

Enhancing Local Farmer Networks in Kansas to Aid in Nutrient Reduction to the Gulf of Mexico

Gary Satter, Executive Director, Glacial Hills RC&D

A \$750,000 Kansas Department of Health & Environment grant from EPA is being administered by Glacial Hills Resource Conservation & Development (RC&D), Wetmore, Ks. from August 1, 2021 to Dec. 31, 2024

The goal of the program is to reduce the amount of nutrients leaving high priority regions of Kansas impacting the Gulf of Mexico

- Water quality impairments can be directly influenced by land management, and through the adoption of soil health practices, Kansas agricultural operations can have a positive impact on water quality and nutrient loading to the Gulf of Mexico
- Soil health practices improve water quality through reduced nutrient applications and greater water infiltration into the soil
- Large scale adoption of these practices can affect the hydrology of watersheds and can produce consistent water quality improvements
- The difficulty in large scale soil health adoption is that to be most effective, these practices need to be customized to each individual farmer

- The adoption of soil health principles has changed the landscape in a positive way for water quality as well as other environmental resources
- Soil health principles include less disturbance, covering the soil, having a living root as much as possible, adding diversity to the soil, and integrating livestock where possible
- Water quality problems such as sedimentation, nutrient loading, bacteria, herbicides, pesticides, and other chemicals are reduced through the implementation of soil health practices

- There comes the realization that many producers need an added level of support to adopt soil health principles
- With this program, producers experienced in soil health principles will give the opportunity to other producers to learn, discuss, and plan changes to their operations
- This program will focus on local farmer-to-farmer coaching from experienced individuals to build capacity and provide the needed tools for successful implementation with neighboring farms, allowing greater success in permanent adoption of soil health practices

- A network of farmer coaches will allow for regional growth of soil health implementation and large-scale water quality improvements
- The purpose will be to provide technical guidance to producers in target watersheds on increasing the use of soil health practices to improve on farm profitability as well as beneficial ecosystem service outcomes
- Each of the 10 coaches will begin to provide planning and one-on-one coaching for 5 producers regarding the implementation of soil health principles and practices, with 5 additional producers added annually
- By the end of this three-year program it is expected that each coach will have at least 15 individual farmers that receive his/her support, for a total of at least 150 farmers receiving direct coaching

- The coaches will work with local farmers individually to customize and plan the implementation of soil health principles and practices such as cover crops, livestock grazing of covers after harvest, terminating cover crops, etc.
- Each farm is unique and a “one size fits all” strategy will not work for widespread adoption
- Coaching entails educating participating farmers in multiple ways. First, one-on-one education is vital to helping participating producers understand how these changes can benefit the environment, their financial bottom line and their overall way of life

- Additionally, to make implementation easier, coaches will educate participants on reasonable expectations and positive and negative outcomes that are possible during initial implementation
- These discussions will help to calm fears related to changing management practices and reduce the chances that participants may suddenly stop implementing changes if there is an initial failure on farm
- Without a network of experienced neighbors, friends, or coaches to discuss a practice failure with, a participant is likely to stop trying new soil health practice implementation

- Build a network of farmers who can count on one another to brainstorm and experiment with BMPs for successful soil health implementation on a variety of operations
- As the farmer-to-farmer coaching builds, more farmers will begin to feel comfortable sharing with other farmers and begin to advise/coach themselves
- As these networks develop, farmer to farmer information sharing becomes a natural part of the community and the need for a formal program will diminish

- Quarterly talks/meetings with the farmers in the coaching program to discuss what they are doing on their farms. Bringing the local farmers together will build a local infrastructure that will have lasting benefits. To be successful, it is imperative to develop these smaller networks for farmers to share ideas
- The local capacity must be built prior to seeing large adoption of new management practices as the implementation of soil health is as much social as it is agricultural. Farmers observe each other, compare the successes and failures of one another, and communicate with each other through how they manage their operation
- Success will come as these networks serve as a secure place for farmers to try new techniques and share the results with each other