

# Iowa Nutrient Research Center – Advisory Council

March 19, 2024 (12:30–2:00 pm)  
Summary from Zoom Video Conference

## Attending:

- Maureen Clayton, University of Northern Iowa
  - Adam Schnieders, Iowa Department of Natural Resources
  - Keith Summerville, Drake University
  - John Lawrence, Iowa State University
  - Kapil Arora, Iowa State University Extension & Outreach
  - Susan Kozak, Iowa Department of Agriculture and Land Stewardship
  - Larry Weber, IIHR, University of Iowa
- INRC:
- Matt Helmers, INRC Director, Associate Chair for Research & Extension, Iowa State University
  - Kay Stefanik, INRC Assistant Director
  - Malcolm Robertson, INRC Program Specialist
  - Wendy Borja-Diaz, INRC-CALS Accountant
  - Ann Y. Robinson, INRC-CALS Communications

INRC Director Helmers welcomed the group and introductions were made. The minutes from March 2023 were reviewed and approved.

## Review of 2023-2024 (March - March) Center Activities

Helmers reviewed INRC activities and funded projects over the last year. 9 projects funded for a total of \$1.25 million. (He reminded advisors of the legislative change that cut funding to INRC for FY 2024 and beyond.) Over 11 years, INRC has funded 136 projects, for \$16.4 million total. There are no indirect costs.

## Center Director Update

INRC by the Numbers features: \$6.7 million in leveraged funds for completed projects this year, 85 presentations, supported 15 grad and 38 undergraduate students supported, 7 new peer-reviewed publications, 5 workshops and 19 field days. Other highlights are reflected in new INRC Annual Review. Helmers presented draft and invited feedback. Welcome ideas for seminars/webinars.

## Other items to mention include:

- Outreach and Education – Collaborations this year included Crop Advantage Series, Iowa Learning Farms webinars and virtual field days.
- Seminar series. Focus on the Future with students and grad students involved in INRC-supported research projects. Continuing to try and build attendance. Invite advisors help to promote.
- Ongoing Research Efforts – Kay, especially, has been working with Adam Schnieders on Nutrient Reduction Exchange to refine Nutrient Tracking Tool. Working with USGS on manuscript looking at nitrate load model at different scales and in different watersheds.
- National Science Foundation Research Experience for Undergraduates (REU) Proposal – Applied again, but not funded. USDA offers similar internship proposal opportunities. Looking to try that.

## 2024-2025 RFP Review – Matt Helmers

Held Stakeholder Input sessions on RFP, Feb. 15, 2024. About 40 attended, representing 10 groups. Robust discussion led to some changes this year, including priorities for research, including:

- Floodplain management for nutrient reduction.
- Weather patterns, nutrient fluxes and how that is likely to influence practice performance.
- Emphasis on socioeconomics, especially policy incentives for implementation.
- Cumulative impacts of practice implementation, scaling. Can we detect changes in water quality?
- New technologies and more systematic evaluation of models.

- Drainage water recycling.
- Alternative bioreactor source materials.
- Removal of P from tile drainage.

Weber: Evaluating nutrient reduction models? Agree real interest and need.

Kozak: Emphasize importance of better understanding how to change people's attitudes and actions.

Lawrence: Was there some discussion around crop sensors? Could encourage people to start out with lower rates and add in-season as needed.

Weber: Have greatly appreciated direct allocations to IGS and IIHR for operating the water quality network sensors, monitoring and assessment. However, understand if pressures lead to switch to apply for support through competitive allocation process.

Helmers: Based on discussions over the last year, think everything may need to go through competitive grant process. Welcome input from the Council.

Lawrence: Agree that the path forward will be to submit a competitive proposal.

Helmers: Pointed out legislative change for who can submit proposals. Original mandate required projects to be led by regents institutions. Now can be broader. Interested to see how this impacts applications. Want to get RFP out early next week, so would like to get any comments back ASAP.

#### Other Advisory Council Discussion

Weber: IIHR establishing new hydrostations/soil moisture sensors in Congressional Districts 1 and 2. Request for funding has been submitted to Congress for District 3.

Lawrence: Encourage getting network redeployed early this spring to be prepared if get flow/rain.

Arora: Interested in learning about status of nutrient trading/nutrient exchange.

Schnieders: Good progress. Have made improvements to calibration of the NTT with help of INRC and now have DNR staff who can review. Beginning to approve backlog of 400+ practices that have been submitted.

Kozak: INRC work valuable to IDALS. One area of growing interest - two-stage ditches.

Schnieders: Became aware that fines/penalties related to DNR enforcement actions supposed to go into Iowa Nutrient Research Fund. Schnieders has been looking into whether that has been done. The DNR knows the penalties are routed to this. ISU will need to coordinate with the state treasury to determine what happens to the funds after that. If funds are not being utilized, would be good to know – or know what they are being used for.

Helmers and Borja-Diaz: Thank you. We are also looking into it.

This year would like to get back to meeting every six months and have someone do a brief report on high-impact research project. Suggestion for Weber to present on eco-hydraulics project on Mississippi River.

No public discussion. The meeting ended at 1:50.