropriate studies published during the timeframe, (2) accommodates a number of advances in this field of study such as the growth of qualitative research with farmers, and (3) focuses on both barriers to and motivations for adoption.

Title: Engaging Farmers in Soil and Water Conservation

Jim Isley, Farmer

River Raisin Watershed, Lenawee County, Palmyra, Michigan

Abstract pending.

Title: Community-based Scientific Discovery and Water Resource Management -

Applications in Ottawa County and New Opportunities for Michigan (2 presentations)

Dr. Zachary Curtis Hydrosimulatics Inc. Lansing, Michigan

Paul Sachs, Director

Ottawa County Planning Dept., West Olive, Michigan

In recent years a large team of researchers, community planners, and other stakeholders came together to address groundwater quantity (availability) and quality (salinity) concerns in Ottawa County, Michigan. The team worked together to compile data/knowledge of different types, qualities and resolutions (coverages) needed to develop computer-generated models of the subsurface that could provide a sound scientific understanding of the issues and the implications for long-term sustainability. The new insights gained from this collaborative environmental investigation are now being used for township- and county-level water resource management for coming decades. Importantly, much of the data used here are available across the state, and thus, the integrated approach can be applied elsewhere in Michigan.

This study was supported by the Michigan Department of Agriculture and Rural Development, Ottawa County, and MSU's Department of Civil and Environmental Engineering and the Institute of Water Research.

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Title: Leveraging Crop Advisers to deliver agricultural conservation advice and increase the adoption

of conservation practices Dr. Linda Prokopy

This talk presents findings from surveys and interviews with farmers and crop advisors in the Saginaw Bay watershed in Michigan. The focus of this research was to better understand if and how crop advisors can be key partners in delivering information about conservation practices and programs to farmers. Findings reveal that both farmers and crop advisors see a role for crop advisors however there are several barriers.

Title: Partners in Soil and Water Conservation: Local Impacts with the Regional Conservation Partnership Program (RCPP) (3 presentations)

Wendy Ogilvie, Director of Environmental Programs
Lower Grand River Watershed Habitat Restoration

Grand Valley Metropolitan Council

The USDA Regional Conservation Partnership Program provides private landowners with financial assistance to implement conservation practices to improve soil health and water quality.

The USDA awarded the Grand Valley Metropolitan Council (GVMC) an \$8 million RCPP grant in September 2017. In addition, a total of \$8 million was secured from 22 community partners as leverage to match this federal funding. The funding will address water quality degradation, inadequate wildlife habitat, and soil erosion in the Lower Grand River Watershed.

The Grand River is the longest river in Michigan running from Jackson, MI, through the city of Grand Rapids and outletting into Lake Michigan. The river runs 252 miles through primarily rural agricultural areas draining numerous smaller rural watersheds including Rogue River and Indian Mill Creek. At more than 3,000 square miles, the Lower Grand River watershed is experiencing significant impairments due to sediment and nutrient loading.

The first portion of the project includes 47 acres of habitat restoration in the Grand River as part of the Grand River Restoration project. The area runs through the City of Grand Rapids, where numerous low-head dams act as barriers to a number of aquatic species, including federally and state endangered and threatened species.

The second portion of the project, will address excess sedimentation issues in both the Indian Mill Creek and Rogue River watersheds. Both watersheds are vital to the fisheries and support warm and coldwater species such as trout, salmon and steelhead. The rural areas of these watersheds will be targeted for agricultural conservation practices to reduce sedimentation issues and habitat improvements.

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Mary Fales, Program Director Saginaw Bay Watershed Conservation Partnership The Nature Conservancy

The Nature Conservancy, in partnership with the Michigan Agri-Business Association, is co-leading a five year \$10M RCPP project in the Saginaw Bay Watershed with partners from the conservation, agribusiness, corporate, foundation, government, and academic sectors (see <u>fact sheet</u>). The majority of this funding is allocated directly to farmers for the implementation of on-the-ground conservation practices that improve soil health and protect regional water quality. Although Michigan agricultural producers have long received incentives for employing conservation practices of this kind, our project does three unique things:

- 1. Educates and engages agribusiness (crop advisors) to help recruit well-qualified farmers into the program
- 2. Utilizes a pre-screening process via our online modeling tool called the Great Lakes Watershed Management System, to maximize the environmental benefits achieved through these funds,
- 3. And tracks program impact not only through the number of acres impacted, but by the environmental benefits (tons of soil and pounds of phosphorus saved from running off into nearby waterways).

Overall, the program has been successful in that the financial assistance will be exhausted in 2019 resulting in over 100 contracts representing 54,000 acres of new conservation practices, over 20,000lbs of reduced P and about 3,500 tons of soil saved.

DJ Shook, Fish, Wildlife and Soil Conservationist Natural Resources Department Grand Traverse Band of Ottawa and Chippewa Indians

The Tribal Stream and Michigan Fruitbelt Collaborative was put together through the hard work of staff from the Grand Traverse Regional Land Conservancy, Leelanau Conservancy, Conservation Resource Alliance, and the Grand Traverse Band of Ottawa and Chippewa Indians. These four core partners leveraged their existing partnerships in an effort that resulted in contribution commitments from a total of twenty contributing partners including Tribal, Federal, State, and local government agencies, non-profit organizations, and trusts to protect natural resources. The Fruitbelt RCPP project area is defined by fifteen counties in Northwest Lower Michigan. Each contributing partner has an interest in restoring and/or protecting the cold water resources in the project area. The partners' approaches to accomplish these goals vary greatly either in approach or in geography within the project area. The four core partners have experience in working with NRCS to protect unique, specially-crop farmland, and in restoring aquatic habitat. Through the Fruitbelt RCPP project, the core partners are accelerating their efforts as well as working with the partners to help them supplement their programs with NRCS financial assistance from the EQIP or ACEP-ALE programs. The Fruitbelt RCPP project is halfway through its five-year project period. To date, partners have protected over 1,560 acres of farmland and removed 39 barriers to aquatic organism passage opening up over 250 miles of stream. Over \$15M has been contributed from the partners so far with NRCS only committing \$1.4M of their total \$7.5M promised financial assistance towards the project.

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