

# Nutrient Science Advisory Committee

## Face-to-face meeting

Illini Union, Urbana, IL

February 13, 2017

9-3 pm Central Time

## TENTATIVE CONCLUSIONS

NSAC's final report to IL EPA should:

- Clearly discuss the lines of evidence used to arrive at numeric criteria
- Present a conceptual model based on general knowledge, with some specificity for conditions in Illinois
- Make clear that NSAC relied on data collected for monitoring purposes, not nutrient standard creation
  - Refinement of data analyses can come in the future, if needed

Other options for final report:

- Might include a series of conceptual models (possibly based on watershed/river size).
- Might use C-FAR conclusions as a starting point
  - See C-FAR Conclusions/Next Steps write-up from Todd Royer.
  - See Mark David presentation with C-FAR decision trees.

## NEXT STEPS

- Consider time series or upstream/downstream comparisons that may warrant further analysis (chlorophyll & nutrients).
- Candice will work with U.S. EPA to compile periphyton chlorophyll a data from NAWQA program for analysis.
  - Work with Paul Terrio to get MSQA dataset for Corn-belt region, others? (aggregate eco-regions).
  - Paul will locate periphyton data from work with IL EPA.
    - Paul to follow up on the methods to make sure standards are met.
    - Also check time to storage-standards.
    - Determine if Jon/TetraTech has these data available
- Consider other lines of evidence for possible inclusion in final report
  - Is there evidence from Ohio in published literature to support Ohio's standards?
  - Existing IL TP standard for lakes/reservoirs?
- Model Refinement
  - Revisit dissolved oxygen dataset to find daily maximum/minimum to compare biological metrics with DO diel range
    - DO datasets are a surrogate for periphyton data
- Consider classification schemes relevant to Illinois rivers
- Use decision trees from C-FAR results to support our conceptual models
  - Examine total phosphorus vs dissolved phosphorus fractions to determine utility in models

- Examine gradient factors

**Tasks to pursue before next call:**

1. Get USGS MRSA data (Candice).
2. Convert whiteboard into PPT slides (Todd).
3. Outline what next steps would be for Tetra Tech. Send to Mike and Jon. (Candice/Todd)
4. Ask for Mike Paul's feedback on bifurcation on stream size and looking for relationships within wadable section. Is there an empirical way to define wadable in terms of response of Chl-a. (Candice/Todd)
5. Start writing introduction and summarizing C-FAR conclusions (Paul Terrio and share with Matt/Doug).

**Future meetings**

Thursday, March 23 Call

Tuesday, April 11 Call

Wednesday-Friday, May 17-19; workshop at UIUC

Perhaps have reps at NMC June 6 meeting. Have questions ready.