

Communications Subgroup

10/14/2020 10:00 – 11:00 am

In attendance: Kate Gardiner, Illinois Extension; Eliana Brown, Illinois Extension; Christine Davis, Illinois EPA; Trevor Sample, Illinois EPA; Lauren Lurkins, IL Farm Bureau; Krista Lisser, Department of Agriculture; Albert Cox, Metropolitan Water Reclamation District of Greater Chicago; Mila Marshall, Sierra Club IL; and Layne Knoche, Illinois Extension

Summary

Welcome and Introductions

Eliana welcomed the group and handed the meeting to Kate.

NLRS Explorer - *Kate Gardiner, Illinois Extension*

Kate presented her progress on the NLRS Explorer, which is a digital toolkit with educational resources relating to the Illinois NLRS. The NLRS Explorer goals are to increase knowledge about and interest in nutrient issues in the Mississippi Atchafalaya River Basin and Illinois' role in these issues, increase educator knowledge and confidence in teaching the Illinois NLRS content, and increase student interest in Illinois NLRS career pathways. The target audience is Illinois K-12 students and their families and key topics include the Gulf of Mexico Hypoxic Zone, the connection between Illinois and Gulf of Mexico, Nitrogen and Phosphorus, Illinois Nutrient Loss Reduction Strategy, and related careers.

Kate solicited feedback and suggestions for ways to improve the toolkit. Subgroup members agreed there is a need for this kind of tool and discussed ideas for how to share it and identify a clear benefit for its users.

Eliana facilitated a vote and the Communications Subgroup approved the motion to take the NLRS Explorer to the full Policy Working Group in November.

Next Steps

The Communications Subgroup approved the NLRS Explorer toolkit with a vote. Kate will present it at the Illinois NLRS Partnership Workshop on November 6th. Register for the workshop at go.illinois.edu/nlrs.

Meeting Minutes

Welcome and Introductions

Eliana welcomed the group and handed the meeting to Kate.

NLRS Explorer - *Kate Gardiner, Illinois Extension*

I have been working on this for the last few months with Joan Cox, who is at Illinois-Indiana Sea Grant. I hope you like it.

While NLRS partners have engaged in many successful outreach campaigns for the Illinois NLRS, many kids, teens, and adults in Illinois still aren't aware of the Illinois NLRS or Gulf Hypoxia. Simultaneously, Illinois needs to increase BMP adoption to reach our nutrient loss reduction goals. Chris Davis came up with the idea to develop an Illinois NLRS curriculum for teachers and other educators. The idea was to teach students about the Illinois NLRS during a time when they are considering career choices and/or

college majors. By getting them interested early on, they can help implement the strategy and share information with their parents.

Eliana and I shared the curriculum idea with Terri Hallesy and Joan Cox, education specialists at Illinois-Indiana Sea Grant. They shared with us the process and timeline for putting together a full curriculum, which can take up to two years to complete. This was much more in-depth and complicated than we thought. And we learned that teachers prefer individual lessons and activities over a full curriculum. We preferred something to share during this school year to help with remote learning, so our solution was to develop an educational toolkit with resources for teachers and other educators to learn about and teach this material rather than a full curriculum. It would be structured, but self-guided, provide basic information and links to resources, and we can always develop a full curriculum later on.

The target audience is Illinois K-12 students and their families. Students may be interested in exploring NLRS components and careers and can share that information with their families. Key topics include the Gulf of Mexico Hypoxic Zone, the connection between Illinois and Gulf of Mexico, Nitrogen and Phosphorus, Illinois Nutrient Loss Reduction Strategy, and related careers. The NLRS Explorer Toolkit will be based on the Illinois-Indiana Sea Grant Weather & Climate Toolkit. You can filter resources by audience, topic, learning mode, time needed, etc. There will be a few differences between our toolkit and the existing Weather and Climate toolkit. For example, our audience will also include the public, and instead of using "Scale," we will replace it with "Knowledge Level" because NLRS can be overwhelming quickly. We would like your feedback on topics, any of these can change. For learning modes, we added "Maps" and "connect with an expert". Example of the latter: Extension Educator Ashley Belle is doing virtual lessons.

To make the toolkit more approachable, we are including a suggested Learning Pathway and a Teacher Guide. The Teacher Guide came out of a meeting with Extension Educator Peggy Doty, who suggested including it so teachers can feel confident with the material.

The NLRS Explorer goals are to increase knowledge about and interest in nutrient issues in the Mississippi Atchafalaya River Basin and Illinois' role in these issues, increase educator knowledge and confidence in teaching the Illinois NLRS content, and increase student interest in Illinois NLRS career pathways. Our objectives for Phase I (which will be completed in February 2021) are to compile existing educational resources into a database, with specific attention to those developed by Policy Working Group partners, build and share a comprehensive toolkit on the IISG website, and identify educational resource gaps. Our objectives for Phase II (which is still to be determined) would be to select and partner with an experienced curriculum writer to analyze toolkit content and resource gaps and to develop an NLRS learning pathway; develop needed educational resources and pilot a learning pathway, including experiential learning and career exploration resources for learners; and create professional development opportunities for educators to increase knowledge and confidence in teaching NLRS content.

We started in late March when Chris Davis introduced the idea. Over the course of the spring and early summer, Joan and I determined which information to include and how to present it. We identified Phase I as developing an Illinois NLRS Toolkit and Phase II, if it occurs, would be developing curriculum and hosting the educational content online. After review internally and by the Illinois EPA, we met with Extension Educator Peggy Doty to outline collaborations and began work on the Learning Pathway and Teacher Guide. We've been gathering resources from partner websites and it helped when you all sent

your resources, we appreciate that. If the Policy Working Group approves the idea, we will move forward with the toolkit, hiring a backend developer and icon designer, and developing a short introductory video. In January, website developers will do backend work and the toolkit will be ready for release in February. The timing works out well because teachers can have time to settle in for the semester. Later on, we can always include career exploration resources, Google Expeditions tours, and interactive maps.

Potential metrics include the numbers of students and educators reached, changes in awareness (noted via pre- and post-surveys), qualitative surveys (educators and students), website metrics: visits, file downloads, and of course direct requests for assistance.

Thank you and please let me know if you have any questions or suggestions for how to improve this tool.

Discussion:

Albert Cox: This is a fantastic project! From my perspective, will be helpful for schools and the general public. Sometime last year, I did a poster presentation to Illinois Wild Things conference and the members said they didn't have much information about the Illinois NLRs. This tool will be helpful to point these organizations to.

Kate Gardiner: Thanks, Albert!

Mila Marshall: I want to understand what our hopes are once it's released. Are we looking for a certain number of people to adopt it?

Kate Gardiner: One of our main goals for the Illinois NLRs is outreach and to increase awareness of nutrient issues and the strategy around the state. Hopefully this tool can increase awareness and BMP adoption by sharing information and having a resource that is easy to use and in one place.

Mila Marshall: Would a person be able to select the filters? Is it a decision tree? I teach for city college and it had to go all online, through the steps, people could get an online certificate. What is the "get/give"? What does it look like to turn it into a certificate? Is there an incentive for a business owner to complete this? This might be beyond the scope, but it's helpful to think of how it benefits a person.

Kate Gardiner: As of now, we don't have a certificate. The toolkit is set up with links that take you to external partner sites. However, this is a great point and I think we could talk about this more.

Mila Marshall: Illinois just passed a CEU requirement, so this could be beneficial for landscapers too.

Albert Cox: That's a good idea. Maybe in Phase II? Educators get CEUs? Maybe they implement a system to give students a certificate.

Kate Gardiner: These are great ideas! It would be great to include CEUs and give users a sense of completion with the certificate.

Chris Davis: Kate and Eliana have reached the saturation point of the work they can do. One of the other benefits is that it would be a good source for SWCDs to point people to science-based information. Maybe we could partner with someone that is already doing something for CEUs.

Lauren Lurkins: Thanks for all the work that has been done. Our Ag in the Classroom instructor shared a ton of resources. In fact, Illinois NLRs was the theme of our 2016 summer institute. We have a ton of watershed examples too and have an activity with constructing a bioreactor with woodchips and glitter. From experience, I can say that there is already an appetite for NLRs information and activities. Even a rough toolkit will give the instructors more resources. When ready to push out, Kevin can get that out to his networks.

Kate Gardiner: Glad to hear that teachers are already interested in this! And your activities sound really cool.

Eliana Brown: I like the glitter bioreactor idea!

Lauren Lurkins: Kevin still has glitter on his clothes! The teachers keep asking for more. Also, we could share what university researchers are working on and potentially attract a different audience.

Kate Gardiner: Yes, we could include that as resources sorted at that advanced knowledge level. These are all great ideas and I would love to work on them. However, like Chris said, we are at a saturation point and we need to wrap up the toolkit by February to make time for the Biennial Report. Does anyone else have thoughts?

Chris Davis: We can work with Grant Hammer for SWCD too.

Jean Payne: I will make Haley Siergeij, Illinois Coordinator for Nutrients for Life aware of this effort.

Mila Marshall: We could also share this with the Shedd Aquarium, Alliance for Great Lakes, and Lincoln Park Zoo. I sit on the board for the zoo.

Chris Davis: Agency education coordinator will share with her networks.

Kate Gardiner: I'll also send the Climate Toolkit out so you can play around with it and see how it works.

Jean Payne: NREC has nice, short videos that should be included. Maybe Julie can share these.

Kate Gardiner: I will check that out and reach out to Julie. Education about why nutrients are needed.

Mila Marshall: I like the idea of humanizing this. Lots of kids have never seen a farmer! The Nature Center is another possibility. Unfortunate how many kids don't know where their food comes from. As humanizing as it can be. Especially if there are pictures of kids.

Eliana Brown: Could we share this with FFA?

Krista Lisser: Yes, at state fair have barn animals and FFA kids.

Mila Marshall: We could share it with 4H as well.

Eliana Brown: Yes, we'll connect with them since they're part of Extension.

Chris Davis: We will track down Scout leads. You can also reach out to Sondra Baker, DeWitt County SWCD. She works with kids for Envirothon.

Lauren Lurkins: I think you should feel good. A lot of folks ready. Will get picked up. Will fit as a great puzzle piece. Collegiate chapters of Farm Bureau.

Jean Payne: Will we be the help desk?

Eliana Brown: Ideally, no. We'll ask IISG how they're doing that for the climate toolkit.

Lauren Lurkins: Kevin, our Ag in the Classroom coordinator, also has the "Just Add Water" project. It has activities for teachers where all you have to do is add water and the activity will come together. It has a good slogan and provides hands-on examples.

Eliana took a vote and the Communications Subgroup approved the motion to take the NLRS Explorer to the full Policy Working Group in November.

Next Steps

The Communications Subgroup approved the NLRS Explorer toolkit with a vote. Kate will present it at the Illinois NLRS Partnership Workshop on November 6th and will send out follow-up information to the Communications Subgroup. Register for the workshop at go.illinois.edu/nlrs.

Note: Dick Lyons was unable to attend the meeting but provided insight while reviewing the meeting minutes. He recommended that K-12 activities are a great place to start and we could reach out to high school agriculture classes and FFA specifically. One way to reach them is the high school agriculture teachers' annual conference or contacting the state FFA office in Springfield. The person to contact at the FFA office is Executive Director Mindy Bunselmeyer.

He recommended utilizing the yearly community college articulation conference and to speak to someone about adding a lecture on NLRS to either the transferable crop science course or the soils course. Articulation for community colleges and universities comes from both directions. Brad Angus is the past president of IACCAI (IL Association of Community College Agriculture Instructors). Brad is at Joliet Junior College. The academic advisor at ACES should be able to put you in touch with either themselves or whoever handles articulation at the U of I. His experience in teaching tells him that kits are great to have at lower levels, but little is developed for higher levels of education, and working from the top down would ensure materials are taught in community colleges and universities.

He also recommended getting in touch with Facilitating Coordination in Agriculture Education staff at www.ilaged.org, as they work across the state within their respective region. This could be important because N & P losses vary region to region.