

## NOTES

### Phosphorus Loading Subgroup

Wednesday, September 2, 2020

1:00-3:00 p.m.

Virtual Meeting

**Members:** Matt Diebel, Laura Good, Dale Robertson, Dick Lathrop, Paul Dearlove, Mark Riedel, Jake Vander Zanden, Greg Fries, Todd Stuntebeck, Kyle Minks

**Lead/Spokesperson:** Matt Diebel

**Recorder:** Paul Dearlove

**Charge:** From 12/6/19 Steering Team Notes: *“The group will focus on the biophysical side of the issue, and not social impacts. It will address questions such as: How does the system work? What kind of lake responses can we expect with different phosphorus reduction scenarios? What models and assumptions should we be using? The process will start with a system inventory and focus on the science and technical aspects of the problem. The subgroup will not get into the recommendation of specific strategies.”*

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**Attendance:** Matt Diebel, Dick Lathrop, Paul Dearlove, Kyle Minks, Dave Merritt, Dale Robertson, Laura Good, Todd Stuntebeck, Greg Fries, Jake Vander Zanden, Mark Riedel

The subgroup met to comment on the 14 Yahara CLEAN 2.0 actions in terms of what has worked or not worked since implementation began in 2013. Diebel previously distributed a modified version of the progress summary chart published in the 2019 State of the Lakes Report.

#### Discussion notes:

- Need to establish true baselines for each of the action categories to help verify the accuracy of progress estimates.
- With respect to the leaf-management action, the group reviewed how the baseline was originally determined by Strand and how/when progress is reported. There are variations between what Selbig's USGS study shows is possible in a small subbasin near Lake Wingra, what DNR's P crediting says, and what is actually measured in loading. Madison gets about 300-400 lbs reduced per year based on their crediting process. Potential reductions can be dramatic, but it takes draconian effort to keep streets free of leaves. The delivery factor for this action is another question that should be investigated.
- May need to start using something besides pounds of P reduced by practice to estimate and message progress. That system of accounting is hard to track and causes confusion with the public. For example, we could instead track and report on the number of practice units or acres covered by BMPs. Then, we can track measured P loading while we report on the success of putting practices in place.

- A pie chart is needed to show the sources and relative proportions of the total loading. This will allow us to go after larger sources of the overall phosphorus budget. Also needed are progress milestones that the public can understand and relate to. Unfortunately, we don't have a lot of information that directly links how each P-reduction action is actually impacting water quality. There is uncertainty with sources and how much reduction we get from different actions.
- How will we decide which of the priority actions we should keep doing and which we should de-emphasize for various reasons? One approach is to distinguish between prevention (i.e., keeping P from getting into the system) and treatment. We will have to get better at recycling nutrients to reduce runoff risk and the need for imported farm fertilizers.
- Maybe monitor a subwatershed to evaluate impacts of different practices. Dorn Creek would be a good example of where we probably have that kind of information already.
- We didn't have a baseline for CLEAN 2.0. Perhaps we track changes in average Phosphorus Indexes (PIs) reported in nutrient management plans. We would probably need to get the average down from 3 to 1.5. That would be difficult if not impossible with a dairy rotation.
- About 50% of the farmland in the watershed is rented, and maybe 20% of those landowners are out of state. This is important when figuring out how to get wider adoption of practices.
- Our subgroup should help set and manage expectations. We are currently treading water and will need a transformative paradigm shift on how we manage the landscape to make a real difference. We should set expectations on what is "needed" and what we can expect once those needs are fulfilled. "A little more of this and a little less of that" is not going to be enough.
- We have to be able to tell the public what they're going to get in water quality improvement if they spend all this money to do the needed work. Also, let's be careful what we wish for. What if we achieve our load reductions only to have the lakes clear up and become overrun with weeds and filamentous algae?

### Next Steps

Subgroup members agreed we need to be more honest with the community about the magnitude of the challenge, what it is going to take to accomplish our P-reduction goal, and what that means in observable changes in our lakes. This will have to be done without trying to be overly precise and setting up false expectations.