Iowa Nutrient Research Center – Advisory Council Meeting Summary

November 22, 2022 (9:30 am–11:00 am)
Hybrid Meeting - Elings Hall-Iowa State University & via Zoom

Attending:

- Kapil Arora, Field Agricultural Engineer, Iowa State University Extension and Outreach,
- Maureen Clayton, Associate Dean of Communities, Arts, and Sciences, University of Northern Iowa
- Chris Jones, Research Engineer, IIHR, University of Iowa
- Susan Kozak, Director Division of Soil Conservation and Water Quality, IDALS,
- Adam Schnieders, Water Quality Resource Coordinator, Iowa Department of Natural Resources
- Matt Helmers, Director, INRC, Professor, Agricultural & Biosystems Engineering, Dean's Professorship, Associate Chair for Research & Extension
- Kay Stefanik, Assistant Director, INRC
- Malcolm Robertson, Program Specialist, INRC
- Wendy Borja-Diaz, Accountant, INRC-CALS
- Ann Y. Robinson, Communications, INRC-CALS
- Suraj Upadhaya, presenter, Bioeconomy Institute
- Keith Schilling, IA Geological Survey
- Larry Weber, IIHR, University of Iowa

Welcome & Introductions - Dean Robison was unable to attend, sent his regards

Review and Approval of Minutes from March 2022 Meeting. Minutes approved with no comments.

Proposal on support for the Iowa Geological Survey
by Iowa State Geologist Keith Schilling, IIHR Director Larry Weber, IIHR Scientist Chris Jones

A proposal was presented to change the approach to INRC funding for the Iowa Geological Survey to a base-level support of $500,000 annually, which would not be tied to a specific proposal. Iowa Geological Survey would provide a workplan. Would include existing INRC support to IIHR for statewide monitoring network ($371,900). The proposal would include support for IGS-IIHR geophysical services, soils and geological expertise and equipment. Would support some renewal, maintenance of sensor network (many of sensors are nearing end of functional lifetime).

Background: Schilling/Iowa Geologic Survey has led 12 INRC projects, which have represented ~ $100,000/year. These include important successes, including studying the nutrient processing capacity of multipurpose oxbows and roadside ditches and assessing P contributions from streambank erosion. IGS has also assisted other researchers at ISU and elsewhere. IIHR and the Flood Center have been active in terms of securing grant funding that has leveraged INRC support. IGS-IIHR would continue to look for other sources of funding, but this would provide additional flexibility.

Advisory Council Questions: Any authorizing language that would prohibit? Any other considerations, like other partners that might be interested in a similar relationship?

Helmers: Don't think language that would prohibit as long as there is appropriate transparency. IGS/IIHR has specific expertise not available from others. Overall, the amount would be similar to what has been going to the IGS and IIHR over time on a project basis. Need to arrange an impromptu virtual meeting soon to give additional consideration, especially for Advisory Council members not in attendance today.

Presentation on INRC-Supported Research
by Suraj Upadhaya, Researcher with the Bioeconomy Institute, on newly funded INRC project, Sociological Water Quality Research: Quantifying Factors at Multiple Scales that Influence Farmers to Shift from Being Potential to Actual Adopters of Conservation Practices. Led by Upadhaya, with J. Arbuckle and Lisa Schulte Moore.

Most existing studies focus on individual-level factors affecting farmers' conservation behavior and sort landowners into two categories of Adopters/Nonadopters. This project includes Potential

Adopters – maybe most important group in terms of where to fruitfully focus efforts -- and aims to focus on multiple influences on conservation behavior and how it can shift over time. Drawing from multiple data sources. Also, exploring best ways to study.

Budget Update – Matt Helmers

Since 2013, ~$15 million in allocations from Legislature/Ag management account for 127 projects. This year ~$1.4 million in funded projects. 28 proposals submitted, representing a funding request of ~$3.3 million. 12 proposals funded. Year 1 ~$970,638, Year 2 ~ $468,240.

2022 RFP Review – Matt Helmers

Briefly reviewed projects funded this year (see news release). Diverse projects include looking at carbon potential of nutrient reduction practices, co-benefits of water quality practices for wildlife.

Center Activities Update – Matt Helmers

- Continued with seminar series this fall - next spring, highlighting projects over last decade. Seminar recordings are archived on website/Youtube.
- Developed a researcher directory and continue to expand digital repository with ISU Library.
- Continue to be active with webinars, virtual field days and articles/interviews, often in coordination with Iowa Learning Farms. Virtual field day on drainage water recycling (Dec. 8).
- Co-coordinated International Drainage Symposium and field tours (August-September).
- Presentations included to National Caucus of Environmental Legislators Field Tour (June) and Council on Agricultural Science and Technology (October).
- OLLI Course, Science of Water Quality in Agricultural Systems (June)
- Re-submitted NSF-REU proposal for internship program

Other ongoing research efforts and plans for the future include:

- Stefanik is leading collaboration with IDNR and others on Nutrient Tracking Tool used for IA Nutrient Reduction Exchange
- Looking for opportunities to better leverage state dollars

Had Board of Regents Center Review in May– happens every 7 years.

- Review Team document just received (handed out). Also shared self-study info. Will send to all Advisory Council. In general, very positive. Reviewers noted that INRC has been successful in fulfilling role to pursue a science-based approach to nutrient management in the state and region. Ideas/points discussed including planning a researcher open house and field tour, hosting a multi-state workshop on nutrient reduction strategies. If pursue, want to avoid duplication.

Advisory Council Discussion

- Schnieders: Represented Advisory Council on review team. Overall, very positive with some good suggestions for moving things forward. See a lot of progress, including Center's ability to change over time, take advantage of opportunities, expand communications. Think the funding piece is important. Encourage INRS to look at other opportunities, possibly bring in more stable funding.
- Kozak: At first glance, a very positive review. Appreciate chance to hear about research at this meeting. Like to talk a little about internships at a future meeting. IDALS working to develop program -- possibly INRC could be helpful
- Jones: How to get "greatness" reflected in Board of Regents review translated into more funding?
- Clayton: Congratulations to Center on positive review. Agree on idea to seek additional funding.

Future Meetings – Matt Helmers

- Need to arrange an impromptu virtual meeting soon to give additional consideration to IGS-IIHR, proposal. Ideally before the end of the year.

No public discussion. The meeting ended at 11:15.