

## **Nutrient TAG Meeting**

**January 9, 2014**

### **Ohio EPA Groveport Field Office**

#### **Attendance**

Member/Alternates – Rob Reash, Elizabeth Toot-Levy, John Lyons, Guy Jamesson, Larry Antosch, Ron Wyss, Kristen Kubitza, Adam Sackenheim (A), Dale Kocarek (A), Adrienne Nemura, Doug Busdeker, John Meyer, Bill Knapke (A), Sasson, Jack Irvin (A), Gary Sheely (A), Michael Brom (A)

Observers – Kevin Elder, Chris Morgan, Bill Hall, Dick Bartz, Todd Colquitt, Rob Brundrett

Via conference phone – Bill Meinert, Sandy Bihn, Steve Haughey, Rusty Neff

Ohio EPA – Dan Dudley, Bob Miltner, Chris Skalski, Dale White, Gary Stulhfauth, Melinda Harris, Heather Raymond

**Handouts** – Agenda and Compilation of questions based upon Early Stakeholder Outreach comments with responses

Meeting began at 10:00 a.m. Quick around the room introductions – members/alternatives first and then observers and phone.

Started meeting at 10:00 a.m.

#### **Review of Last Meeting and Housekeeping Updates**

- Today's Agenda – no changes noted by group
- Dec 10 minutes – Group should send any revisions within a week, otherwise will be considered approved
- Future meeting dates and venue changes
  - Second Thursday of the Month still good but Dan Dudley has Hypoxia Task Force calls in afternoon of those days – might have to be out for about 1 hour. Co-Chair can run meetings.
- For time, 10:00 a.m. to 3:30 p.m. still ok, going to see how today goes and adjust if necessary.
- Venue changes – Rob Reash going to check on capacity and availability of the AEP Environmental Lab meeting space near Groveport on Bixby Road.
- Upcoming events fyi
  - Dan Dudley has been invited to be on nutrient panel at the National Environmental Professional Association meeting in April – One topic for discussion at the meeting is stakeholder input – draft paper due first week of Feb if anyone wants to provide information to Dan.

- Another event – nutrient numeric criteria meeting (RTAG meeting) at U.S. EPA Region 5 on February 3 to 5, 2014. Bob Miltner is going. Meeting is open to the public. Bob will send a link to everybody. Bob will give an update on the event at the next meeting.
- Hypoxia Task Force – took over membership from ONDR. Next meeting in May 2014.
- Wisconsin Natural Resources webinar series on nutrient rules. Ohio EPA staff starting to view these for ideas. Dan suggested TAG members might also want to view these. Adrienne offered to look at this since she has already some background on the Wisconsin regs. Elizabeth suggested this topic for next meeting – Adrienne cautioned on using other states for example. Ohio is different so maybe we need to look to ourselves – Rob agreed that not spend a lot of time if not apples to apples – maybe just look at their implementation issues. John Lyons suggested looking at areas where controls have been put in place and money spent to see successes and failures.
- Dan just wanted to make everyone aware because Wisconsin does have some adaptive management that should be looked at. U.S. EPA suggested we look at what Wisconsin did so we are going to need to address this. Adrienne would like a fact to face meeting with U.S. EPA Region 5 to support Ohio EPA in this effort so that we don't receive a rejection letter – does Dan think this will happen? Region 5 WQ people on Ohio's side – road blocks have been with headquarters. We did a lot of work already with Tetra Tech and had several meetings that led to the gentlemen's agreement we have now. Dan thinks they want to approve our method but other states have had surprises. U.S. EPA Region 5 permit folks will want some implementation like Wisconsin. Headquarters' main concerns is independent application, might let us move forward as long as it is not numeric nutrient criteria. We really need more details on implementation on paper. If we get to a point that we need help with U.S. EPA, we should invite them to a meeting. We have already had back and forth with U.S. EPA on the TIC and right now have the best compromise. We need to make sure we build false positive and negatives off ramps into implementation. Need to look at continuing increases in nutrients and false negatives to make sure waters are not degraded.

## **Group A ESO Questions**

**Member discussion – objective is to review Ohio EPA draft responses, identify areas of common ground and identify remaining issues/action items**

**In the end, this will be a group work product.**

(Numbers below correspond with questions/answers on the handout.)

Item 1 Will the agency use data from a third party? Agency will use it if collected for intended purpose and according to approved study plan. Permit holders might want to look into collecting credible data for use in the TIC because it could be in their interest. If lieu of becoming a certified collector, could work with Ohio EPA NPDES permit writer to have TIC data collection included in the permit. Group saw huge problem if training and funding is not available to interested parties to become certified. For the TIC to work more data will be needed. Ohio EPA needs to be aware

third party data or sister agency data to use to ground truth findings. OWRC has a subgroup charged with improving water quality data sharing – see:  
[http://www.epa.state.oh.us/dsw/owrc\\_wq\\_monitoring.aspx](http://www.epa.state.oh.us/dsw/owrc_wq_monitoring.aspx).

- Items 2, 3, 4 Discussion on use of default data in the TIC scoring, some believing use of default data would be acceptable and others very concerned about potential imposing of nutrient controls when TIC results based on defaults. Discussed temporary TIC scores to be confirmed when all necessary data available and concluded that a TIC based effluent limit should not be imposed without actual TIC data.
- Item 5 Yes – the Agency should increase data collection. Concerns were expressed over the cut back on small stream sampling in basin surveys – typically backed off to 8 square miles. Need to discuss small NPDES dischargers and to look at the Ohio Nutrient Reduction Strategy and the tiered sizing of wastewater treatment plants.
- Item 6 Why calculate a TIC score if the water body is in attainment? Is there value in running the TIC to look for threats – waters on watch for future load increases or to target for Section 319 grants. Have been collecting data to calculate the TIC in most recent stream surveys. Response needs to be clarified as it contradicts itself – maybe a management decision will be that going forward, Division will collect necessary data and calculate the TIC. These results could be used for baseline information and recalibration of the tool. Ohio EPA agreed to clarify response.
- Items 7, 8, 9 Moved to Implementation discussion – Groups B & C.
- Item 10 On a site specific basis, might be able to use speciated forms of phosphorus. The Agency has been ramping up dissolved phosphorus collection but cannot always do it because of SOP constraints (field filtering within 15 minutes). Maybe as more data is collected, the TIC could be revised. Loadings to Lake Erie? an issue – handled by the Ohio Nutrient Reduction Strategy.

**Lunch break from 12:17 p.m. to 1:33 p.m.**

**Dick Bartz mentioned the National Water Quality Monitoring conference in Cincinnati in April. Will send Dan more information.**

- Item 11 Really an implementation issue and an antidegradation issue, not really new. Is there something the rule might have to address to where the stream is not impaired and need to prevent impacts? What about where the stream is threatened? This also needs to be further addressed regarding the non-point sources
- Item 12 Implementation issue as well. Term “mass” in the paragraph should be revised to “molar”. Where is the Agency thinking there might be a DIN limit imposed? Might happen to dischargers upstream of some inland lakes. Phosphorus is typically the limiting nutrient in streams.
- Item 13 First question to be addressed in Group A, second question is implementation related and should be addressed in Groups B & C. In regards to MWH streams, the TIC works just as well for WWH as MWH. Discussion of how many MWH streams were in the nutrient study. Would it make sense

to develop nutrient targets for each ALU – should MWH streams have different targets? No, stream type does not matter – if sunlight and nutrients are available, algae will grow.

- Item 14 Question is “where downstream?” This determination is too site-specific. The TIC data collection would not occur within the mixing zone. Data will be collected as presently done and the rule should remain flexible in this regard.
- Items 15, 16 Maybe need a small group to discuss data requirements. Concern expressed over obtaining enough phosphorus samples. Use of the geometric mean stabilizes the data, dampens out wide fluctuations.
- Item 17 Outside the range of nonsignificant departure means impaired. Potential group for further discussion.
- Item 18 Implementation issue to be discussed when we talk about reasonable potential.
- Item 19 See 15, 16 – include in the TIC data collection group. Water quality data collected at sentinel sites is collected for a year. D.O. data is collected for 24 to 48 hours. Is this enough?
- Bob Miltner suggested the group look at the TSDs for the Lower Great Miami River and Upper Little Miami River watersheds. The Lower Great Miami TSD is available at: [http://epa.ohio.gov/dsw/document\\_index/psdindx.aspx](http://epa.ohio.gov/dsw/document_index/psdindx.aspx) and the Upper Little Miami TSD will be posted on this site soon.
- Item 20 See 17.
- Item 21 Potential group for further discussion.
- Item 22 Implementation issue. Important that TIC scores corroborate with causal determinations discussed last meeting. Potential group for further discussion.
- Item 23 See 21.
- Item 24 Scoring document – adjust scoring based on ecoregion? Matrix is not just based on Ohio. See below. Also discussed potentially removing biocriteria from the index and while possible would remove the weight-of-evidence component from the TIC scoring mechanism.
- Dan Dudley mentioned that Bob Miltner has a TIC scoring matrix excel spreadsheet that can be looked at – contact Bob for a copy of the spreadsheet. Potential group to investigate scoring values? Items 25, 26 go here also.
- Items 25, 26 See 24.
- Item 27 What happens with weather? In extremely wet years, what happens – the stream survey might not proceed. What is too atypical? Data keeps getting added for TIC scoring calibration as we conduct more stream surveys.
- Item 28 Include in work group.

- Item 29 Anthony Sasson is aware of some analysis that has been done between mussels and nutrients, can provide if necessary. Mussels have been hit pretty hard – should look into this in the future, but no current plans to address in the TIC.
- Item 30 No comment. What about Maumee and other large rivers? Ohio EPA has a separate charge to develop nutrient criteria for large rivers. Will be a future separate rulemaking and will revise the response to the question.
- Item 31 What if the biology component is removed from the TIC score calculation – seems the biological attainment is counted twice. Taking the biology component out of the TIC score could lead to more streams being impaired by nutrients – more like independent application. This is what Maine did. Connecticut looked at benthic species – when start to see a shift in benthic species, then nutrients a problem. Caution – part of the agreement with U.S. EPA is to have the biology component in the TIC calculation. Maybe evaluation of the macros could be another tool to help diagnose nutrient problems. Add this topic to the group to investigate TIC scoring values.
- Item 32 The Field Manual referenced in the response is an update to the Surveillance Manual.

### Summary

Need to revise Group A responses and move some questions to Groups B and C

TAG members under direction of Co-chair will form three small groups to further discuss the following topics:

- How nonsignificant departure and nonattainment are being addressed in the TIC score calculation. We need to talk with John Lyons to see if his concerns were addressed to determine if we need this group. Should this be moved into same group with TIC scoring?
- Minimum data requirements for TIC calculation, especially D.O. – Rob Reash agreed to lead.
- TIC score calculations and scoring values matrix (Guy has volunteered to lead).

Work for Division

- Make available recent watershed study plans and TSDs
- Redraft responses to Items 6, 11 and 30
- Test TIC\_SCORING excel spreadsheet to make sure it works properly; make it available to TAG members and observers upon request

### Future topics

- Groups B and C ESO Questions
- Lake Erie – what we are doing will help but will not be entire solution. Annex 4 – working on nutrient issues in Lake Erie – Agency has 2 representatives on the committee. Work will be done through 2015. The Lake is getting worse so we need to be able to implement the outcome of Annex 4 as soon as the new information is available. Question raised about a TMDL for Lake Erie

- Gulf of Mexico hypoxia zone – Court decision on federal level that U.S. EPA might appeal. Need to be aware of what is going on and need to be able to act if necessary.
- Rob Reash brought reports to share – will scan and send to group.

U.S. EPA. 2009. Empirical Approaches for Nutrient Criteria Derivation.

[http://yosemite.epa.gov/sab/sabproduct.nsf/0/5972E2A88464D45E85257591006649D0/\\$File/Final+Draft+Empirical+Approaches+08-17-2009+for+EPEC+Sept+9-11+2009+Meeting.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/0/5972E2A88464D45E85257591006649D0/$File/Final+Draft+Empirical+Approaches+08-17-2009+for+EPEC+Sept+9-11+2009+Meeting.pdf)

Douglas B. McLaughlin. 2013. Maximizing the Accuracy of Field-Derived Numeric Nutrient Criteria in Water Quality Regulations.

- Heather Raymond asked about downstream uses – this will be looked at when we discuss implementation issues.
- More discussion about how causes and sources of biological impairment are determined. More discussion about what if a stream fails the TIC but nutrients are not listed as a cause of impairment. This was addressed at the last meeting and will be further discussed in implementation.
- Kevin Elder had a concern with the last sentence in the response to question 11 – Division should consider revising the response.

Meeting adjourned at 3:35 p.m.