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MEMO TO: NREC Potential Project Investigators
FROM: Ed Corrigan, NREC Research Committee Chair
RE: **REQUEST FOR 2020/2021 NREC PROJECT PROPOSALS**

We are pleased to announce the solicitation of projects for the crop year 2021 for the Illinois Nutrient Research & Education Council (NREC).

NREC's priority is funding projects that advance the science of products and practices that increase the efficiency of nitrogen and phosphorus use while maintaining productivity goals. It is expected that the results of such projects will be shared with other scientists by publishing in peer-reviewed scientific journals. 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 conclusions or best management practices.

NEW for 2020/2021 – As NREC enters new timing for the funding cycle, it is expected that any project proposed with cover crops, fall nutrient applications or other fall treatment be initiated the year funding is awarded. So, for this cycle, that would mean fall of 2020. With this in mind, site identification, cooperators, equipment, and other needs must be complete when submitted.

NREC is looking for research projects that achieve "Phase 2" of our understanding of agronomic practices around nutrient management. Much of this research will need to be multidisciplinary, with multiple sites and using a systems approach. Therefore, priority will be given to those projects that demonstrate a multidisciplinary approach and collaborate with researchers from other universities or entities.

Economic Cost/Benefit Analysis: Feedback from farmers in Illinois consistently 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 utilizes data from other NREC-funded projects in order to conduct the economic analysis.

In 2020, NREC is focusing on the following key areas of investigation that farmers and other key stakeholders have identified as needed based upon the goals outlined in the Illinois Nutrient Loss Reduction Strategy. While much of our current research has been focused on nitrogen and phosphorous, we recognize that other nutrients play a role in crop nutrition and we are open to research projects that look beyond these two primary nutrients.

1. Continue studies testing the impact of N management systems on efficiency of N use.
 - a. Maintain statewide distribution of work on optimum N rate to meet the needs of the MRTN.

- b. Evaluate the efficacy of combinations of (4R's) source, place, rate and time of application on N efficiency.
2. Cover Crops: Evaluate the economics, feasibility, water quality impacts and best management practices of growing cover crops to address nitrogen and phosphorus loss as well as crop productivity. Proposals should address all aspects of cover crops from crop selection, seeding and grazing through crop termination and subsequent mineralization and nutrient release.
 - a. Cover Crop systems following soybeans and ahead of corn to maximize corn production and minimize nutrient losses.
 - b. Engineered cover crops/Cover crop options beyond cereal rye.
3. Evaluate the agronomic and environmental benefits of reduced tillage/strip till/erosion control and the placement and timing of nutrient applications throughout the entire state.
4. Phosphorus – Continue studies testing the impact of Phosphorus management systems on efficient Phosphorus usage, the role of legacy Phosphorus, as well as placement and timing of Phosphorous applications in corn and wheat.
5. Investigate the cause(s) of increased nutrient loads in the Illinois and/or Rock River watersheds identified in the latest NLRs Biennial Report.
6. NREC is also very interested in research projects that go beyond the “known” into more innovative (novel, inventive, original) and forward-looking research.

We encourage you to submit well-defined proposals that will endure peer review yet will also be useful to crop producers and the agribusiness industry in their quest for higher yields, while minimizing potential negative environmental impacts 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 critical 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 2021. Please go to www.illinoisnrec.org to view a summary of these projects as well as the 2018 Annual Report. The 2019 Annual Report will be available later this Spring.

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 May 8th. Shani will acknowledge receipt of your proposal. The NREC Council will consider the proposals and will announce in August 2020 the projects NREC will fund in the 2020/2021 crop 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.