Iowa Nutrient Research Center – Advisory Council

March 7, 2023 (10:30 am–12:00 am)

Summary from Zoom Video Conference

Attending:

- Carolyn Lawrence-Dill, ISU-CALS Associate Dean Research & Discovery
- Maureen Clayton, Associate Dean of Communities, Arts, and Sciences, University of Northern Iowa
- Chris Jones, Research Engineer, IIHR, University of Iowa
- Adam Schnieders, Water Quality Resource Coordinator, Iowa Department of Natural Resources
- Keith Summerville, professor of environmental science and associate dean of the College of Arts and Sciences, Drake University
- Grant Menke, IDALS, Deputy Secretary, Iowa Department of Agriculture and Land Stewardship
- Matt Helmers, INRC Director, Professor, Agricultural & Biosystems Engineering and Dean's Professorship, Associate Chair for Research & Extension
- Kay Stefanik, INRC Assistant Director
  Malcolm Robertson, INRC Program Specialist
- Wendy Borja-Diaz, INRC-CALS Accountant
- Ann Y. Robinson, INRC-CALS Communications
- Keith Schilling, Iowa State Geologist, Iowa Geological Survey

INRC Director Helmers welcomed the group and introductions were made. Summerville moved to approve the minutes from the previous (November and December 2022) INRC Advisory Council Meetings, which was seconded by Clayton and approved by all.

<u>IIHR / Iowa Geological Survey Work Plan - Keith Schilling</u>

This item was presented early on agenda as some Council members were going to have to leave early. Requesting $100,000 for IGS - laid out four main project areas:

1. Continue to develop new saturated waterway concept. Coordinating with an interested farmer, IDALS and NRCS. Goal to get a design and install to document performance in spring 2024.
2. Continue to refine saturated buffer concept for eastern Iowa, working with two landowners who have approached us with new design ideas. Will also experiment with variations in monitoring to help assess impacts of different management choices.
3. Analysis of historical loads of N&P back to 1980 for Iowa Rivers and load estimations detail at all ambient monitoring sites.
4. Groundwater monitoring and geological/geophysical services to support other INRC researchers/research projects.

Schnieders: Projects sound great. Not sure about flow of the total dollars. Does this mean that the rest of the funding originally requested for base-level support will be in workplan for IIHR for sensor network maintenance and upgrades/replacement? Schilling: Yes, IIHR workplan that will include testing new sensors will probably go up to $400,000.

Helmers: Believe proposal helps with new technology development, assisting other INRC projects. Asked for Council's vote on approval via an anonymous poll.

Council members: Unanimous support.

Helmers: Schilling will do a combined budget laying out more details, including personnel.

Center Director Update – Matt Helmers

2022 Projects: $1.4 million. ~$15.1 million and 127 funded projects total as of August 2022. Funding allocation to date $16.1 million. Based on first two quarters, projecting similar funding availability for the upcoming 2023 (FY24) request for proposals.

Shared a preview draft of the INRC 2022 annual review. Did not receive any suggestions for changes.

Ongoing Outreach and Communication Efforts: Include seminar series (all archived), publications in digital repository, webinars, virtual field days and articles/interviews, short videos. Trying to reach a broad audience. Social media outreach has now reached 500 Twitter followers.

Networking: Includes plans for annual research site field tour for May 2023. INRC awarded an Excellence in Extension Grant through ISU to develop a half-day workshop on the Iowa Nutrient Research Strategy, which will feature work from INRC.

Plans for Spring-Summer.

- Plan for next year's monthly seminar series.
- 10th anniversary Researcher Open House and Field Tour (May 2023);
- INRS workshop;
- Continue to look for opportunities to better leverage state dollars we receive;
- Continue communications, short research videos, work to get publications in digital repository;
- Summer Outreach events with various organizations (Iowa Learning Farms/Water Rocks, Wings2Water, Iowa Rural Water Association, etc.)

2023 RFP Review – Matt Helmers

Request for proposals sent out. Pretty consistent from last year, reflecting stakeholder roundtable spring 2022 (every two years). Hope this year we may be able to do more to emphasize grazing. Changed some language regarding co-benefits or unintended consequences of practices. New technologies, including vertical tillage to help answer questions about that practice. Plan to release March 9 – proposals due April 28. Make funding decisions by early July for projects starting August 15.

Jones: Do we really need to continue to study conservation tillage as it's known or characterized? But agree vertical tillage would be interesting to know more about.

Helmers: Maybe also not so much information available on strip tillage. (Final Language in 2023 RFP: Explore impacts of strip tillage and or vertical tillage on non-point source N and P.)

Advisory Council Discussion

Schnieders: Asked about Wings2Water organization. Stefanik: Right now, focused on Cedar Rapids airport – they have a fund for small grants for conservation and education/outreach projects focused on community education. Want to share scientific info around conservation practices. Interest in possibly expanding to other airports along Mississippi River.

Jones: CR airport owns a lot of farm land. Could deploy water quality sensors around airports.

Future Meetings – Plan for another meeting in six months, September-October timeframe.

No public discussion. The meeting ended at 11:25.