

Nutrient Science Advisory Committee

Tentative Conclusions and Next Steps

December 13-14, 2017

Urbana

TENTATIVE CONCLUSIONS

1. NSAC reviewed the USEPA's Combined Criteria guidance and discussed the applicability to IEPA data analysis.
 - Direct link between nutrient concentrations and algae/chlorophyll a in conceptual model but there are important confounding factors such as flow and velocity that aren't generally included in the IEPA dataset. Benthic chlorophyll a and water velocity would be good information to be collected in future IEPA monitoring.
 - NSAC discussed how to ensure all streams and downstream uses are protected if a combined criteria approach is used.
2. Doug presented a spreadsheet that presents the data in relation to specificity and sensitivity. It shows false positives and false negatives for a continuous predictor and a candidate response threshold that allows you to divide the data into a condition which is acceptable and one which is not.

NSAC started compiling response variable values, with a focus on algal chl a concentrations, that could be included in a combined criterion and discuss the different ways we could combine them, as well as the pluses and minuses from a risk assessment perspective. Using this type of approach, NSAC needs to look at:

- Macroinvertebrates and fish in relation to chlorophyll a
- DO minimum values and DO range in addition to chlorophyll

Illinois EPA's dataset and literature sources were explored for potential inclusion into a combined criteria approach

3. NSAC tabled the discussion on the report.

NEXT STEPS

- Additional literature review.
- ROC and other analysis of Illinois TP and TN data, as well as analysis of a range of chlorophyll values
- Candice sent literature review spreadsheet – everyone will put their assignments into the spreadsheet.

Future meetings and calls

- January meetings
 - Skype call: Monday Jan 8th afternoon, 2:00 pm Eastern/1:00 pm Central until 5:00 pm Eastern/4:00 pm Central
 - Face-to-face: January 22nd 1:00 pm going through afternoon of 23rd in Urbana.