

October 25, 2017

Minnesota Office of Soil Health:

“Building Common Ground for Water Quality and Agricultural Production”

The Minnesota Office of Soil Health will be a new collaborative initiative between the Minnesota Board of Water and Soil Resources (BWSR) and the University of Minnesota Water Resources Center (WRC) to support increasing awareness of the benefits of soil health and soil conservation through research and outreach that expand the tools and skills of Minnesota’s conservation delivery professionals. The mission of the initiative is to protect and improve soil resources and water quality by developing the knowledge, skills and abilities of local experts to more effectively promote sustainable soil and land management. In particular, the initiative will emphasize the importance of soil health and the water quality and economic impacts of applied land and water management practices.

The initiative creates an opportunity for WRC and BWSR to collaborate to better align University research, outreach, and innovation with the state’s mission to develop and maintain a trained and skilled conservation delivery workforce and partnerships necessary to assist agricultural producers implement soil health principles into their operations through training, technical assistance, and financial incentives.

The WRC will lead the University’s involvement in cooperation with the U of M Extension, the Department of Soil, Water, and Climate, and other University units. Program activities will be guided and advised by a leadership group consisting of the WRC staff affiliated with the program, U of M faculty members, BWSR staff, the National Resources Conservation Service (NRCS) State Conservationist, and the Minnesota Association of Soil and Water Conservation Districts (MASWCD).

Initiative components and objectives

1. **Build the professional knowledge base.** Build knowledge and skills associated with soil health principles and associated conservation practices amongst the MN conservation delivery system workforce and partners. Interpret and report out research results with the goal of increasing implementation of soil management best practices. Raise awareness among key audiences about economic, agronomic, and water quality impacts of soil management practices. Support training and education of conservation staff across the state by connecting U of M resources to other initiatives such as the BWSR/NRCS Technical Training & Credentialing Program. Collaborate in identifying needs, and developing and delivering training.
2. **Conduct and coordinate applied research.** Identify soil health research gaps, especially in relation to the soil-water connection, and facilitate applied research projects to address these gaps.
3. **Strengthen networks for sharing information and discussing solutions.**
 - a. Convene a Soil Health Advisory Council of private sector, university, and agency representatives to identify priority activities.
 - b. Collaborate with existing soil health partnerships.

- c. Serve as a liaison and convener to enhance communication between University researchers and state and federal conservation agencies and private sector organizations and businesses.
 - d. Enhance the BWSR presence within academic discussions and research on soil and water conservation issues, buffers, and working lands initiatives.
4. **Coordinate tillage, cover crop, and erosion surveys.** Maintain ongoing analysis of satellite imagery to track tillage & cover crop practices and maintain the Daily Erosion Project. Interpret and report results.
 5. **Develop or improve conservation tools.** Tools may be useful to analyze watershed health impacts and cost effectiveness of land treatment practices and landscape level initiatives such as Reinvest in Minnesota, Conservation Reserve Enhancement Program, and One Watershed, One Plan.
 6. **Coordinate soil health and watershed work.** Integrate the soil health activities described above with WRC's research and outreach initiatives related to watershed-based conservation planning and implementation.
 7. **Report to a Leadership Group.** Establish and convene an Office of Soil Health Leadership Group to advise on program activities. The Group will consist of up to six WRC staff, three U of M faculty, three BWSR staff, the NRCS State Conservationist, and a representative of the MN Association of Soil and Water Conservation Districts. Submit an annual evaluation and report of program activities to the Leadership Group.

Commitment to Action

The partnership's first action (now underway) is to hire a State Soil Health Specialist to be housed in the U of M Department of Soil, Water, and Climate. This person will lead the outreach and research activities. At the same time, work will begin on other foundational activities:

- Convene a Leadership Group to guide the initiative and set priorities;
- Begin formalizing communications with a broader network of stakeholders;
- Work with stakeholders to jointly develop a Healthy Soils Action plan for the state and define principles to govern the plan. This process will help develop shared goals and strengthen collaborative work.

Guiding principles will be identified with wider involvement, but preliminary principles important to the initiative include:

- Promoting voluntary actions;
- Acknowledging statewide landscape diversity ;
- Meeting the needs of producers;
- Engaging stakeholders, being inclusive, valuing diverse contributions, and building partnerships;
- Setting goals, assessing progress, and measuring success.