House Ag Finance and Policy Committee, Feb 22, 2021

A statement on HF1010 from Ann Marcelle Lewandowski

I am Ann Marcelle Lewandowski. I am on the staff of the University of Minnesota Water Resources Center, which has a mandate to leverage University research and education resources to address the state's water problems -- whether they relate to water quality or quantity. I am also the coordinator for the Minnesota Office for Soil Health.

As a University employee, I cannot take a position on funding directed to the University, but I do want to make some technical comments about the proposal.

If we want healthy water, we have to manage soil health. Soil is the most widespread and powerful mediator impacting where water flows, how fast it flows, and what constituents ultimately are found in groundwater, streams, and lakes. Water resource management often focuses on managing pollutant sources and building water management infrastructure. While these are critical, they are not sufficient. We also need to pay attention to how soil functions across the entire state for all the reasons we care about water: that is, drinking water, agricultural productivity, habitat, recreational resources, as well as mitigating flood impacts.

You have probably noticed **the explosion of interest in soil health across diverse interests.** Various stakeholders recognize the potential of soil management and have been working for years to figure out how to use soil better to achieve their goals. Agricultural producer organizations and individual farmers have been working the longest to figure out the logistics of integrating soil health management into their operations. More recently, the food industry has been trying to figure out how to show their consumers that they support practices that protect water and store carbon. The farm financial sector, environmental and consumer organizations, state agencies, colleges and universities -- are all taking notice and addressing soil health issues in their own way. Given the different functions of soil and the site-specific nature of managing soil, it is important that the capacity to innovate and to solve local issues remain dispersed across the state, in a variety of sectors and disciplines. Like water, protecting soil is not well suited to centralized management.

But this decentralization means that **everyone's work could be strengthened with greater communication and coordination**. This is the purpose of the proposed Soil Health Action Plan: to bring together state and federal agencies, universities, the financial sector, the food and agriculture sector, and environmental and consumer advocates to increase understanding of each other's missions and to identify and coordinate the role each can make towards advancing soil health management statewide.

Since it was established in 2018, the Minnesota Office for Soil Health has twice convened this mix of stakeholders and facilitated discussions across sectors. We have observed **a readiness to learn and work together** and an eagerness to see the widespread outcomes that have been suggested by the results of small-scale examples -- outcomes including storage of atmospheric carbon, better resilience in the face of excessively dry or wet weather, more stable agricultural income, and healthier groundwater, lakes, and streams.

We have solid science suggesting significant potential for soil management to take us towards these goals. We can only get there if we take an approach of widespread learning and capacity-building across the state and across sectors. **A Soil Health Action Plan would facilitate that cooperative process.**