

# Performance Benchmark Committee

October 8, 2020 2:00pm

*In attendance:* Trevor Sample, Illinois EPA; Eliana Brown, Illinois Extension; Kate Gardiner, Illinois Extension; Lauren Lurkins, Illinois Farm Bureau; Raelynn Parmely, Illinois Farm Bureau; Emily Bruner, American Farmland Trust & S.T.A.R.; Mila Marshall, Sierra Club IL; Albert Cox, MWRD Chicago; Cindy Skrukud, Sierra Club IL; Alec Davis, IERG; Nick Longbucco, AISWCD (new STAR Coordinator); Marty McManus, Illinois Department of Agriculture; and Elliot Lagacy, Illinois Department of Agriculture

## Summary

### Method for Calculating Point Source Loads

Trevor shared the methods for calculating point source loads for the following:

- *2018 Point Source Nutrient Load Methodology—Major Municipals*
- *2018 Point Source Nutrient Load Methodology—NonPOTWs*
- *2018 Point Source Nutrient Loads—Minor Municipals*
- *2019 Point Source Nutrient Load Methodology—Major Municipals*
- *2019 Point Source Nutrient Load Methodology—NonPOTWs*
- *2019 Point Source Nutrient Loads—Minor Municipals*
- *2020 Point Source Loads*

### Update on Additional Implementation Scenarios Development

IEPA contracted with Dr. Reid Christianson to develop additional Implementation Scenarios both to meet the interim goals and to meet the 45% reduction goal. Reid has been working on this since June and is about to wrap up. The scenarios document will be released soon. Reid will give an overview of the scenarios at an Ag Water Quality Partnership Forum meeting (online) later this month.

Comments and suggestions are encouraged! He will present the final scenarios at the November 6<sup>th</sup> NLRs Workshop.

### Review of 2019 Adaptive Management Chapter

Trevor provided an overview of 2019 Adaptive Management Chapter. For the 2021 report, additional graphs will be included for benchmarking agriculture implementation progress. Point source loads for 2019 and 2020 will also be included. Unless there are new conservation practices or updated practice performance, there is no need to include the section from the University of Illinois Science Team. He also covered how to address potential resource needs in the 2021 Report and opened the discussion to other thoughts or additions.

### Additional Topics of Discussion from Members

#### *Partners for Conservation – Cindy Skrukud*

SB3462 works with IDNR, IEPA, and IDOA to update the Partners for Conservation (PFC) fund and continue to fund the activities that the PFC has traditionally covered, adding Illinois NLRs implementation as a purpose for the fund. The PFC sunsets in FY21, so the bill extends it to FY26 and recommends increasing funding over those years with the idea to ramp up strategy implementation.

The Sierra Club and other working group members worked on this bill for the spring session but couldn't move it due to COVID. Please reach out to Cindy if your organization would be interested in signing onto their support letter, which they will share with the session in mid-November.

### **Next Steps**

The Illinois NLRs Partnership Workshop is November 6, 2020. You can register at [go.illinois.edu/nlrs](http://go.illinois.edu/nlrs).

The Resources and Outreach spreadsheets are being updated and will be shared soon.

## **Meeting Minutes**

### **Method for Calculating Point Source Loads**

#### *2018 Point Source Nutrient Load Methodology—Major Municipals*

Trevor Sample downloaded annual loads for Total Phosphorus and Total Nitrogen using the USEPA ECHO "Water Pollution Search" tool. The loads calculated by the tool were used for facilities that have "001" designated as their main outfall. For those facilities that had outfalls other than "001", the DMR data was used to calculate monthly and annual loads. For the few facilities that do not have monitoring requirements, the Hypoxia Task Force Nutrient Modeling tool was used. IAWA provided annual loads for MWRDGC and other facilities. Additional facilities that do not have monitoring requirements submitted data to IEPA.

#### *2018 Point Source Nutrient Load Methodology—NonPOTWs*

Annual loads for Total Phosphorus and Total Nitrogen were downloaded using the USEPA ECHO "Water Pollution Search" tool. Facilities were separated by Major and Minors, although we combined both for reporting purposes.

#### *2018 Point Source Nutrient Loads—Minor Municipals*

The loads estimated by the original Science Assessment were used.

#### *2019 Point Source Nutrient Load Methodology—Major Municipals*

Since more facilities have been given a "B01" designations, it was determined that we would use raw DMR data to calculate monthly loads for all Major Municipal facilities. For the few facilities that do not have monitoring requirements, the Hypoxia Task Force Nutrient Modeling tool was used. IAWA provided annual loads for MWRDGC and other facilities. Additional facilities that do not have monitoring requirements submitted data to IEPA. For months with missing data for MGD or concentration, the annual average value for that facility was used.

Formula used to calculate monthly loads: MGD (monthly average) \*nutrient concentration (monthly average or daily result) (Mg/L) \*8.34\*30.417. Monthly loads were summed to determine each facility's annual load. Much time was spent determining correct outfalls to use and completing QA/QC of the data for flow and concentration values.

#### *2019 Point Source Nutrient Load Methodology—NonPOTWs*

Annual loads for Total Phosphorus and Total Nitrogen were downloaded using the USEPA ECHO "Water Pollution Search" tool. Facilities are not being separated by Major and Minors

### *2019 Point Source Nutrient Loads—Minor Municipals*

The loads estimated by the original Science Assessment will be used. 2019 Point Source Loads are still being worked on. Once completed, we can have another full Performance Benchmark Committee meeting, or a meeting just with the point source members.

### *2020 Point Source Loads*

The Hypoxia Task Force Point Source Working Group will be developing a 2021 Point Source Report using 2020 data. Focus on Major Municipals only. Illinois EPA intends to work with USEPA to calculate point source nutrient loads for all facilities using one of the nutrient loading tools or will use the 2019 methodology.

### *Discussion:*

Albert Cox: You get data from the various US EPA tools and from IAWA. Could you comment on the difference that you find in those estimates and how do you determine which is the most appropriate tool?

Trevor Sample: I haven't compared those yet. There are differences. If you take the same dataset. For those not familiar with point source data, flow and concentrations can vary month to month. In wetter years, depending on how systems are set up, you can have more flow. So, we use facilities' average monthly flow. Facilities have different methods for monitoring.

Albert Cox: For those minor facilities and those that do not have data, I think that it's important in the report to highlight what the percentage of total load those represent. So, if it is very small, then we can understand that those facilities contribute to less of the total impact.

Trevor Sample: If you'd like, I can send you that information so you can reach out to them.

Albert Cox: If the loads are very small, it may not actually be worth it to spend a lot of time to get the accurate number. It's just a matter of indicating that these may not be accurate, but they do represent a small fraction of the total load.

## **Additional Implementation Scenarios Development**

IEPA Contracted with Dr. Reid Christianson to develop additional Implementation Scenarios both to meet the interim goals and to meet the 45% reduction goal. Reid has been working on this since June and is about to wrap up. The scenarios document will be released soon. Reid will give an overview of the scenarios at an Ag Water Quality Partnership Forum meeting (online) later this month.

Comments and suggestions are encouraged! He will present the final scenarios at the November 6 NLRS Workshop

## **Adaptive Management Chapter**

### *Overview of 2019 Adaptive Management Chapter*

Trevor showed Figure 8.1 on Water Quality Goals from the 2019 Adaptive Management Chapter. This

will be updated to include nutrient loads through 2019 and possibly 2020. A more thorough discussion on water quality will appear in the Science Assessment update (Chapter 3).

#### *Agriculture Implementation Progress*

For the 2021 Report, we will include additional graphs that will include the added scenarios that Reid has developed. This will provide for measuring against different benchmarks for implementation.

#### *Point Source Implementation Progress*

For the 2021 Report, we will include the 2019 and 2020 loads. In the Point Source chapter, we went into detail on methods of calculating loads, Feasibility and Optimization studies, point source groups, NARPs, etc.

#### *Adopting New Conservation Practices and Updating Practice Performance*

This section discussed the process that was developed by the U of I Science Team for adopting new conservation practices and updating practice performance. The process states that new practices or performance updates are to be submitted by December 31 of even-years. If practices or performance updates are submitted and approved, they will be discussed in the Science Assessment update Chapter 3. Do we want to delete this section from the 2021 Report?

#### *Potential Future Resource Needs*

Soil and Water Conservation Districts, Wastewater Treatment Facility Upgrades, Stormwater Practice Adoption, Water Quality Monitoring, USGS, Illinois EPA, Illinois NLRs Meetings and Reporting. How do we want to address these issues in the 2021 Report? Other thoughts or additions to the Adaptive Management Chapter?

#### *Discussion:*

Cindy Skrukud: I like the Figure 8.1 graph and the point sources implementation progress graph. Can we include a graph for N too as point sources had already reduced N by 10% as of the 2019 report.

Lauren Lurkins: That makes sense to me.

Emily Bruner: Makes sense to me as well.

Albert Cox: I think it's a good idea to remove the section on Adopting New Conservation Practices and Updating Practice Performance because the Science Assessment should be obligated on some regular business. And it should include any additional information on practices that are already in the report – new information on cost effectiveness or efficiency because that information will also be used to adjust those scenarios.

Trevor Sample: Yes, that's part of the process. If they submit a practice, they must share the cost. If new practices or efficiencies are approved, they will be discussed in Chapter 3.

Cindy Skrukud: Maybe a sentence or two in the Adaptive Management chapter referring to this.

Trevor Sample: If we do end up approving some practices, we can refresh on this too.

Cindy Skrukud: On the point source graph, I really liked it. But I find that when I use it, I have been including in the N reduction that point sources have achieved. I would love to see that we're tracking

their N reductions too, I don't know if that is another graph. Just a way to make note of the N reductions achieved by point sources.

Trevor Sample: It is discussed in the Point Source chapter, just not in this graph in the Adaptive Management chapter.

Albert Cox: On this graph, one thing to consider is that including, instead of 2018, to do a 5-year average similar to the approach used for the total for Figure 8.1. We could document the additional resource needs updates here. For example, if we got funding for the wastewater treatment facilities updates, include that and note if it is still a significant need.

Trevor Sample: For stormwater, we have IGIG, so maybe we could update that. For USGS, we could say that IEPA is funding one more year but are still looking for additional funding. If everyone is in agreement, we could do that.

Lauren Lurkins: I think this is helpful and I'm not sure where it should fit. The thing that's helpful is making sure that we prioritize things and come forward with legitimate numbers to document what it would cost. For an official report like this, I think that's important to keep it to a short list and include the details on cost.

Cindy Skrukud: Where is Ag BMP cost-share? Maybe it's covered under SWCDs? We had PFC in the 2019 report, I just wonder if that needs to be spelled out more directly.

Trevor Sample: There are so many of them. In the ag chapter, we go through and talk about each of those. As for how much funding is needed for each practice, if someone wants to try to estimate the amount of funding needed, that would be great. I just think it could be difficult.

Emily Bruner: Is some of that covered in the scenario development? Could we tease out specifics from that analysis?

Trevor Sample: We could, we'll see if we could tease that out. It would differ for each scenario potentially, but that's something we could look at.

Nick Longbucco: Hi everyone, I'm here on Steve Stierwalt's behalf. On this section, the scenarios show gaps and from there, could you get an estimate on investment gaps too? I came from Iowa and I think they did that. Not sure how much you guys are looking at other state nutrient strategies, but that could be a starting point for estimating cost. They all have their own estimates for practice costs.

Trevor Sample: That was included in what Reid is doing. The original strategy covers what they estimate those costs to be.

Nick Longbucco: Thanks, I just started yesterday so I haven't delved too deep into the Illinois NLRS.

Trevor Sample: That's okay, thank you and welcome. Any insights you have from Iowa we would appreciate. I'm part of the HTF so I'm aware of the other strategies. We will actually have a panel of guest speakers from other states at the November 6 conference.

Albert Cox: Thanks, Nick! This was the next question that I had. We have now produced a nice informative report. One thing that we should have in place is looking to see what other things – how are our neighbors reporting – what they are doing to make the report better. I think that we should always

be looking towards others to see what ideas they are incorporating that could make our report more effective.

Trevor Sample: I absolutely agree with that. I spent some time this year looking at other states. By now, all 12 HTF member states have developed strategies and some are getting into reporting – Iowa’s yearly reports and Minnesota just released their five-year update. Everyone reports a little differently, so I try to stay updated on what everyone is doing to get ideas for Illinois.

### **Partners for Conservation – *Cindy Skrukud, Sierra Club Illinois***

SB3462 works with IDNR, IEPA, and IDOA to update the Partners for Conservation (PFC) fund and continue to fund the activities that the PFC has traditionally covered, adding Illinois NLRs implementation as a purpose for the fund. The PFC sunsets in FY21, so the bill extends it to FY26 and recommends increasing funding over those years with the idea to ramp up strategy implementation.

The Sierra Club and other working group members worked on this bill for the spring session but couldn’t move it due to COVID. I shared two links in the chat – language and factsheet. If it turns out we won’t work on the bill, we will reintroduce it in the spring because it will be the start of a new session. We have been working on an organizational sign-on letter to share with the session in between the election and veto session in mid-November. It would set up a framework for future decisions to make for funding strategy implementation. We are working on finalizing that letter with the plan to reach out to organizations like the ones on the call to see if you’d be interested in signing on. I’m happy to answer any questions and if you are interested in signing on, I’ll put my name and email in the chat. Does anybody have any questions?

Legislation Language:

<https://www.ilga.gov/legislation/fulltext.asp?DocName=10100SB3462sam001&GA=101&SessionId=108&DocTypeld=SB&LegID=125214&DocNum=3462&GAID=15&SpecSess=&Session=>

Factsheet: <https://drive.google.com/file/d/1GQQX69AXnvFaBAn2KjpSnyl5rMjhFBF1/view>

### **Next Steps**

The Illinois NLRs Partnership Workshop is November 6, 2020. You can register at [go.illinois.edu/nlrs](http://go.illinois.edu/nlrs).

We will send out the Resources and Outreach spreadsheets soon as well. They are due in January 2021.

*Discussion:*

Albert Cox: For the resources and outreach spreadsheet, when will you send that?

Eliana Brown: It will be as we’ve done in the past for Ag and Stormwater sectors, we are doing some small improvements to that spreadsheet, but no changes to the point source spreadsheet. In the past, you have coordinated the IAWA spreadsheets. Would you be willing to do that again for this year?

Albert Cox: Yes, I can do that.

Eliana Brown: Thank you, Albert.

Trevor Sample: Thank you. We normally ask for information by end of January and then for point sources we provide by end of February. That will still work for us. Thank you.

Lauren Lurkins: On that issue too, I think I emailed Kate about this. Are you all going to tweak that to make sure you have a good place to report the pivot to virtual events this year?

Eliana Brown: That is one of the considerations and let me back up and say that Kate and I have spent some of our pandemic time working with Dr. Anna Marshall to add clarity to the spreadsheet. As far as virtual, that is something we've been talking about because it doesn't make sense to directly compare 2019 to 2020 due to the changes. We are going to ask for a focus group to go into a deeper dive on that.

Lauren Lurkins: We are happy to help. We kept that reporting in mind when deciding not to cancel things.

Eliana Brown: We appreciate that, you always do a wonderful job with your reporting.

Cindy Skrukud: I just wanted to tell folks that Mila Marshall has joined the call and she started working for Sierra Club in August. She is our new clean water advocate. As I move to retirement, she will be taking on a lot of what I took on in the past. We've done one-on-one calls with many of you, but just wanted to give an introduction.

Trevor Sample: We will be working to put together the biennial report next year. Just reach out to us if you need anything. If you want to hear about the NASS survey results and Reid's survey development, please attend the AWQPF meeting on the 20<sup>th</sup>.

Eliana Brown: Thank you all for your time today and input. Thank you, Trevor, for your work putting together the point source information.