



Farm Sustainability Rewards Project

Request for Contract Services: Nutrient Management Modeling - Limited Term

The Farm Sustainability Rewards Project (FSR) is a two-year project led by Wisconsin's Green Fire in partnership with Clean Wisconsin to assess the feasibility of and design for a voluntary Farm Sustainability Rewards Model for farm conservation that provides incentives for farmers who meet increasingly robust tiers of environmental performance while improving their whole-farm and farm product sustainability.

To assess the environmental parameters of a Farm Sustainability Rewards Model, we're seeking an individual (or organization) to conduct nutrient loss modeling using producer-supplied, real farm data from a representative sample of farms throughout Wisconsin.

Specifically, the work required will include:

- Work with FSR team members to identify “evaluation areas” that are representative of Wisconsin farm types (livestock, cash grain, vegetable, etc.) and farming styles (conventional, organic, irrigated, etc.) for the purpose of developing a reasonably accurate assessment of environmental performance within the major geographic regions of Wisconsin, e.g. (Northeastern Dairy, South Central cash grain, Driftless Area Dairy, Central Sands Dairy & Potato/Vegetable, Northern Dairy, TMDL watersheds). In geographic regions where phosphorus loss is a significant environmental challenge, “evaluation areas” will be in watersheds with established phosphorus TMDL values and preferably with DNR approved 9 Key Element plans.
- Work through county conservationists and FSR team members to identify between 3-6 agricultural operations per “evaluation area” with nutrient management plans (NMPs), request and obtain use of their NMP SNAP Plus files, and any additional data needed to conduct Nitrogen loss and Carbon loss estimates, as needed. All personally identifiable producer information and specific farm location will be maintained as confidential.
- Import NMP farm data and perform model runs to assess current whole farm phosphorus, soil and nitrogen losses and carbon footprint of cropping practices on each farm, as well as potential best management practice adoption scenarios (ex. changes in crop rotation, tillage, cover cropping, or other conservation practices) needed to meet project-identified tiers of environmental performance. Modeling tools used will be:
 - Phosphorus runoff loss using SNAP Plus
 - Soil loss using Snap Plus.
 - Nitrate loss using UW's Nitrogen loss tool.
 - Carbon loss or capture using COMET Farm.

- Compile and organize model run outputs into a set of summary reports.
- Assess strengths and weaknesses of each environmental measurement tools/models and advise FSR team members on model applications, limitations, and potential refinements to improve accuracy or efficiency.
- Participate in meetings as requested of the FSR Project Advisory Group.

Timing and Terms

We anticipate an initial level of effort from 120-180 hours by a qualified individual between March 15th and June 15th, 2024. The work could be conducted via a contract with an established consultant, or through an LTE employment of a qualified individual.

Qualifications

- A B.S. degree in Agronomy, Soil Science, or Environmental Sciences, and/or significant professional experience in agronomy and farm conservation.
- A solid working knowledge of Nutrient Management Plans and their applications and implications for farm conservation.
- Expertise working with SnapPlus, COMET and/or the UW Nitrogen Leaching Calculator tool.
- General computer literacy, including the ability to learn and use computer-based farm models, analyze data, and develop presentations, visuals, and supporting materials.
- A motivated self-starter capable of working and making key decisions independently, and able to collaborate and consult effectively with a team.

How to Apply (open until filled)

Please provide the following to Fred Clark, fclark@wigreenfire.org:

- A short letter explaining your interest, availability, and qualifications for the work.
- A current statement of organizational capacity, or a professional resume
- (Optional) A cost proposal, required rate of pay, or proposed terms of service.

Questions about this opportunity can be made to any of the following project advisors:

Jim VandenBrook jvandenbrook@wigreenfire.org

Sara Walling swalling@cleanwisconsin.org

Fred Clark fclark@wigreenfire.org

www.wigreenfire.org

PO Box 1206, Rhinelander, Wisconsin 54501 | 715.203.0384 | Info@wigreenfire.org