



801 E. Sangamon Ave
PO Box 19281
Springfield, IL 62794

Phone: 309.212.0047

August 8, 2018

MEMO TO: NREC Potential Project Investigators
FROM: Ted Mottaz, NREC Research Committee Chair
RE: **REQUEST FOR 2019 NREC PROJECT PROPOSALS**

We are pleased to announce the solicitation of research proposals that address the objectives of the Illinois Nutrient Research and Education Council (NREC) for the calendar year 2019. The overall objective of this program is to advance the scientific knowledge associated with practices or products that impact efficiency of nutrient use while maintaining crop productivity and at the same time strive to protect natural resources.

This list of priorities has been developed from a combination of feedback from NREC stakeholders and from questions that have been identified through previous research projects.

Economic Cost/Benefit Analysis: Consistently, feedback from farmers in Illinois shows that a major hurdle in the adoption of conservation practices is the lack of economic information. To that point, we are looking for research proposals that include an annual economic analysis OR a stand-alone project that pulls data from other NREC-funded projects in order to conduct the economic analysis.

Outreach/Education: Please look for a separate Outreach/Education RFP which will be available in early 2019.

2019 Research Priorities as Identified by Illinois NREC

Nitrogen and Phosphorus Management Projects

1. Continue studies testing the impact of N management systems on efficiency of N use.
 - a. Scale the work on optimum N rate to include more Illinois soil types, especially in Southern Illinois.
 - b. Evaluate the efficacy of **combinations** of 4R practices on N efficiency
 - c. Evaluate the potential for N loss from surface applied UAN
2. Cover Crops: Evaluate the feasibility, economics, water quality impacts and best management practices of growing cover crops to address nitrogen and phosphorus loss as well as crop productivity. Best management practices should look at all aspects of cover crops from crop selection, seeding and grazing, through crop termination. There is particular interest in better understanding factors that influence the time and rate of N release by cover crop residue.

3. Evaluate the agronomic and environmental benefits of tillage/erosion control and the placement and timing of phosphorus applications throughout the entire state, but with special emphasis on Southern Illinois soils.

Tile and Conservation Systems

4. Drainage: Evaluate drainage water management and erosion control practices (i.e. sediment basins) from both a nutrient management and agronomic standpoint.
5. Edge of Field Practices (Bioreactors, Buffers, Saturated Buffers, Constructed Wetlands): An evaluation of practical approaches to installing these systems in areas where drainage ditches are the conduit for tile drainage. Focus should be on ways to utilize these systems to provide the most practical benefit while limiting the amount of land taken out of production.

Innovative Approaches to Nutrient Management

6. NREC is also very interested in research projects that go beyond the “known” into innovative and forward-looking research.

All proposals are expected to contain a strong methods and materials statement which contains reference to published work that would support the hypothesis. It is expected that the results of such projects will be shared with other scientists by publishing in peer scientific journals and as such, proposal must contain methodology acceptable in the scientific community. Methodology needs to include a description of the site selected or the criteria to be used in selecting the site for the study. While credentials are not required, it would be beneficial to demonstrate experience or training in the area of research being proposed. We also expect the results to be widely distributed to farmers and crop advisors via meetings, news releases, and electronic media in a manner that effectively promotes and assures implementation of the derived best management practices.

We encourage you to submit well defined proposals that will endure peer review and that will also be useful to crop producers and the agribusiness industry in their quest for higher yields, while minimizing the potential negative environmental impact of crop production practices in Illinois. In addition to detailed mid-year and year-end project reports, we also require that each project identify at year-end any observations learned from the study that can be shared with the industry and the general public.

NREC is currently funding 26 projects and many of these will be considered for continued funding in 2019. Please go to www.illinoisnrec.org to view a summary of these projects as well as the 2017 Annual Report.

Attached is an outline for submitting a project to NREC, a standard cover sheet and the project budget template. Please limit your proposal to ten pages total and the synopsis to one page. You can modify the budget template accordingly to best reflect your project's unique or specific budget items. Please be succinct but descriptive with your project titles and include an email and telephone number where the lead investigator can be reached.

Please submit your proposals in PDF format via email to the NREC Research Manager at sgolovay@illinoisnrec.org by October 2, 2018. Shani will acknowledge receipt of your proposal. The NREC Council will consider the proposals and will announce in December 2018 the projects NREC will fund in the 2019 calendar year. If you have questions, please direct them to Shani, who can also be reached at 618-593-9229.

Thank you for your interest in NREC and helping us pursue research and educational projects to advance Illinois agriculture and protect our natural resources.