2019 Illinois NLRS Partnership Conference

Minutes: December 3-4, 2019

Tuesday, December 3, 2019

Welcome – *Eliana Brown, University of Illinois Extension*
Eliana Brown welcomed everyone to the 2019 Illinois NLRS Partnership Conference.

Plenary Opening Remarks – *Director John Kim, Illinois EPA*
Director Kim thanked everyone for their participation and contribution of ideas. Illinois's strategy was written over 4 years ago by the PWG made up of members from every sector. Illinois EPA is proud to serve as one of the members. This is not an Illinois EPA effort alone: Illinois NLRS partners include the Illinois Department of Agriculture, University of Illinois Extension, and the many Policy Working Group member organizations. You need that diverse stakeholder group to make this effort meaningful and worthwhile. We wouldn't be able to do this without the group. The biennial report does a great job of breaking down successes, results, and areas to focus on. Collaboration by all the parties is the cornerstone of what will result in successes going forward. Goals cannot be met without the efforts by all the different sectors. The Illinois EPA would like to highlight the achievements made by the point source sector in particular, which reduced their phosphorus discharges by 24%. The strategy's interim goal is 25% reduction in phosphorus by 2025. There is still a lot of work left to be done to meet our goals. This conference is an excellent opportunity for people to come together and reflect on successes and discuss means for addressing our challenges. You will be hearing from speakers from various industries and how they are addressing their challenges, each sector has their own opportunities and challenges. Each will require continued hard work to reach its goals. We'd like to highlight NREC, they are in their seventh year of providing funding and their efforts have been crucial to reducing nutrient loss. We believe that all the options for addressing the 45% reduction goal should be kept open. We have a lot of great partners, a lot of shared interest, and a lot of great resources that we all bring.

Keynote Address – *Under Secretary Bill Northey, USDA*
Under Secretary Bill Northey of the U.S. Department of Agriculture provided the Keynote Address for the conference. He started by noting that conservation is at work in Illinois with partnerships, the Regional Conservation Partnership Program, on-farm conservation innovation trials, and data sharing. The Illinois NLRS was developed with input and data from NRCS and key agricultural groups. Conservation, sustainable farm operations, and healthy soils are essential.

There are lessons to be learned from other regions, as well. The National Water Quality Initiative uses a targeted water quality approach on over two hundred watersheds nationwide, including seven in Illinois. Since 2012, NRCS has worked with 3,650 producers to put conservation practices on 825,000 acres in priority watersheds. Eleven impaired streams nationwide have improved and have been delisted or scheduled for delisting. The Mississippi River Basin encompasses thirteen states, including Illinois. The Mississippi River Basin Healthy Watersheds Initiative, launched in 2009, uses a small watershed approach to support the states' reduction strategies. In total for fiscal year 2018, NRCS invested $25.6 million in financial assistance on over 81,000 acres in the 13-state MRB area. The Chesapeake Bay Watershed uses a variety of Farm Bill programs, including the Environmental Quality Incentives Program, the Regional Conservation Partnership Program, and the Conservation Enhancement Program. Soon, the watershed

will also utilize the Conservation Reserve Program. Florida's Everglades are the primary source of drinking water for more than 7 million Americans, more than a third of Florida's population. Unlike other regions where the focus was on conservation practices on working lands, the main USDA tool in this region is wetland easements, as wetlands serve as natural filters. Florida received more than $25.6 million in Agricultural Conservation Easement Program financial assistance funding in fiscal year 2019. Through the Wetland Reserve Easements and the Wetlands Reserve Program, restoration work has been conducted on over 49,000 acres.

The Gulf hypoxic zone has elevated nutrient levels and USDA is targeting efforts with the Mississippi River Basin Healthy Watersheds Initiative and the National Water Quality Initiative to address that. Collaboration between state and federal agencies and private groups is possibly the most important factor. The Hypoxia Task Force, created in 1997, is made up of five federal agencies and twelve states. The Hypoxia Task Force understands the causes and effects of eutrophication in the Gulf and coordinates activities to reduce the size, severity, and duration of the hypoxic zone and ameliorate the effects of hypoxia. The National Drought Resilience Partnership builds national capabilities for long-term drought resilience, leverages the work of existing federal investments, and links information with long-term strategies.

Nutrient management has impacts on and off the farm and it's a personal decision and commitment by individual landowners and farmers. U.S. Department of Agriculture technical and financial assistance is available through NRCS. Although we have a long way to go, we need to recognize progress and collaboration. Thank you all for all that you do – we have great interest across the country and great folks in Illinois. At the end of the day, the most important people to you are the folks in your county office and the U.S. Department of Agriculture is here to help them help you.

Biennial Report Review

Chapter 3: Science Assessment Update – *Greg McIsaac, University of Illinois*
Dr. Greg McIsaac briefed the audience on his science assessment update, which is summarized in chapter three of the biennial report. He summarized his work by showing that statewide average riverine water flow, nitrate-N load, and TP load estimates for 2013-2017 were 13%, 7%, and 26% greater than the 1980-96 baseline period. Point source 2017 estimated point TP and TN discharges were 22% and 14% lower than 2011 estimates. At the HUC 8 scale, nitrate and TP yields 2012-17 were generally similar to 1997-2011 values, with some exceptions. There were TP load reductions in Chicago and Des Plaines, TP increases in the Upper Sangamon and elsewhere, changes in nitrate-N load were correlated with changes in water flow for HUCs with high N yields, and Nitrate-N reductions per unit of water yield in the Mackinaw, Spoon and Kaskaskia Rivers and Henderson Creek. His suggestions for further study and future updates include to identify factors causing changes in loads, more frequent sampling of rivers, especially for P at high flow, quality assurance and control for point source data, use more than one year of point source discharge data, focus on monitored watersheds rather than HUCs, estimate loads in unmonitored watersheds by watershed characteristics rather than by neighboring HUC, and evaluate uncertainty and climate change impacts.

Chapter 4: Agricultural Sector – *Warren Goetsch, Illinois Department of Agriculture*
Deputy Director Warren Goetsch briefed attendees on the agricultural sector chapter in the biennial report. He explained that the chapter continues to be based on the logic model and the resources we

have. In 2016, there were 89 staff members engaged in Illinois NLRS outreach, implementation or research in the agricultural sector. In 2017, that number jumped to 250. In 2018, the number jumped again to 377 full time employees. While the number of events has hovered at about the same between 2015-2016 and 2017-2018, the attendance at these events has more than doubled and farmer familiarity with NLRS best management practices has increased as well. In just two years, the number of woodchip bioreactors in Illinois has nearly doubled.

The agricultural sector also has a number of surveys to measure implementation and farmer opinions. The Soil Transect Survey shows we've seen a slip backward with fewer acres eroding at or below "T," but we are heading in the right direction with ephemeral erosion. We do have watersheds with a significant amount of transect points with loss greater than "T." The USDA-NASS survey, funded by the Nutrient Research & Education Council, gives us a good idea about what producers are thinking. Cover crops continue to be of interest, even though it looks like we had a drop from 2015 to 2017 based on the NASS survey results.

There are thirty-nine agricultural-related programs, initiatives, and projects developed by agencies and non-government organizations listed in the state Nutrient Loss Reduction Strategy. New this biennial report are the Edge-of-Field Partnership for Saturated Buffers, Edge-of-Field Partnership for Woodchip Bioreactors, Fall Covers for Spring Savings, which is an incentive program for the use of cover crops, and the Illinois Extension Watershed Outreach Associates. The two watershed outreach associates, based in Galva and Effingham, develop and deliver education, outreach, and technical assistance centered in and focused on selected priority watershed basins. This document is an excellent reference because it describes all the projects and lists where to go for additional information.

Warren thanked all of the partners for their efforts and opened the floor to questions.

Questions:

Albert Ettinger: We saw the data showing the loadings were going up even though point source was going down. Is there anyone who can explain why P and N loadings may be going up?

Warren Goetsch: We're going in the right direction, just need more implementation. How do I explain the results? I don't have an explanation. I do believe river flow plays a large part and in increased river flows, you'll see increased loads.

Greg McIsaac: You can make that case for P. The short answer is that we don't know. We have these legacy effects and P can be liberated over time. Concentration of livestock into smaller areas is something we could look at. The answer will vary by watershed, since we have an increase in some watersheds and a decrease in others.

Albert Ettinger: Have we looked at if there are high concentrations in the Rock River watershed?

Greg McIsaac: I have not, that is beyond what I was tasked to do.

Chapter 5: Point Source Sector – *Trevor Sample, Illinois EPA*

Trevor Sample of the Illinois EPA provided the point source sector update. He explained that data from the resource and outreach measures is provided from a survey by the Illinois Association of Wastewater Agencies. The association had a higher return rate in 2018 compared to 2017, which explains why some of the numbers are up. Funds spent on nutrient reduction-related activity increased dramatically from

2017 to 2018. The point source sector has seen a 24% decrease in total phosphorus loads, nearly reaching the 2025 interim goal of 25% total phosphorus reduction. The point source sector has also seen a 10% decrease in total nitrogen since the 2011 baseline. Individual facility total phosphorus load reductions range from 55-80%. Most facilities with a 1.0 mg/L total phosphorus permit limit are discharging well below that limit, with a few facilities achieving annual average concentrations below 0.5 mg/L.

In terms of permitting, over 30% of major municipal NPDES permits have total phosphorus limits statewide. The Illinois EPA Total Maximum Daily Load (TMDL) Program has seen 94 approved phosphorus TMDLs and 8 approved nitrate-nitrogen TMDLs. The Illinois EPA has identified 536 active large Concentrated Animal Feeding Operations (CAFOs). Since July of 2015, there have been 351 livestock facility visits. Nineteen facilities are covered under general CAFO National Pollutant Discharge Elimination System (NPDES) permits. The Illinois Department of Agriculture receives and reviews applications for siting and construction as per the State Livestock Management Facilities Act. In 2017, there were 124 applications and in 2018, that number went down to 90. Approved projects are designed as zero discharge facilities and require waste management plans. The Illinois EPA State Revolving Fund Water Pollution Control Loan Program funded seven nutrient reduction projects in 2017, totaling $121,566,879. In 2018, the program funded four nutrient reduction projects, totaling $54,624,463.

Questions:

Albert Ettinger: I noticed the State Revolving Fund numbers went down. Is the state of Illinois actively promoting increased funding?

Rick Manner: I can give you a couple comments. It is something that wastewater treatment facilities lobby for on the national level. In regards to Trevor's numbers, he showed a decrease from 2017 to 2018. Fox Metro had a large 2017 number and were finished by 2018, which is why that number was lower. The various large wastewater treatment facilities are in different stages in their renovations. All of the nutrient projects that are coming online will use up all of the revolving fund money.

Chapter 6: Urban Stormwater Sector – *Eliana Brown, University of Illinois Extension*
University of Illinois Extension's Eliana Brown provided the urban stormwater sector update. With agriculture, we track via the grant programs. With point source, we track via the discharge monitoring reports. Stormwater, though a nonpoint source, it is much more of a narrative type reporting and it not as easy to track.

In 2018, the stormwater sector started capturing the data for resources and outreach. These are underreported numbers because we only had three organizations reporting – Parkland, Greater Egypt, and DuPage County. Eliana showed the funds supporting 2018 nutrient reduction-related activities and outreach events reported by the stormwater sector. The three organizations that reported were able to reach over 6,000 people at their events.

Eliana also showed the MS4 communities and the work done by Illinois Extension's Lisa Merrifield.

Questions:

Cindy Skrukrud: Will you be able to do what Lisa did for each biennial report and track MS4 reports on a biennial basis?

Lisa Merrifield: Perhaps.

Eliana Brown: Going through all the narrative MS4 reports has proved to be a pretty laborious task. It would be wonderful if all the facilities took what they did and fit in nutrient reporting within that.

Chapter 8: Adaptive Management and Measuring Progress – *Trevor Sample, Illinois EPA*
Trevor Sample reviewed the adaptive management chapter. He told attendees that discussions during Policy Working Group and Performance Benchmark Committee meetings led to the formation of this new chapter, the purpose of which is to assess current progress in meeting water quality goals and implementation with goals discussed in the NLRS. The NLRS is a "living" document that is updated every two years through the biennial reports. When determining how to measure progress, the Performance Benchmark Committee looked to information in the NLRS as a guide – interim and long-term water quality goals and implementation scenario examples. The NLRS sets an interim goal of 15% reduction of nitrate-nitrogen and a 25% reduction of phosphorus by 2025. The NLRS long-term water quality goal is to reduce nitrate-nitrogen and total phosphorus loads by 45% each. Trevor provided an overview of the two NLRS implementation scenarios (NP2 and NP3) and showed Illinois' progress towards reaching the suggested BMP implementation levels.

Trevor also briefed the attendees on the procedure for adding new conservation practices and updating practice performance to the NLRS, future strategy considerations, and future strategy needs. Things to consider would be whether to continue updating nutrient loads on a HUC8 basis every five years, to develop additional implementation scenarios for meeting the interim water quality goals as well as the 45% reduction, and to continue striving to collect the most accurate implementation data from all three sectors. Potential future resource needs include extending the Partners for Conservation Program, which expires in 2021, continued and enhanced support for the Soil and Water Conservation Districts, support for wastewater treatment facility upgrades, support for urban stormwater practice adoption, continue the USGS Super Gage Network, continue and enhance the Illinois EPA Ambient Water Quality Monitoring Network, and continue support for the NLRS work group meetings and reporting structure.

Plenary Closing Remarks – *Director John Sullivan, Illinois Department of Agriculture*
Illinois Department of Agriculture Director John Sullivan provided closing remarks for the morning plenary session. He noted that as he was speaking with the local Soil and Water Conservation Districts over the summer, more than a few told him that they had farmers walk through their door for the first time. The farm community and conservation community were able to come together and introduce producers to some new opportunities. Director Sullivan gave a round of applause for all the NLRS partners for their continued efforts and the progress Illinois has made.

Partner Updates

Illinois Farm Bureau – *Lauren Lurkins*
Lauren Lurkins, Director of Environmental Policy at the Illinois Farm Bureau (IFB), provided the IFB update.

The Illinois Farm Bureau has provided education and information to help farmers since 1916. Farmers join through their county Farm Bureaus and IFB has approximately 80,000 members today – that represents three out of four Illinois farmers. Current IFB NLRS priorities include education and outreach, supporting research, supporting implementation, and demonstrating progress. Since 2015, IFB has invested $1.5 million to help reach Illinois NLRS goals.

Illinois Farm Bureau prioritizes education and outreach – since 2015, they have reached 48,000 people at 306 events. Illinois Farm Bureau also supports scientific researchers from the University of Illinois, University of Illinois Extension, Illinois State University, Southern Illinois University Carbondale, and the Prairie Research Institute. Illinois Farm Bureau supports implementation via grant program, cover crop cost-share, streambank stabilization projects, and collaboration with the League of Women Voters and the Forest Preserves. Illinois Farm Bureau believes demonstrating progress is important for tracking progress, telling farmer stories to a variety of audiences and agencies, and showing diversity of needs and practices across the state. Lauren concluded by emphasizing that IFB appreciates the opportunity to participate and innovate, the benefits of voluntary practice adoption are robust, and documentation of efforts and direct farmer communication are important to make meaningful progress.

Illinois Fertilizer & Chemical Association – *Dan Schaefer*
Dan Schaefer, Director of Nutrient Stewardship at Illinois Fertilizer & Chemical Association (IFCA), provided the update for IFCA.

Dan showed the on-farm nitrogen rate trial locations in Illinois and showed regional MRTN nitrogen rates from the N rate calculator for fall 2019. He explained that nitrogen rates for MRTN depend on what happens in each spring and winter. The MRTN Nitrogen Rate Calculator is available at http://cnrc.agron.iastate.edu/. One of IFCA's partners put out a Nitrogen Rate Factsheet, which helps farmers determine their N rate. IFCA may adapt this to Illinois.

A large portion of land in central Illinois is rather flat – a 0 to 2% slope. Large precipitation events can cause substantial runoff, even from relatively flat fields. Dan showed a photo of runoff on frozen ground, where the rain was unable to infiltrate into the soil, and warned of dissolved phosphorus running off frozen soils. There is a lack of research on the effect of conservation tillage practices, phosphorus rate, and placement method on phosphorus runoff and IFCA would like to help producers move toward cover crops and other BMPs.

Illinois Corn Growers Association – *Laura Gentry*
Laura Gentry, Director of Water Quality Research at the Illinois Corn Growers Association (ICGA), provided the update for ICGA. Illinois Corn Growers Association targeted non-point nitrogen and phosphorus losses by focusing on farmers, partnerships, financials, in-field practices, and cover crops and moving the needle on nutrient loss reduction.

Illinois Corn Growers Association's water quality initiatives include the First Time Cover Crop program, the Cover Crop Coupon program, the anonymous water testing program, and Precision Conservation Management (PCM). The First Time Cover Crop program with Beck's Hybrids has helped 80-100 farmers every year since 2015. ICGA is trying to give farmers the best experience their first time using cover crops, so that they feel comfortable continuing on. The Cover Crop Coupon program is in its third year and offers $150-200 off cover crop seed costs. The water testing program offers anonymous water testing and partners with county SWCD offices.

The PCM program has 330 farmers, 350,000 acres of land, two states (Illinois and Kentucky), and a $5.3 million NRCS RCPP award. This is not possible without partnerships. Illinois has limited resources and together, we bring out own strengths and we have a great collaborative effort. Locally, ICGA has worked closely with SWCDs, the Illinois Sustainable Ag Partnership, the S.T.A.R. Program, and local ag retailers and independent consultants. The state NRCS office has been a great partner as well and ICGA works with

corporate supply chains like PepsiCo, Mars, and Field to Market. At a national level, ICGA works with different conservation groups such as the Nature Conservancy, American Farmland Trust, and the Environmental Defense Fund. And lastly, PCM works with the Zea Mays Foundation, the Walton Family Foundation, and the University of Illinois.

The Illinois Corn Growers Association has scaled up in staff and projects. In just one year, ICGA has added three staff people – Travis Deppe as the PCM Director, Debbie Malloch as the PCM Administrative Manager, and Megan Dwyer as the Nutrient Loss Reduction Manager. ICGA has scaled up several projects, including Otter Lake RCPP, the 5 Year Transition Program, and the Rural Green program.

To facilitate practice change across the Midwest, ICGA puts out publications and papers. NRCS recognized PCM's RCPP as a model of innovation, Senator Dick Durbin recognized ICGA as an innovative commodity group, and they won two major grants.

S.T.A.R. Program – *Emily Bruner*
Dr. Emily Bruner is the Midwest Science Director for American Farmland Trust. She also serves on the S.T.A.R. Steering Committee and chairs the S.T.A.R. Science Advisory Committee. She provided the update for the S.T.A.R. Program.

First, she provided some background on the S.T.A.R. Program. S.T.A.R. is a free tool to assist farm operators and land owners in evaluating their nutrient and soil loss management practices on individual fields. The purpose of S.T.A.R. is to motivate those making cropping decisions to use the "best management practices" that will ultimately meet the goals of the Illinois Nutrient Loss Reduction Strategy.

To use the S.T.A.R. Program, individuals complete a field form for a given crop year, where points are assigned for each practice, and a summary of points convert to a S.T.A.R. rating of 1 to 5 stars. Potential S.T.A.R. benefits include decrease nutrient and soil loss, positive image of agriculture, inspire other farmers and landowners, promotes producers for new farmland leases, assists with local conservation cost-share, future market incentives for sustainably-grown crops, support of water quality defense issues, and increased net income. S.T.A.R. was officially endorsed by the Association of Illinois SWCDs in 2018 and now 45 counties offer S.T.A.R. via the SWCDs and Farm Bureaus. S.T.A.R. training and information has been provided to over 800 attendees.

New in 2019 are revised field forms to better align with the NLRS goals, a third-party program evaluation, an updated business plan, progressive web app development, and an annual outcomes report. At the regional and state level, multiple RCPPs are in development and S.T.A.R. received an official endorsement from the Illinois Department of Agriculture. In the Midwest, there is a Memorandum of Understanding with Iowa Association of Soil Conservation District Commissioners and several Indiana counties participating. And finally, the NACS is interested in making the program available at a national scale.

Illinois Sustainable Agriculture Partnership – *Megan Baskerville*
Megan Baskerville, Upper Sangamon River Watershed Manager for The Nature Conservancy's Illinois chapter, will provide the update for the Illinois Sustainable Agriculture Partnership (ISAP).

First, Megan provided some background on ISAP. Their mission is to create a network to support a systems approach to improve soil health and reduce nutrient loss. ISAP envisions Illinois as a sustainable agriculture system that results in improved soil health, water quality, profitable and resilient agriculture systems, and thriving communities. ISAP is a platform for disseminating relevant research, coordinates

field days and other events, provides expertise through its collaborative partnerships, and provides resources for soil health networks, as well as outreach and education.

Megan showed ISAP's highlight reel for 2017 – 2019. Their Soil Health, Conservation Drainage Trainings reached 95 trainees and resulted in 3 BMPs installed. Their Risk Management Conference in 2018 and 2019 had 160 attendees and won 3 awards. Through their Risk Management Conference, they can really reach farmers with the idea of reducing risk and reducing claims and provide the latest research. The conference is also a great opportunity to recognize growers. And finally, to support education, ISAP held 76 events and 28 with ISAP expertise. It is important to build a cohort of people to share the knowledge. Peer-to-peer networks will be very important to increase farmer practice adoption.

Looking ahead, ISAP will reconvene the science committee and will continue to provide trainings, blog content, and practitioner resources. The Alphabet Soup group will be meeting January 29th, 2020 in Decatur. The partnership also welcomes Jean Brokish, the new coordinator for ISAP!

Illinois Association of Wastewater Agencies – *Rick Manner*
Rick Manner, Executive Director of the Urbana & Champaign Sanitary District, provided the update for the Illinois Association of Wastewater Agencies (IAWA).

Originally, about half of the phosphorus was coming from point sources and three modes of regulation existed: a 1.0 mg/L phosphorus monthly limit upstream of reservoirs, TMDLs primarily where existing impairment was seen, and the 1.0 mg/L phosphorus monthly limit for all expanding plants. Recently, all major NPDES Permits include monitoring, evaluation of limits of 1.0, 0.5, and 0.1 mg/L, and optimization and minimization planning. The IAWA expected that this would generate great progress and it did!

The point source sector reduced 4.3 million pounds of phosphorus. In seven years, Illinois has accomplished the largest reduction in Gulf phosphorus loadings ever seen. While there is still a ways to go, we must recognize the progress we've made.

Illinois Environmental Protection Agency – *Amy Dragovich*
Amy Dragovich, Manager of the Permit Section in the Division of Water Pollution Control, provided an update for the Illinois EPA NPDES Permits and Nutrients, focusing on watershed groups and the agreement between the Illinois Association of Wastewater Agencies (IAWA) and several non-governmental organizations (NGOs).

The agreement between the IAWA and NGOs for major facilities is to address "reasonable potential" of violating narrative water quality standards. It is promoting biological nutrient removal and a proposal has been drafted and NPDES conditions finalized. A Nutrient Assessment Reduction Plan (NARP) is required if a facility is located upstream of a waterbody or stream that has been determined to have a phosphorus related impairment or is at risk of eutrophication due to phosphorus levels in the waterbody. The agreement is not an effluent or water quality standard.

The downstream waterbody or segment is listed by the agency as impaired due to dissolved oxygen and/or offensive condition (algae and/or aquatic plant growth) impairments related to excessive phosphorus levels. Determination of risk of eutrophication is based on available information on that plant, algal or cyanobacterial growth is causing or will cause violation of a water quality standard.

Facilities' Nutrient Assessment Reduction Plans must be developed and submitted by December 31, 2023. Facilities must cooperate and work with other stakeholders in the watershed and their NARPs need to be supported by data and sound scientific rationale. Target levels will be based upon the December 2018 recommendations by the Nutrient Science Advisory Committee as well as watershed-specific target levels. The facilities' NARPs must identify phosphorus input reductions from point and non-point sources, have a schedule for implementation, and include provisions for water quality trading. The 0.5 mg/L total phosphorus 12-month rolling geometric mean must be met by January 1, 2030. Exceptions to that date would be if it is not technologically feasible with biological phosphorus removal, would result in substantial and widespread economic or social impact, can only be met by chemical addition, is not feasible by that date but is feasible within a longer timeframe, or if it is not achievable, but the effluent shall not exceed 0.6 mg/L.

Amy then provided updates on the watershed groups. The Fox River Watershed has its NPDES conditions finalized and permits issued. Their requirements include collecting additional data and amending their model, amending the Fox River Implementation Plan by December 31, 2022, submitting optimization plans, and reaching a 0.5 mg/L total phosphorus 12-month rolling geometric mean effluent limit by January 1, 2030. The Upper Des Plaines River Watershed Workgroup has their NPDES conditions finalized. Their requirements include developing an in-depth analysis of all chemical, physical, and biological data collected; developing a NARP, continuing their water quality monitoring program, submitting an optimization plan, submitting a phosphorus removal feasibility study, reaching a 1.0 mg/L monthly average limit within three years, and reaching a 0.5 mg/L total phosphorus 12-month rolling geometric mean effluent limit by January 1, 2030. The Lower Des Plaines Watershed Group has their NPDES conditions finalized. Their requirements include conducting stream monitoring and developing recommendations for future monitoring, submitting a phosphorus removal feasibility study, submitting an optimization plan, developing a NARP, reaching a 1.0 mg/L monthly average limit within three years, and reaching a 0.5 mg/L total phosphorus 12-month rolling geometric mean effluent limit by January 1, 2030. Hickory Creek Watershed Planning Group joined the Lower Des Plaines Watershed Group in July 2019. Other watersheds include the DuPage River/Salt Creek Workgroup, Lower DuPage River Watershed, and the North Branch Chicago River Watershed Workgroup.

DuPage County – *Mary Beth Falsey*

Mary Beth Falsey, Water Quality Supervisor at DuPage County Stormwater Management, provided the update on nutrient reduction efforts in DuPage County. She introduced the attendees to DuPage County, which is located just west of Chicago and has about 1 million residents. The Stormwater Management program was established in DuPage County in 1989 and flood control facilities have a floodwater capacity of nearly 6 billion gallons.

Nutrient reduction efforts include the MS4 Permit partnership, watershed planning, the Water Quality Improvement Program Grant, and education and outreach. There are a total of 41 MS4 partners in DuPage County, which encompass the East and West Branches of the DuPage River and Salt Creek watersheds and partially the Des Plaines River, Fox River, and DuPage River main stem watersheds.

DuPage County is developing watershed plans for impaired waterways. In 2017, DuPage County completed five watershed plans and in 2018, they worked on the Lower Salt Creek Watershed Plan with the Chicago Metropolitan Agency for Planning. DuPage County just started a watershed plan for the East Branch DuPage River, for which there will be outreach and stakeholder meetings.

The county's watershed planning started with detention basin assessments. DuPage County has over 3,000 stormwater basins within the completed watersheds to date with assistance from engaged stakeholders. There are good quality and poor quality detention basins. Good water quality basins generally have native plants, buffers, varying water levels and zones, lots of plant, soil, water interaction, and stable shorelines. Poor water quality basins generally have severe shoreline erosion, turf grass, waterfowl, little to no plant, soil, and water interaction, and trash.

Potential funding sources for implementation include the Illinois EPA Section 319 grants and DuPage County Water Quality Improvement Program. For the St. Joseph Creek Stabilization, the Village of Downers Grove used state, county, and village funding to implement projects identified in the watershed plan and track estimated pollutant load reductions.

The Water Quality Improvement Program Grant (WQIP), established in 2000, provides assistance to projects that provide a water quality benefit and funds up to 25% of construction costs. Eligible projects include streambank stabilization and rehabilitation, in-stream habitat improvements, detention basin retrofits, riparian or wetland buffer creation or enhancements, green roofs, rain gardens, and permeable pavers. Example projects funded by the WQIP grant include the Elmhurst Police Department rain garden in 2017, the Jay Stream School permeable paver parking lot in 2016, and the Jefferson Junior High Green Initiatives in 2016.

DuPage County engages in public outreach and education, including water quality education and events. They work with county residents via citizen stewardship programs like the Adopt-A-Stream and Storm Drain Medallions programs. Events include the Thanksgiving Cooking Oil Collection, the Pumpkin Smash, DuPage River Sweep, and the Sustainable Design Challenge.

BREAK

Great Lakes to Gulf Virtual Observatory – *Jong Lee, NCSA*

Dr. Jong Lee, Principal Research Scientist at National Center for Supercomputing Applications, provided the update on the Great Lakes to Gulf (GLTG) Virtual Observatory. Development of the NLRS Data Portal was based on the GLTG application and data.

First, he explained that the GLTG Virtual Observatory is a web-based geospatial application that integrates water quality data and analytical tools from multiple sources allowing a user to visualize and understand nutrient pollution and water quality conditions in the Mississippi River watershed. The online interactive application provides users with tools to explore, analyze and compare water quality data from the Mississippi River and its tributaries.

He shared that the GLTG main site includes 1,427 sites, 13 data sources, and data from 13 states. The NLRS-specific site includes 393 sites, 9 data sources, and over 12 million data points. Selected data sources include the U.S. Geological Survey (USGS) Super Gages, U.S. EPA, Upper Mississippi River Restoration Long Term Resource Monitoring Program, NGRREC Great Rivers Ecological Observatory Network, Metropolitan Council of Minneapolis/St. Paul, Fox River Study Group, and Iowa Water Quality Information System at the University of Iowa. Jong reviewed the geospatial contextual layers available on the GLTG portal, including layers related to nutrient analysis for Illinois.

New on the portal are the Geostreaming Data Framework V3, which was developed through combining efforts of four projects, improved frontend and backend technologies, signup and login for users, a

dashboard for Illinois NLRS data, and a storyboard. Jong worked with users and stakeholders to develop relevant stories with easy to digest graphs, charts, and summaries. The Explore page has a new interface design as well, with separate panes for data sources and Geospatial layers.

Jong elaborated on GLTG's collaboration with the Illinois NLRS. He is working on geospatial data support for analyses on nitrogen and phosphorus changes over time with Professor Greg McIsaac and the Illinois EPA. They are working on catchment analysis of monitoring stations, identifying point sources related to certain monitoring stations, identifying unmonitored area in Illinois (with point sources), generating/visualizing the nitrogen and phosphorus loads by HUC8, and those geospatial layers will be GLTG contextual layers.

Jong provided a live demonstration of the Great Lakes to Gulf Virtual Observatory.

Nutrient Research and Education Council Updates – *Julie Armstrong and Shani Golovay, NREC*
Julie Armstrong, Executive Director at the Nutrient Research & Education Council (NREC), started the presentation by providing background on NREC. It was created in 2012 through a state statute to pursue nutrient research and educational programs and ensure adoption and implementation of practices that optimize nutrient use efficiently, ensure soil fertility, and address environmental concerns regarding fertilizer. It is funded by a $0.75/ton assessment on fertilizer sold in Illinois and is a collaboration between agriculture, environmental groups, and state agencies. NREC solicits proposals that focus on improved nutrient efficiency, enhanced crop production, and protect water quality. The council, research committee, and an independent peer review team review applications and projects are ranked on merit and availability of funds. Projects will now start in October instead of January to align with the crop year and there are no new projects in 2020. A new RFP will be available in late spring 2020 for the 2021 crop year.

Since 2013, approximately $19.8 million has been invested in research projects. There have been four NREC publications as well as annual reports, investment insights, field notes, and videos. More than a dozen papers have been published in professional journals written by NREC-funded researchers and there are many opportunities for collaboration on research and outreach projects. NREC's funding priorities are to maximize efficiency, minimize losses, and mitigate negative impacts.

Dr. Shani Golovay, Research Manager at NREC, provided an update on the NREC research projects. Starting with cover crop highlights, she showed us Shalamar Armstrong's research, which found that cover crops resulted in a 72% reduction in nitrate-nitrogen load within the tile drainage system relative to the Regional Control system where no cover crops were planted. Next, she showed Dr. Lowell Gentry's research, which found that timing of fertilizer N application impacts nitrate losses. Catherine O'Reilly found that this spring, the cover cropped watershed lost 30% less N than her reference watershed. Nick Seiter found that fields in Effingham County suffered above average slug damage, but both the cover and no-cover fields were affected. And Jonathan Coppess' project is an innovative effort at translating research into web-based decision support tools that will assist farmers in the management of cover crops in their fields.

Next, Dr. Golovay covered the phosphorus research projects. Dr. Andrew Margenot found that struvite can be used to meet vegetative growth phosphorus needs of corn. Initial results from Dr. Reid Christianson show increased dissolved reactive phosphorus loss in runoff for both cover crop types (cereal rye and radish) when subjected to heavy freeze. Wei Zheng is working to create designer biochars to effectively adsorb phosphorus, recycle phosphorus-captured biochars as a slow-release fertilizer, and construct

refillable biochar-sorption channels to capture phosphorus from subsurface tile drainage. Dr. Karl Williard and Dr. Jon Schoonover are studying water quality and the agronomic impacts of gypsum. To date, gypsum application has resulted in lower total phosphorus and dissolved reactive phosphate loads in surface runoff compared to control.

Research concerning edge-of-field practices was reviewed next. Dr. Laura Christianson is studying in-ditch bioreactors for Illinois, as well as working with Dr. Richard Cooke to examine drainage water management and saturated buffers. Dr. Jon Schoonover and Dr. Karl Williard are modelling and designing saturated buffers.

There are several NREC-funded projects on 4R nutrient management as well. Dr. Angela Kent is studying management of dissimilatory nitrate reduction to ammonium. Amir Sadeghpour is studying precision nitrogen management. Dr. Below is studying nitrogen placement and application timing. Emergence of each plot was assessed, but pre-plant fertilizer treatments did not affect the rate or percentage of plants emerged. The Illinois Fertilizer & Chemical Association is studying nitrogen rate research through an NREC project partnership.

Dr. Shani Golovay and Julie Armstrong directed attendees to the NREC website for more information and promoted the research showcase for more details on research projects. NREC is hosting an Investment Insight live event in Champaign on February 13, 2020.

Wednesday, December 4, 2019

Policy Working Group

Welcome – *Eliana Brown, University of Illinois Extension*
Eliana Brown welcomed the group to the last Policy Working Group meeting of 2019.

Watershed Outreach Associates Update – *Haley Haverback-Gruber & Jennifer Woodyard, University of Illinois Extension*
Haley Haverback-Gruber and Jennifer Woodyard provided an update on their work as the state's two Illinois Extension Watershed Outreach Associates. Haley is based in Galva, working on nitrogen-priority watersheds and Jennifer is based in Effingham, working on phosphorus-priority watersheds.

First, they provided an update on their Illinois NLRS Podcast. In 2019, they taped and released 12 episodes with a range of guests and topics. They collaborate with Illinois Extension's Todd Gleason on the podcast.

Next, they covered field days and educational programs. The Cover Crops and Soil Health workshop was presented by the Midwest Cover Crops Council and hosted by Illinois Extension. The Advanced Soil Health Training is a tri-state advanced soil health training organized and funded by the University of Illinois Extension, The Nature Conservancy, the Zea Mays Foundation, and the Illinois Sustainable Agriculture Partnership. It involves a cohort of 22 agriculture professionals, farmers, and conservationists going through six two-day trainings over a period of 15 months. The next round of training is spring of 2020 in northwest Illinois.

The Watershed Outreach Associates work with and assist several watershed groups. The Lower Rock Watershed Group has quarterly meetings for discussion among SWCD staff on watershed planning and

priority areas. Districts share education and outreach programs and converse about opportunities within the watershed. The Mill Creek Watershed is engaged in watershed planning as well. The Mississippi North Central Watershed applied for a 2019 Illinois Farm Bureau Nutrient Stewardship Grant to hold farmer meetings across the watershed. They'd like to talk about resource concerns within the watershed, have watershed consultants share opportunities for watershed plan creation, gauge stakeholder interest, and identify an area for plan development. The Embarras River Watershed Plan saw stakeholders come together to raise match support to apply for an Illinois EPA Section 319 grant, which was submitted in July 2019. The grant would fund nine meetings for farmers throughout the watershed in January 2020.

They are publishing factsheets as well. Two factsheets have already been released, *Post Corn, Going to Soybean: Use Cereal Rye* and *Post Soybean, Going to Corn: Use Oats/Radish*. Coming soon is *Solutions to Minimize Phosphorus Loss through Subsurface Tile Drains*.

Questions:

Albert Ettinger: Are you doing anything with NARP and NPDES permits?

Jennifer Woodyard: No, I haven't thought about the NARP stuff yet.

Albert Ettinger: Hopefully all sorts of groups will be involved. These requirements exist all over the state and it would be great if we could work together on this and incorporate multiple aspects.

IAWA has a group that is working together to do this. These NARP things will only be successful if wastewater and ag are working together.

Jennifer Woodyard: That would be great, we would love to talk to you about that.

Working Group Updates

Nutrient Monitoring Council – *Trevor Sample, Illinois EPA*
Trevor gave an update on the Nutrient Monitoring Council meetings. At the March 19, 2019 meeting, the NMC heard from a number of speakers. Dr. Greg McIsaac presented on Nitrate-N and Phosphorus Load and Yield Estimates in Illinois Rivers, Jong Lee provided updates to Great Lakes to Gulf Virtual Observatory, Momcilo Markus gave his assessment of nonpoint source NLRS goals in respect to climate change, Kelly Warner and Paul Terrio provided USGS updates, Trevor Sample provided an update on the NLRS Biennial Report, Gregg Good provided a Nutrient Science Advisory Committee report update, and as always, members provided their own updates.

At the September 9, 2019 meeting, Gregg Good presented on NMC membership and the NSAC report, Kelly Warner provided an update to the Havana Lowlands Groundwater Monitoring project, Jong Lee updated members on the GLTG Virtual Observatory, and Dr. Greg McIsaac provided a critique of the March 2018 Science Article *N Reduction Lag Times to Gulf of Mexico*, presented on possible causes of nitrate load increase in the Rock River from 1980-1996 to 2013-2017, and provided a preliminary nitrate budget for the Illinois River. Paul Terrio presented on estimating statewide nutrient loads from USGS Super Gages and brought up non-monitored areas and the need to subtract contributions from Wisconsin and Indiana. Kelly Warner and Gregg Good presented a Super Gages update and led a discussion on the need to continue funding the network.

The NMC also met on October 22, 2019 to discuss a method for calculating statewide annual nutrient loads. The Illinois State Water Survey will work with Dr. McIsaac to develop a proposal for including non-monitored areas while subtracting Wisconsin and Indiana nutrient contributions. These loads will then be incorporated into the USGS Super Gages Annual Report to Illinois EPA.

Questions:

Albert Ettinger: Will you look into the phosphorus numbers?

Trevor Sample: We will look into it.

Albert Ettinger: I really think we need to solve this mystery.

Cindy Skrukrud: If we're looking into the Super Gages, we will be able to look into yearly numbers.

Albert Ettinger: Maybe reporting concentrations would be better than reporting loads.

Rick Manner: Have we resolved how to fund the USGS Super Gages?

Trevor Sample: Not yet, that's something that we will address in Illinois NLRS future resource needs.

Agriculture Water Quality Partnership Forum – *Warren Goetsch, Illinois Department of Agriculture*
Warren Goetsch reviewed Agriculture Water Quality Partnership Forum (AWQPF) membership and objectives. The AWQPF is tasked with steering and coordinating outreach and educational efforts to help farmers address nutrient loss and select BMPs, identifying needed educational initiatives or training for farmers and technical advisors, strengthening connections between industry initiatives, certified crop advisor continuing education requirements, state initiatives, and other technical services, tracking BMPs, coordinating cost-share and targeting, and developing other tools as needed.

The AWQPF met April 4 in 2017, April 30 and November 13 in 2018, and April 30 in 2019. During those meetings, the AWQPF recommended to include tillage data in future biennial reports, explored various sources for cover crop data, recommended the phrase "*Go Date*" for fall NH3 application, expressed interest in future work with Extension watershed coordinators, recognized Champaign County SWCD's S.T.A.R. Program as an appropriate tool for operator and landowner evaluations, and continues to track progress regarding strategy implementation by the agriculture sector.

Warren also reviewed the AWQPF Technical Subgroup membership and objectives. The AWQPF Technical Subgroup is charged with determining appropriate methods to share and aggregate BMP implementation data across agencies for progress tracking and determining what BMP implementation parameters to be tracked and how data is aggregated for reporting. The subgroup met on July 17, 2018. During the meeting, the subgroup agreed to continue submitting information for land measures, resources, and outreach on programs and efforts for biennial reporting purposes. The subgroup also agreed to follow the Hypoxia Task Force Nonpoint Source Measures 2018 Workgroup recommendations for BMP implementation tracking, which include tracking BMP location, conservation practice type, applied amount or practice units, and practice implementation date.

Urban Stormwater Working Group – *Eliana Brown, University of Illinois Extension*
Eliana Brown reviewed the Urban Stormwater Working Group (USWG) membership and objectives. The USWG is charged with exploring funding, identifying legislative initiatives and developing plans, coordinating outreach, orchestrating statewide efforts related to green infrastructure expansion and

retrofitting, MS4 program training, and urban stream, lake and stormwater monitoring. The USWG met on November 12, 2019.

The USWG Education Subgroup initiatives include a stormwater resource repository and the Stormwater 101 presentation template, which are housed on the Illinois Association for Floodplain and Stormwater Management (IAFSM) website. The Education Subgroup met July 23, 2019.

The Tracking Subgroup is sharing DuPage County's method for tracking BMPs with other local governments and will continue developing a green infrastructure inventory. Eliana presented the NLRS at the IAFSM conference in March 2019 and attended the Calumet Stormwater Collaborative meeting as a stakeholder to discuss tracking.

USWG Partner initiatives include the National Green Infrastructure Certification Program training offered by Parkland College, Illinois Extension's Sustainable Communities Initiative, the Lawn to Lake Program, the Stormwater@Home video series, the Red Oak Rain Garden, and the Illinois native plant brochures.

USWG initiatives for 2020 include encouraging more participation in the partner spreadsheet and utilizing the Illinois Extension MS4 analysis results. Future topics include the Calumet Stormwater Collaborative BMP inventory and the Preserves at Oak Meadows and Harborside golf courses. Potential meeting locations for 2020 include the Chicago Metropolitan Agency for Planning and the Crowne Plaza Springfield as part of the IWEA Watershed track. The Illinois Department of Natural Resources is compiling a venue list.

Performance Benchmark Committee – *Cindy Skrukrud, Sierra Club*
Dr. Cindy Skrukrud of the Sierra Club presented on behalf of the Performance Benchmark Committee. She provided background on the Performance Benchmark Committee, which was established in 2016, as the Illinois NLRS identified no specific scenario to reach goals. The Committee is charged with working with sector groups to identify steps to meet the 2025 interim milestones, the 45% reduction targets, and in-state waterway cleanup goals. Discussions in 2019 included implementation targets, trajectories, flexibility, learning as we go, and identifying resource needs.

Chapter 8 of the biennial report focuses on adaptive management. Cindy opened up the floor to Policy Working Group members, asking what they would like to see in the adaptive management chapter for the next biennial report in 2021.

Discussion:

Albert Cox: On that table 8.1 in the report, which highlights the two scenarios that show how we can achieve the 45% reduction goal, I think we need to show the new information we are getting on the practices and cost of implementation. We should update the scenarios to reflect our current knowledge. Now we know better what it will take for us to get there. If we update the information in these scenarios, we might realize that it could be less or more difficult to reach the 45% reduction goal.

Dick Lyons: The numbers we were given were from the original science assessment. They are floating numbers. We heard about the soil health concept training. Many need to realize that as we move towards thinking about soil health, the actual practices we will be using (tillage, cover crops), what's occurring through the PCM project, we've talked about implementing PCM. It's measuring what we're doing. For a group that is limited in their ag backgrounds, it's important to remember that as we implement these

practices, the soil health dramatically impact what happens with our nutrient loss. I think this is something all of us need to understand. Costs change and the water we get changes. All of us who talk about cover crops, right now we have a shortage of rye for planting. We only have a 100,000 acres of rye Will we have enough rye to have 18M acres of cover crops? We don't have enough to have 1 million acres in Illinois.

Communications Subgroup – *Trevor Sample, Illinois EPA*
Trevor Sample of the Illinois EPA provided an update on the Communications Subgroup. In 2018, the subgroup developed an NLRS "Common Message" presentation, which is available on the Illinois NLRS webpage and provides basic information on the NLRS with highlights from the 2017 biennial report. The group also mailed hardcopies of the NLRS report and 2017 Biennial Report with a letter to Illinois legislators.

In 2020, the Communications Subgroup will update the NLRS "Common Message" presentation with information and highlights from the 2019 Biennial Report. The Steering Committee will draft a presentation and the Communications Subgroup will review and provide comments. A PDF version will be available on the NLRS page and PowerPoint versions may also be available. The subgroup will once again mail a letter to Illinois legislators with hardcopies of the NLRS report and 2019 Biennial Report.

NLRS Website Updates – *Trevor Sample, Illinois EPA*
Trevor Sample gave an overview of the updates to the Illinois EPA NLRS webpage and provided a live demonstration showcasing the website changes.

Questions:

Alec Davis: Where can we access the NSAC report?

Trevor Sample: We are still deciding on the next course of action with regards to the recommendations provided in the NSAC report.

Biennial Report Review – *Eliana Brown, University of Illinois Extension*
Eliana Brown introduced the topic and noted that the 2019 Biennial Report is approximately twice as long as the 2017 report. The 2019 report reorganizes the working groups into their own chapter and includes a chapter on how to navigate the report. The Agriculture Chapter (Chapter 4) is the longest and includes Transect Survey information and additional NRCS project information. The report also has a new chapter: Adaptive Management (Chapter 8).

Eliana then opened the floor to discussion on the biennial report.

Kay Anderson: The addition of the Adaptive Management chapter was a big plus and it's location in the report is very strong. It was a good decision to add that. Adaptive Management is the guts of how we're making progress. Discussing it and having it be a high point in the report was very good.

Audience Member: One of the presenters said the report is being sent to Illinois legislators. Will it go anywhere else?

Eliana Brown: It is on the Illinois EPA's website. It is located there as an online copy and as far as hard copies, I will let Trevor cover that.

Trevor Sample: Hard copies are available upon request. If you'd like one, let us know. We go around to conferences and will have them available.

Lauren Lurkins: That's a ton of work that a lot of people get credit for pulling together all of the materials and information. It takes time, money, and people to do it. But we would have no story to tell if someone didn't do that work. Thank you and I hope we can continue to put that work together.

Eliana Brown: Trevor did a tremendous amount of work. Warren contributed some eloquent phrases and Christine Davis provided support.

Future Initiatives

UMR Water Quality Improvement Act – *Lauren Salvato, UMRBA*

Lauren Salvato, Policy and Programs Director at the Upper Mississippi River Basin Association (UMRBA), provided an update on the UMR Water Quality Improvement Act. She introduced UMRBA, which is a regional interstate organization formed in 1981 by the governors of Minnesota, Wisconsin, Illinois, Iowa, and Missouri. It facilitates dialogue and cooperative action regarding water and related land resource issues on behalf of the five basin states. Issue areas UMRBA focuses on include ecosystem health, commercial navigation, clean water, hazardous spills, flooding, and aquatic nuisance species. The challenges with nutrient reduction include differences in state monitoring programs, data system incompatibilities, spatial gaps, estimating costs of conversion practices, and lack of major investment in reduction.

The UMR Water Quality Improvement Act is based on the idea that federal and state investment must be substantially increased and strategically targeted in order to reverse the trend of water quality degradation. Its solutions are to increase federal investment to help states meet their nutrient reduction goals and to enhance overall coordination and cooperation of resources through a Mississippi River Program Office administered by NRCS and USEPA. The Act would implement states' respective nutrient reduction strategies and leverage existing modeling, monitoring, and research in the UMR watershed to further reduce sediment and nutrient runoff and improve monitoring. The Act's communication component is equally important to improve knowledge of water quality status and trends on the UMR among decision-makers, water users, and the general public

Ongoing efforts include outreach to stakeholder groups, developing funding requests for the Act, and review of legislative text by the UMRBA Board and UMRBA Water Quality Executive Committee. You can be involved by supporting the legislation, advocating for its enactment, and commenting on legislative text when it is ready for review and feedback.

Questions:

Warren Goetsch: What would be your proposed timeline for this process?

Lauren Salvato: Right now, we are looking at 2020. There will be opportunities with the ag natural resource communities. It's a jurisdictional issue if we want it to be jointly led. We are working on it right now and we have support for this act in both the Senate and the House.

Lauren Lurkins: Can you speak a little to the type of folks you have coming from those states? Who is in your executive committee?

Lauren Salvato: Our board consists of people from each state and have representation from all types.

Alec Davis: Would it be facilitating funding to direct to state programs or would UMRBA be overseeing the activities? How does it interact with existing infrastructure?

Lauren Salvato: We are trying to figure that out and determine to what extent we want to be involved. Ultimately, we want the states to have more authority on where the dollars are spent in terms of ag and urban conservation practices. UMRBA would serve as a unifying voice and we are still working through those questions.

Cindy Skrukrud: What's the timeline for developing the legislative text? Who from IL is providing input so far?

Lauren Salvato: It is drafted now and being reviewed by our board. Pending holiday interference, we could get that this month. Gregg Good is on our Water Quality Executive Committee and they would have done due diligence. We would take your input if you'd like to give it. Hopefully that would be in January or February 2020.

US EPA Nutrient Strategy Grant – *Trevor Sample, Illinois EPA*
Trevor Sample updated the Policy Working Group on the US EPA nutrient strategy grant.

Questions:

Cindy: When do you expect to hear when you get the money?

Trevor: It's just a matter of when it is transferred. It is $100,000 each year.

Christine: The second year is still up in the air.

Trevor: Yes, the first in FY19 funding is guaranteed.

Rick Manner: Is the first $100,000 spent among you already?

Trevor: Yes, we think so.

Lauren: What do you think Iowa's secret is to getting millions of dollars?

Trevor: They have groups that put in for it. Some may be state agencies or associations. We have to have the staff to be able to take those projects on.

Did Rick Manner say this? Iowa has flooding. They had absolutely catastrophic flooding, so the government responded with funding.

Iowa also dedicates part of their fishing licenses to this.

Lauren Salvato: We just started leveeing a water exercise tax, which has awarded some grants.

Future Meetings – *Eliana Brown, University of Illinois Extension*
Eliana Brown asked Policy Working Group members to send meeting conflicts and speaker ideas to Kate Gardiner at kgardin2@illinois.edu by Friday, December 13th. Next year's workshop will be in Urbana in early November. Partner spreadsheets are due January 31, 2020. The Steering Committee is exploring an online version, which would be easier for some people and aggregates the information for us.

Future Resource Needs – *Trevor Sample, Illinois EPA*
Trevor Sample outlined the future resource needs of the Illinois NLRS effort. The agreement between the Illinois EPA and USGS for the USGS Super Gage network expires in March 2021, with monitoring currently scheduled to end September 2020. Illinois EPA is looking for assistance to continue funding the gages for another five years. The current agreement between Illinois EPA and University of Illinois Extension expires March 2021. Illinois EPA is looking for assistance to continue the meeting and reporting structure into the future. Finally, the current agreement between Illinois EPA and University of Illinois Extension for the Watershed Outreach Associates expires June 2023.

Trevor opened the floor to Policy Working Group members to add in additional resource needs. Albert Ettinger mentioned funding further studies to understand why phosphorus is increasing while point source phosphorus loads have decreased.

Lauren Lurkins: Could the Illinois Department of Agriculture or the Illinois EPA share more about the funding sources? What is the source of funding for that now and will it exist in the future?

Trevor Sample: Illinois EPA Bureau of Water Chief Sanjay Sofat is working on getting that together, thank you for asking.

Christine Davis: The NLRS will play a larger role in the US EPA Non-Point Source program and Illinois EPA is updating our programs. Illinois EPA tells US EPA what they plan to do with the allocated funds, document the usage, etc. Illinois EPA has some tools in place that lock in the agency to do that as long as 319 funds continue to be available. 319 can be variable in funding. With the new biennial report, we have the opportunity to go through and look at specific tasks to implement, including the ones Trevor mentioned and additional tasks outlined in the strategy. The two state agencies are not the solution to helping fully implement the strategy and it is difficult to give long-term commitments when they are looking at grants two years at a time.

Albert Ettinger: One thing we should consider is that this is information we should capture in the biennial report. In future reports, we should have a section that discusses funding issues and so on.

Cindy Skrukrud: Thanks, I appreciate this discussion. Thank you to Chris, we'd like to continue that discussion with Sanjay so that we're all on the same page. Knowing that we have some big ticket items to fund, like the USGS Super Gages, we have to be ready to go to the legislature to ask for more funds. The Partners for Conservation Program is set to expire in 2021, so we need to extend that program as well. I think that's something that we need to be talking about in January.

Rick Manner: I'd start with agreeing with Cindy on the need for funding on a statewide level. If you're talking about Upper Mississippi River Basin Water Quality Improvement Act, all the states should have money for monitoring.

Albert Ettinger: Different states monitor in different ways. States apply different standards as well. It's an interesting situation.

Lauren Salvato: We have a UMR shared monitoring approach to communicate a shared message. It's based around wildlife and fish consumption. They are piloting the program with Illinois, Iowa, and Missouri. The states monitor inconsistently on the Mississippi River, so we are trying to fill those data gaps as well.

Dave Collard: From the Sanitary District of Decatur, I thought it might be well to consider the money we are spending on monitoring be done consciously. It seems like we might be doing some double dipping and we could be more economical and efficient.

Wrap Up – *Eliana Brown, University of Illinois Extension*
Eliana Brown wrapped up the conference by thanking the conference speakers and attendees. Warren Goetsch announced his retirement from the Illinois Department of Agriculture. On behalf of Trevor, Chris, Kate, herself, and the entire Policy Working Group, Eliana offered Warren a framed Illinois NLRS logo, signed by the Steering Committee and Policy Working Group members, as a small token of their appreciation for being such a steady force guiding the Strategy.