

Iowa Nutrient Research Center – Advisory Council Meeting Summary

September 19, 2019, Elings Hall, Iowa State University, Ames

Attendees:

- Dan Robison, CALS Dean, ISU College of Agriculture and Life Sciences
- Joe Colletti, CALS Senior Associate Dean, ISU College of Agriculture and Life Sciences
- Matt Helmers, INRC Director, Professor Agricultural & Biosystems Engineering, Dean Professorship, Associate Chair for Research & Extension, Iowa State University
- Kapil Arora, ANR Extension Agricultural Engineer, ISU Extension and Outreach
- Roger Bruner, Iowa Department of Natural Resources
- Maureen Clayton, University of Northern Iowa, Associate Dean
- Chris Jones, Research Engineer, IIHR-Hydrosience and Engineering, University of Iowa
- Julie Kenney, IDALS Deputy Secretary of Agriculture
- Susan Kozak, IDALS, Director Division of Soil Conservation and Water Quality
- Keith Schilling, State Geologist, IIHR-Hydrosience and Engineering, University of Iowa – online
- Keith Summerville, Drake University Deputy Provost, Associate Dean College of Arts and Sciences, Professor of Environmental Science
- INRC Staff/Iowa State University: Wendy Borja-Diaz, INRC-CALS Accountant; Malcolm Robertson, INRC Program Coordinator, Ann Y. Robinson, INRC-CALS Communications Specialist; Kay Stefanik, INRC Assistant Director

Welcome and Introductions – Joe Colletti

Review and Approval of Minutes from May 2019 video conference

Julie Kenney motioned to accept. Seconded by Kapil Arora.

Center Activities - Review of 2019 (May – September) – Matt Helmers

INRC website – Helmers shared an overview of web analytics since the website launched in May. Unique visitors to the INRC website are generally increasing and content continues to be added.

INRC-sponsored Water Quality Field Events: INRC led a water quality tour for the Dean with a small group of researchers to look at practices being researched and demonstrated near Iowa State campus. Also coordinated an August water research tour for Regents institutions researchers, grad students and staff. Hope to make that an annual event. Goal to catalyze conversations and encourage interactions between disciplines and institutions.

Staffing and Budget Updates – Matt Helmers

New INRC Staff introduced: Wendy Borja-Diaz, MS in accounting from ISU, also works for CALS; Dr. Kay Stefanik, comes from Ohio and the Ohio State University, PhD in Environmental Science.

Had a little more project funding for FY2019 from the Ag Management account (\$3,025,767). Have had a short-term average of \$1.6 million annually. This year could be a little lower – planning for closer to \$1.4 million.

2019 RFP Process and Review – Matt Helmers

Continued focus on cover crops, oxbow restoration, grazing and forage, nutrient management and barriers to adoption/social sciences. Also had emphasis on manure management but didn't get much interest from researchers. One issue that has come up is the July start date for projects is not that workable for some, i.e., due to water sampling season, growing season, equipment that needs to be purchased, etc. Should we shift to a fall start date? Previously wasn't workable but could be more flexible now.

Chris Jones - IIHR may be able to support monitoring if researchers have project that would benefit from a sensor.

2019 Funded Projects – Matt Helmers

Presented list of 16 new projects funded: <https://www.cals.iastate.edu/news/releases/iowa-nutrient-research->

[center-funds-new-set-diverse-water-quality-studies](#). A good balance of diverse projects. List includes several projects continuing. More details on projects on website under each project's name.

Center Director Update – Matt Helmers

Planning a monthly seminar series, to begin in January. The focus will be on research with a goal of fostering networking and information-sharing among researchers including faculty, staff, grad students and other stakeholders. Planning to livestream and archive sessions to increase outreach.

Continuing communications work including press releases. First video on cover crop research will be posted soon on INRC website. Developing map of WQ research projects so people can see what research is happening in their area – on public lands and university-related sites. Open to have private land featured if landowners willing to have it shared (would need formal way to do this – and make sure landowners are informed of any liability).

Plan for stakeholder roundtable (in February?), including Advisory Council members, to gather input on 2020 RFP -- last done in 2018. This time will be sent to broader invitation list to include more stakeholders.

INRS Science team recommended inclusion of multipurpose oxbows for INRS practice list – subcommittee reviewed, science team approved. A lot of partners interested. New INRC project to research this practice further.

Presentation: Keith Schilling, State Geologist and IIHR, University of Iowa – Contribution of Streambank Erosion to Total P loads in Iowa Agricultural Watersheds

Work funded by INRC and others. Area identified in original INRS for P loads as needing more research. Aware that streambank erosion very prevalent, but hard to quantify. A lot of variation in sources -- big task. New analysis captures big picture and range (not watershed or reach specific), compares monitoring data with models to get some good estimates. Main conclusions:

- IA a major contributor to N (29%) and P (15%) loads to the Gulf
- TP export from IA averages ~ 1.7 kg/ha and exports ~ 25,000 Mg per year
- Streambank contributions may account for ~ one-third of annual TP export.

Council Discussion

What about RFP? Change of date preferred by some researchers to allow more time to get equipment, hire students, etc. Good to allow more flexibility even if don't change general date. Recommend surveying PIs (including those who submitted proposals and weren't successful).

Encourage diverse RFP focus areas: How to encourage more submissions around manure management, barriers to adoption? Think a lot of potential related to Multi-outcome projects.

Good to build on what is being learned about streambank erosion and potential to reduce stream power.

For seminars, outreach, keep in mind the broad audience within scientific community, different groups and stakeholders, including DNR staff. On technical topics, could do public talk and more scientific talk. Recommend piggybacking on or presenting at existing conferences, such as PFI, CDI Conference for commissioners, SWCS.

Future Meetings – Matt Helmers

Teleconference - latter part of March? Will send doodle poll to schedule. Technology - connections? Zoom seems to work pretty well. (Council member suggested Skype has not worked well in the past for his group.)

Stakeholder Roundtable - Timing may have to be adjusted, depending on RFP schedule.

Public Discussion – No representatives of public attended.

Joe Colletti - Adjourned at 12:16.