ENVIRONMENTAL LAW UPDATE FROM COLUMBUS

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CSEAO Winter Conference
December 9, 2013

I. STATUS OF RULEMAKING FOR NUTRIENT (P&N) LIMITS.

A. 2013-14 Technical Advisory Group (TAG) Monthly Meetings.

1. First of 12-18 monthly meetings commenced on November 19.

a. Summary of the draft TIC (trophic index criterion) (enclosed).

(1) Four scoring factors – biocriteria attainment status, diurnal DO variation, benthic algae (measured as chlorophyll concentration), and nutrient (P&N) instream concentration.

b. Dan Dudley and Bob Miltner (D&M) ran the meeting, and no other OEPA staff spoke, although several staff managers were in attendance.

c. D&M indicated that with "minor tweaking" TIC is ready to be finalized as part of a new narrative (not new numeric) WQS, to be used as one of a group of diagnostic tools/data from which to make decisions.

(2) Questions/comments from TAG members did not reflect that they share the sentiment that TIC is ready to go w/minor tweaking (enclosed).

(3) D&M indicated that other factors/data that would be considered along with TIC score included QHEI score, other habitat features, nonpoint source contributions, trading, assimilative capacity, and cost-benefit. How these factors would be weighed and the weight to be given to them was not discussed, but is for future meetings to decide.

d. D&M indicated that many issues need to be resolved as part of the process and procedures for implementation of the TIC, and to obtain USEPA approval:

(1) How would TIC fit w/in "reasonable potential" formula;

(2) How much stream data needed before doing the scoring, and in what seasons would the data be collected. How to determine whether the data is "representative" and thus defensible.

(3) Would limits be concentrations or loadings, seasonal limits or year round.

e. D&M indicated that USEPA has tentatively approved OEPA's nutrient reduction strategy.

2. Next TAG Meeting for Tomorrow Afternoon, 12/10

3. Dan Dudley wants written comments/questions from CSEAO/OML and has committed to "off-line" meeting or conference calls to discuss our comments and questions.

B. Impact Of Great Miami River TMDL Process On The Status Of The Draft TIC (Who Is In Charge Here?).

1. Lower GMR in full attainment with biocriteria.

2. Chemistry/biology on continuous upward trend.

3. 2010-2012 water quality survey showed high DO swings during the one late summer data collection, and also high levels of sestonic (floating) chlorophyll during the same summer collection.

4. TMDL data collected, but no draft report completed yet.

5. Instream P data shows target P levels already being attained.

6. OEPA initially refused to meet to discuss TMDL status and instream P data, but then changed its mind.

a. Novak stated at meeting that GMR is impaired, or at least threatened, under the TIC scoring, and P limits are coming regardless of the status of the TMDL, regardless of biocriteria attainment, and despite instream P value already being achieved.

(1) All major (1.0 mgd+) POTWs will get 1.0 mg/l P monthly, and 1.5 mg/l weekly, limits spring 2014 because "the technology is well established and all of the POTWs can afford to meet such limits."

(2) When TMDL is finalized, the P limit will go to either 0.5 or 0.3 mg/l.

(3) All POTWs who paid for nutrient trading credits (as much as $0.25 million by some POTWs) as part of OEPA-approved MCD trading program will not be permitted to use those credits to offset nutrient reduction requirements.

7. What happened to the "draft" TIC that is not meant to be applied as a strict numeric limit?

C. Next Steps For The Nutrient TIC.

II. STATUS OF THE FAIRFIELD COUNTY APPEAL TO SUPREME COURT.

A. As Of Today, The Only Issue Taken For Appeal Is Whether OEPA-Developed TMDLs Must Go Through Rulemaking Procedures Before Their Allocations Can Be Applied To Point And Non-Point Sources Along The Stream Or Watershed.

1. Because of holdings of ERAC and Court of Appeals that limited the scope of review provided to a permit holder when its appeals the first permit that contains TMDL-based limits, whether the TMDL must first go through rulemaking may provide the only meaningful review for permit holders if those holdings are not overturned.

2. Whether USEPA's approval of the OEPA-developed TMDL is, standing alone, sufficient foundation to uphold the allocation or limits permit holders to a review only of how the allocation "pie" will be distributed, are two important additional issues that have been requested be taken up as part of the appeal.

B. Procedural Status Of The Appeal And Next Steps.

C. Protecting Yourself During And After The TMDL Process.

1. Meeting with OEPA during the TMDL process

2. Forming stakeholder groups of the impacted POTWs

3. Collecting upstream, effluent and downstream P and N data

4. Commenting on the draft TMDL

5. Documenting nonpoint source impacts and irreversible stream habitat conditions

6. ????????

III. STATUS OF REVISED TDS WQS.

A. Per 11/20 Discussion With OEPA, Agency Still Collecting TDS Instream Data And Still Collecting Toxicological Information Linking TDS To Impaired Macroinvertebrate Scores. No Early Stakeholder Outreach (ESO) Expected Until 2015.

B. Until ESO, Case-By-Case Imposition Of TDS Limits Driven By Low ICI Scores, Documented Impairment, Coupled With Elevated (>1500 mg/l) Effluent Values.

IV. STORMWATER FEE LITIGATION UPDATE.

A. *NEORSD v. "Rest of NE OH."* 8th App. Dist. Ct. Ruling, 9/26/2013.

1. NEORSD is a RC 6119 regional sewer district and Ct. struck down (2-1) its regional stormwater fee and its promulgated stormwater management program because they exceeded the authority set forth under RC 6119. Stormwater authority under Chapter 6119 limited to combined stormwater and wastewater, not separate stormwater. Whether fee was an unlawful tax was not decided.

2. Dissent interpreted Chapter 6119 as being broad enough to support a stormwater management program and fee.

3. Appeal filed by NEORSD 11/12/2013, but no decision yet whether Court will take the appeal.

V. WATER/SEWER SERVICE RIGHTS LITIGATION UPDATE.

A. *Trumbull County v. City Of Warren And Village Of Lordstown* – Decision Being Drafted By Judge Pearson In ND Court Of Ohio. Hopefully Out By End Of The Year. County's Sewer Rights Under R.C. 6117.01-.05 At Stake In Areas That Incorporate Or Annex After The County Forms Its Sewer District.

B. *Greater Cincinnati Water Works/Hamilton County v. City Of Harrison* – Obligation Of A Municipality To Obtain County Approval For Construction Of Water Lines In Unincorporated Area Under RC 6103.02 Upheld By 1st App. Dist. Ct. In June. GCWW's Win Over City Of Harrison Under RC 6103.02 And 6103.04-05 Appealed To 1st App. Dist. Ct. In May, And Briefing And Oral Argument Completed In November.

C. Preventive Steps To Protect Your Water/Sewer Service Rights.

VI. STATUS OF *IOWA LEAGUE OF CITIES* DECISION (enclosed).

A. Efforts To Make The 8th Cir. Decision National In Application.

B. Impact Beyond Just POTWs With Blending Operations.

1. Ruling that EPA jurisdiction limited to what goes out the pipe, w/o authority over inner-workings of the POTW.

Trophic Index Criterion – Rationale and Scoring

Introduction

Pollution associated with municipal and industrial point sources has largely been controlled, often with dramatic results, under the Federal Water Pollution Control Amendments of 1972, commonly known as the Clean Water Act (CWA). For example, prior to 1985, nearly 70 percent of the state's waters were too polluted to support fishing and recreation, and 20 percent were so polluted as to be functionally dead. Here, organic enrichment - essentially raw sewage - and pollutants like metals from industrial sources were the most proximate causes of impairment. By 2006, fewer than 35 percent of the state's waters were considered impaired; however, of those, sediment, habitat destruction, flow alteration and nutrients were the four leading causes of impairment (Ohio EPA 2006). The common thread running through those remaining causes of impairment is that they are all principally derived from diffuse sources related to land use practices; few of which are regulated in an environmentally meaningful way under the CWA.

That is not to say that efforts to address pollution from diffuse sources have been wanting or unfruitful. Sediment pollution from agricultural sources has been greatly reduced through broadly prescriptive, incentives-based programs (Richards et al. 2009). More recently, pollutants associated with urban storm water have been addressed under the umbrella of the NPDES system (*i.e.*, MS4 permits). And to address the issue of nutrient pollution, U.S. EPA (2001a) published suggested nutrient criteria using a reference range approach, and authorized states to develop regionally specific, scientifically defensible criteria (U.S. EPA 2001b).

Most of the existing numeric water quality criteria are built on a sound technical basis owing to well-defined, dose-response relationships between individual pollutants and aquatic organisms. These relationships are so well-defined as to allow confident predictions of environmental outcomes; hence, our administrative and regulatory infrastructure is largely predicated on tabular or algorithmic numeric criteria. However, unlike toxicants and putrescible materials, the effects of nutrient pollution on fish or macroinvertebrates are indirect, and therefore not predictable through simple dose-response curves, or highly deterministic models.

That said, relationships between nutrients and stream eutrophication have been well documented (Dodds and others 1997, Smith and others 1999, Biggs 2000), and a sufficient number of field studies exist tracing the links between nutrients and algae, macroinvertebrates or fish, that a reasonably complete picture exists of how biological condition changes over a nutrient gradient. The upshot of all this is that there is a dose-response relationship of sorts, though that response cannot be interpreted in the traditional sense because of the indirect pathways over which it is expressed, and because of the confounding factors that tend to mute, obscure, or exacerbate the responses. The dose-response relationship, such as it is, can be exploited, however, because there is a reasonably predictable and consistent response between increasing nutrient concentrations and periphyton (reviewed by Hillebrand 2002), and between periphyton and dissolved oxygen concentrations (Morgan et al. 2006, Huggins and Anderson 2005, Heiskary et al. 2010, Miltner 2010). The Ohio EPA nutrient criteria study (Miltner 2010) was predicated on tracing the steps from nutrients to periphyton (as given by chlorophyll-a), from periphyton to dissolved oxygen, and from dissolved oxygen to macroinvertebrates and fish, with the goal of identifying benchmarks or thresholds at each step that would help define where a given water body is positioned along a continuum of enrichment.

Trophic Index Criterion – Rational and Scoring

The Trophic Index Criterion

The Trophic Index Criterion (TIC) is a composite index that brings together the measures of nutrients, periphyton, dissolved oxygen, and biological assemblages by awarding points to successive ranges of each indicator, where the ranges are defined by benchmarks identified in the nutrient study. Hence, the TIC provides a structured method of aggregating data collected on Ohio's streams and rivers into a nominal scale that is essentially a translator for the condition of a water body relative to nutrient enrichment. As such, it can be applied independently to dictate the imposition of appropriate nutrient management programs including NPDES permit limits, waste-load allocations, and abatement strategies for landscape pollution.

Table 1. The Trophic Index Criterion (as currently proposed in draft form).

Biological Assemblages	**Dissolved Oxygen**	**Benthic Algae**	**Nutrients**†	**Trophic Index Criterion**
Meet applicable biocriteria (12)	Normal variation‡ <6 mg/l (12)	<107 mg/m^2 (8)	Concentrations typical of low disturbance systems (6)	**Acceptable (38-22)**
	Modest swings >6 mg/ (6)	107-183 mg/m^2 (4)	Concentrations typical of healthy streams in working landscapes (3)	
Within the range of non-significant departure (6)	Wide swings >7 mg/l (1)	Enriched 183-320 mg/m^2 (1)	Concentrations observed with high-intensity land use and WWTP loadings (1)	**Threatened 21-14**
Fail biological criteria (0)	Extreme swings >9 mg/l or swings >7 mg/l and minimum D.O. <WQS (0)	Thick to nuisance levels >320 mg/m^2 (0)	Concentrations typical of highly disturbed systems; effluent domination; >50% chance of biological impairment (0)	**Impaired 13-0**

†See Table 2 for nutrient concentration ranges

‡Measured as the difference between the daytime maximum concentration and the morning minimum

Trophic Index Criterion – Rational and Scoring

Table 2. Trophic Index Criterion scoring for the nutrient component.

Total Phosphorus (mg/l)	Dissolved Inorganic Nitrogen (mg/l)				
	≤0.44	0.44-1.10	1.10-3.60	3.60-6.70	≥6.70
≤0.04	6	3	3	1	0
0.04-0.08	3	3	3	1	0
0.08-0.13	3	3	1	1	0
0.13-0.40	1	1	1	0	0
≥0.40	0	0	0	0	0

A Note on TIC Categorical Levels

Boundaries set for the TIC (i.e., Acceptable, Threatened and Impaired) are assigned using the rationale that the biological indicators can be used to set the ceiling and floor of the threatened range. For example, if full biological attainment (i.e., a score of 12) occurs where two or more of the enrichment indicators suggest over-enrichment (i.e., a component score of 1), then the site will usually be classed as threatened. Also note that marginal biological performance with one of the enrichment measures indicating over-enrichment would class the site as impaired. This approach recognizes that the biological indicators can be stressed by nutrient enrichment before showing statutory impairment as defined by the biocriteria. Conversely, it is worth noting that full biological attainment accompanied by normal variation in daily dissolved oxygen concentrations yields an acceptable TIC rating regardless of what the other enrichment indicators show. This construct recognizes and dampens the reality of environmental variability inherent in chemical measures. It also allows for the determination of reasonable potential, given that dissolved oxygen concentrations can be reliably modeled (Cox 2003).

Implementation in NPDES Permits

Demonstration of impairment or reasonable potential to a receiving water body will invoke permit limits for nutrients, typically phosphorus. The default limits are 1.0 mg/l TP and 10 mg/l DIN. These limits are anticipated to be iterative through two successive 5 year permit cycles to allow for pursuing other options including habitat restoration and water quality trading. If, after two cycles, the water body remains impaired due to nutrient over-enrichment, nutrient target values based on ranges defined by empirical relationships will form the basis of discharge limits. The agency is evaluating if any current rules would need to be revised to implement this approach. Values to be used in the derivation of water quality based effluent limits are as follows:

Aquatic Life Use and QHEI	**TP (mg/l)**	**DIN (mg/l)**
Exceptional warmwater habitat and all QHEI scores	0.060	3.0
Warmwater habitat and QHEI score = 12 to 64	0.13	3.0
All other aquatic life uses and QHEI scores	0.30	3.0

Trophic Index Criterion – Rational and Scoring

References

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AGENDA

Ohio Nutrient WQS Technical Advisory Group

December 10, 2013 1:00 PM – 4:30 pm
Ohio EPA Groveport Lab Facility
4675 Homer Ohio Ln
Groveport, OH 43125

Review Agenda and Initial Question/Task list
15 minutes

Dan Dudley – Ohio EPA, DSW Standards and Technical Support Section

- Review agenda, adjust as need
- Revised minutes
- Compilation of questions from Early Stakeholder Outreach (ESO) comments
    - Proposal to build future meetings around the 3 major categories
- Future meeting dates

Basics of Ohio's Stream Survey Program
60 minutes

Bob Miltner – Ohio EPA, DSW Ecological Assessment Section
Member Discussion

- Objectives –
    - Achieve a common understanding of what sampling is done, how streams are "listed" as impaired and how causes and sources of pollution are determined
    - Link in all related ESO questions

Short Break

TIC principles and operational issues
90 minutes

Bob Miltner
Member Discussion

- Objectives –
    - Provide team members an understanding of how the TIC was derived so that questions related to metric scoring can begin to be addressed
    - Show how the TIC will fit into the causal assessment process
    - Link in all related ESO questions

Identify next steps, work assignments
40 minutes

All

- Summary of nutrient rules in other States (Anthony Sasson)
- New work related to today's topics or other needs

Wrap up
5 minutes

Nutrient TAG Meeting

November 19, 2013 (1:30 to 4:30 p.m.)

Ohio EPA Groveport Field Office

Attendance

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

Observers - Mark Wilson, Dan Button, Rob Brundrett, Chris Morgan, Bill Hall, Gene Phillips, Todd Colquitt, Mike Bailey, Kevin Elder, Greg LaBarge

Via conference phone – Steve Haughey, Remegio Confesor (and others at Heidelberg University), Bill Meinert

Ohio EPA – Dan Dudley, Bob Miltner, Jeff DeShon, Chris Skalski, Melinda Harris, Eric Nygaard, Dan Gill, Gary Stuhlfauth, Cathy Alexander, Dale White

Handouts

- Agenda, List of TAG Members/Alternates, List of TAG Observers, Ohio EPA Guide to Rule-making fact sheet, Purpose and Charge Given to TAG, TAG Member Perspectives on the Development of Numeric Nutrient Criteria, Nutrients ESO Comments Summary

Introduction

Dan Dudley gave welcome and went over agenda. Dan asked that everyone present introduce themselves and use one sentence to describe background experience that will be useful in this task. Have quick written notes on this part. See list at end of minutes.

Dan Dudley asked members to review the meeting's agenda – no changes were suggested.

Dan's expectations – get to know one another for the work over the next 12 months. The TIC is a near field tool, an improved tool box. However, the job is not done. We need to think about downstream, need to think about how to tackle the work in a manageable way.

List of issues/work

Adrienne – supports chunks – fits in with USEPA nutrient framework – 8 steps

Dan – we do have the Ohio Nutrient Reduction Strategy (ONRS) – not talk about now – will work on the 8th step.

Ground Rules

Dan Dudley went over the ground rules for the TAG –

- Professional common courtesies.

- Non-voting – consensus seeking; option for minority opinions.
- Alternate can step in when member cannot. Observers will receive all materials. Encourage off-line discussions.
- As co-chair Dan will cut off tangent discussions if need be.
- No objections were voiced to the ground rules.
- TAG meetings will not be run by a facilitator. Dan Dudley will be co-chair. Elizabeth Toot-Levy volunteered to be the other co-chair.

TAG Charge

Dan Dudley discussed the 4 bullets on the handout. These are Dan's ideas – if any issues, let him know. Dan has learned from previous EAG groups – wants a different outcome – wants to gets rules done. Dan is looking for the group to provide a good effort especially on implementation side because we need the input – can't think of all questions. Rule language to be drafted by Agency and small group if interested. White papers authored by groups. Will use "parking lot" for issues to be addressed later.

Timeline for effort – originally 18 months, maybe 12 to 18 months. Expect to meet monthly with work being done outside of meetings – offline work. Nutrient rules are a priority for Agency and director in 2014 – first item on list of priorities. Already did ESO (first step in rule process). Next step is drafting rule language for Interested Party Review. Plan to have IPR rule package in early 2015.

Member Viewpoints

Member viewpoints on nutrient pollution and means to control impacts. Had everyone skim the handout and those that did not respond give thoughts.

- Tom Price – excellent comments, agreed with most. Coming from farming background – wants to get arms around what we are trying to do and bring that back to the 88 county soil and water districts.
- Adrienne Nemura – supportive of point source comments. For small POTWs - economics and benefits to water quality must be there, concern over high costs at the really low P levels, need to consider rate payers and businesses.
- Doug Busdeker – agriculture and retailers with crop nutrients know ag is part of the problem. With NPS voluntary efforts and changes in management practices – want to be part of the solution.
- Kristen Kubitza – agrees with LEIA and TNC comments – wants outcome to be obtainable, measureable, and quantifiable – all sources of nutrients addressed.

Overview ESO

Dan Dudley went over how we got here and why. U.S. EPA published national recommendations in about 2000. States can either adopt the national recommendations or something equivalent. That is how program works. At this point, very few states have adopted nutrient standards. Ohio EPA put together a plan and started collecting field work. Then it took couple of years to convince U.S. EPA that our approach was ok with their plan. Finally go ok from region and

headquarters to proceed. TIC not perfect but we think is as good as going to get. Next is implementation – details that we have preliminary ideas on but group input is important. We need stakeholder support in front of JCARR. Without that, rules will not go anywhere. Please give honest advice on this issue.

Provided summary of ESO comments. Dan started list of parts we need to start working on. Chris putting items on board. Group decided to have Bob Miltner go first with TIC overview before we come up with list of items to work on.

Bob Miltner's Presentation

- Copy of presentation available on TAG web page
- New category of "Hold" for one off events – need to think about how to handle in rule language

Back to list of work components/Questions

After Bob's presentation, the group went back to the task of brainstorming items to work on:

- How to translate necessary reductions to sources
- Use of TIC in relation to WLAs
- Source Identification
- Enforce/Implement
- TIC – how it was developed/how it works
- Stratification by ecoregion / stream size
- When in the process do we do the TIC
- Nutrient reduction in relation to other stressors
- Site specific options/offramps
- Nuts and bolts of TIC operation – how much data, what to do if data is missing
- Different load reduction strategy options
- Average periods and appropriate WQBELs and loads vs concentrations
- Adaptive management
- Treatment options/effectiveness/costs – point and nonpoint sources, technology feasibility on nonpoint sources
- Mass balance

At 4:30 p.m. Dan decided to continue working on this list and will send it out via email for further input.

Next Meeting

Scheduled next meeting for December 10th at Ohio EPA Groveport Field Office.

List of Items for Further Exploration

- Look into further what other states have done – for example Montana (where they adopted low nutrient criteria but then granted variances) – also look at Wisconsin and Kansas
- More details on Ohio EPA's assessment process and TIC development

Members/Observers Introduction Statements

- Dan Dudley, Ohio EPA, DSW, Manager of Standards and Technical Support program, aquatic biologist
- Cheri Budzynski – alternate for Rob Reash who has been involved with the EPRI ORSANCO water quality trading program
- Elizabeth Toot-Levy – represents AOMWA and NEORSD – large point sources
- Tom Price – Chair of the Ohio Soil and Water Commission – farms along the Scioto River
- Larry Antosch – represents Ohio agriculture and have three water related degrees
- Adrienne Nemura – small POTWs – nutrient issues in other states (Chesapeake Bay watershed) and represents the City of Lima in the TMDL process
- Guy Jamesson – represents OWEA and AOMWA – engineer with experience in WWTP nutrient removal design and operation
- Ron Wyss – represents Lake Erie Improvement Association – modeled after GLSM group and is a farmer
- John Lyons with Strand Associates – represents AOMWA and has a background in green infrastructure
- Doug Busdeker with the Andersons – fertilizer sales and partnership with The Nature Conservancy is a 4R certification program
- Anthony Sasson – represents The Nature Conservancy – freshwater conservation. Worked on WLEB project and other recent water quality committees
- Kristen Kubitza – represents the Ohio Environmental Council – mostly involved in the urban side of nutrient issues
- John Meyer with John Morrell foods. Is an environmental engineer and has participated in TMDL committees in the past.
- Remegio Confesor Jr. and another professor with Heidelberg University

- Bill Meinert with O'BRIEN & GERE represents POTWs and participated in the Point Source and Urban NPS work group
- Chris Skalski, Ohio EPA, DSW, Standards and Technical Support program
- Melinda Harris, Ohio EPA, DSW, Rule Coordinator
- Eric Nygaard, Ohio EPA, DSW, Permits program
- Dale White, Ohio EPA, DSW, Modeling and Assessment section
- Bob Miltner, Ohio EPA, DSW, Ecological Assessment unit
- Jeff DeShon, Ohio EPA, DSW, Manager of Ecological Assessment unit
- Gary Stuhlfauth, Ohio EPA, DSW, Permits program
- Dan Gill, Ohio EPA, DSW, Supervisor of Permits program
- Cathy Alexander, Ohio EPA, DSW, Manager of Modeling and Assessment section and CAFO unit
- Michael Brom with Potash Corp.
- Bill Hall with Hall & Associates. Environmental Engineers with 15 years of experience with nutrients.
- Dale Kocarek with Stantec represents point sources and chair of the OWEA Government Affairs committee
- Bill Knapke with Cooper Farms
- Tom Menke with Menke Consulting – involved in permitting and nutrient management plan development for livestock farms
- Mark Wilson with Land Stewards represents the Certified Crop Advisors
- Gary Sheely, Director of Utilities for City of Lima, represents small POTWs and local experiences
- Adam Sackenheim with Butler County represents AOMWA
- Chris Morgan with Jones Day represents the City of Lima
- Rob Brundrett represents the Ohio Manufacturing Association
- Jack Irvin represents the Ohio Corn and Wheat Growers Association
- Todd Colquitt with Ohio Common Sense Initiative Office
- Dan Button with USGS
- Gene Philips with Ohio Department of Health – regulation of household sewage

- Mike Bailey with Ohio Department of Natural Resources, Soil and Water
- Dave Ritter with NEORSD has experience in urban storm water
- Greg LaBarge with The Ohio State University Extension
- Kevin Elder with Ohio Department of Agriculture, Livestock Environmental Permitting

Compilation of questions based upon Early Stakeholder Outreach comments

Group A, Principles and derivation of the TIC
– scoring questions, data requirements, sorting out causes of biological impairment, etc.

Group B, Application of the TIC assessment outcome
– relative to TMDLs / 303d listings, the target N and P concentrations for TMDLs, NPDES limits (initial technology levels and lower WQBELs), compliance time lines, reasonable potential, site specific criteria , etc.

Group C, Adaptive management and policy questions
– the pace, stringency and mechanisms to phase in degrees of regulation and innovative NPS techniques, water quality trading questions, habitat management, etc.

Group A - Principles and derivation of the TIC

1. How will credible data be used in the metric?
2. Where in relation to a discharge within the waterbody will TIC scores be determined? (one mile downstream, 3 miles downstream, some average value)
3. What time period and what data will be used (i.e., the past year, the past five years, average, worst-case scenario, best-case scenario)
4. How will multiple data values for each component of the TIC be used?
5. What if one or two biocriteria are in attainment but the others are not?
6. How will TIC scores be calculated and how will they be applied for multiple point sources to the same waterbody?
7. What if there is no data for one of the TIC metric factors?
8. What if there is insufficient data to develop a TIC score?
9. How much data is needed to develop a TIC score? What is the minimum amount of data necessary to calculate each of the Tic metrics?
10. How will areas in partial biological attainment be addressed?
11. Should a TIC score be calculated in biocriteria are in attainment?
12. Why are biocriteria values in the range of non-significant departure only given one-half of the applicable TIC score?
13. How will it be determined that nutrients are the actually cause of impairment in a water body?
14. How will nutrient standards be applied in situations where there are other stressors preventing the attainment of aquatic life criteria?
15. How will nutrient standards be applied in situations where there are other stressors preventing the attainment of aquatic life criteria?
16. Why are biocriteria values in the range of non-significant departure only given one-half of the applicable TIC score? Should non-significant departure be three quarters of the full attainment

value? Or should the biocriteria metric value be determined based on the historic trend of biocriteria values?

17. How will situations be handled where data are lacking; will default scoring values be applied?
18. What steps can be taken to ensure data are not missing? Is there a need to increase Ohio EPA sampling capacity? Should sampling by the permit holder be considered?
19. Dissolved Reactive Phosphorus is a key parameter associated with water quality problems in western Lake Erie. Why has Ohio EPA used total phosphorus in the TIC?
20. How are factors of ecoregion, stream size and tiered aquatic life uses incorporated into the TIC?
21. How were the TIC metric concentration values for phosphors and nitrogen established? Should they vary by ecoregion?
22. Imposition of nutrient limits if other stressors are more proximate; keeping primacy of bio-criteria as arbiter of impairment.
23. Is the Invertebrate Community Index (biocriteria) a good biological component for use in the TIC?.
24. How was the weighting of scores for TIC components established?
25. How much field testing of the scoring system has been done?
26. What are the data quality standards for field assessments?
27. What are the sampling protocols relative to the temporal, spatial and quantity of samples required for each TIC component?
28. How will situations of new or expanded sources of nutrients be evaluated? Is it possible to use models to forecast future TIC conditions?
29. When will the TIC be used to trigger the Dissolved Inorganic Nitrogen in-stream target value and subsequent TMDLs / WQBELs?
30. Can the TIC be broadened to include mussel species?
31. What is the range of stream sizes that can be evaluated with the TIC?
32. How are streams with the Modified Warmwater Habitat aquatic life use evaluated? How are downstream segments with higher aquatic life uses protected?

Group B, Application of the TIC assessment outcome

1. What reasonable potential process will be used?
2. How will the determination that a point source is a substantial contributing cause to the nutrient problems be made?
3. How will situations where point source nutrient reductions are not expected to significantly reduce the nutrient loading to a water body be addressed?
4. How will the TIC score be used to develop permit limits, TMDLS, WQBELs, etc?
5. How will relative source contribution be accounted for in the development of NPDES permit limits?
6. Will seasonal/annual NPDES permit limits be used?
7. How will nutrient limits currently in place be addressed?

8. How will loading targets be allocated among point and nonpoint sources?
9. How will criteria and WQBELs be applied to very small point sources? How will these sources perform TIC assessments during the periods between NPDES issuance dates?
10. Will TIC scores in the "acceptable" range be used to (automatically?) remove nutrients from the 303(d) list for the waterbody? What happens to the TMDL (and associated NPDES permit limits) previously prepared for a segment fitting this description?
11. What is the expected impact of TIC on urban storm water runoff, MS4 permits and general storm water permits?
12. Has Ohio EPA considered WERF Final Report "Modeling Guidance for Developing Site-Specific Nutrient Goals" relative to assessing near and far-field effects?
13. How will permit limits be expressed (30-day average, harmonic mean, seasonal, annual)?
14. Is there an option for site or waterbody-specific criteria? How would this be implemented?
15. What documentation will be prepared regarding how a TIC score will be used to develop a WQBEL?
16. What are modeling protocols that will be applied to translate the nutrient target values into TMDLs and WQBELS?

Group C, Adaptive management and policy questions

TIC generated in-stream nutrient target values (TP set at 0.3 mg/l, 0.16 mg/l or 0.06 mg/l; DIN 3.0 mg/l) will result in some POTWs having WQBEL numbers are that at or near the limit of treatment technology.

1. Are the interim limits of 1.0 mg/L TP and 10 mg/L DIN appropriate?
2. Is there additional flexibility regarding the length of time the interim limits would be in place?
3. What does Ohio EPA mean by adaptive management in the context of imposing nutrient limits on POTWs?
4. How will adaptive management be incorporated into the nutrient program?
5. How will water quality trading be used in the nutrient program?
6. How will nutrient reduction activities already undertaken by point sources be accounted for?
7. How will the amount of time it takes for the effects of nutrient reduction measures to occur be accounted for?
8. What if two permit cycles show clear water quality improvement trend but the stream has not achieved full attainment of the aquatic life use?
9. How will the associated (to nutrient reduction) water quality improvements be tracked?
10. How will the rules accommodate the implementation of effective alternatives to nutrient permit limits?
11. How will downward trends in nutrient levels (and/or upward trends in biocritieria scores) that have not yet met the goals be addressed?
12. How will the financial implications of meeting nutrient targets be addressed/accounted for?
13. How will we satisfy the requirement to ensure downstream uses are protected?

14. Should very low WQBEL numbers be enforced on POTWs is situations where NPS loads dominate the stream segment and continue to do in spite of efforts to curb NPS loads? What options exist in this situation?
15. What procedures will be followed (modeling / permitting) for situations without any available biological survey data (no TIC results available)?
16. What content belongs in administrative rule language vs. operational guidelines?
17. What is the correct balance enforcing TIC application consistently through explicit rule language vs. allowing an adequate degree of flexibility?

November 26, 2013

The Honorable Gina McCarthy
Administrator
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Need for Nationwide Consistency on Implementation of the 8th Circuit's Iowa League of Cities Decision

Dear Administrator McCarthy,

As you are aware, on March 25, 2013, the 8th Circuit Court of Appeals issued a ruling in *Iowa League of Cities v. EPA* (Docket No. 11-3412) that vacated, on procedural and substantive grounds, the unadopted legislative rules set forth in two U.S. Environmental Protection Agency (EPA) guidance letters. The decision addressed EPA's reinterpretation and enforcement of three key federal rules (bypass rule, Secondary Treatment rule and Water Quality-Based Permitting rule) that apply nationwide.

Specifically, the Court held that EPA's prohibition of bacteria mixing zones in primary contact recreation waters, regardless of the degree of possible health risks, unlawfully eliminated state discretion to utilize such mixing zones and, therefore, constituted a revised rule that did not go through the proper rulemaking procedures under the Administrative Procedure Act (APA). The Court also found that EPA's blending prohibition, which restricted how municipalities could design facilities to address peak flow processing (thereby reducing CSO and SSO discharges or system backups), exceeded the Agency's statutory authority under the Clean Water Act (CWA) and was inconsistent with both EPA's secondary treatment rule and bypass rule (711 F.3d 844 (8th Cir. 2013)).

We understand that even though this decision came down more than seven months ago and was never stayed, clarification requests regarding the implementation of this decision have gone unanswered and EPA has yet to withdraw its prior objections to NPDES permits based on these now vacated policies. We also understand based on recent public comments from EPA officials that the Agency believes the decision to have binding legal effect only in the 8th circuit and that it will be applied to permittees elsewhere in the country on a case-by-case basis. We would note that Congress expressly granted the circuit courts original jurisdiction to review the NPDES regulations at issue under Section 509 of the CWA to ensure nationwide uniformity and that EPA regulations provide for only one circuit to render an opinion on a petition for review. Consequently, we believe there is no legal basis to assert that the 8th Circuit decision does not apply nationwide.

In closing, the Agency's attempt to modify nationally applicable NPDES rules without undertaking a rulemaking was struck down in no uncertain terms. The issues in this case have been causing delay and confusion for municipal entities throughout the country in addressing wet weather compliance and have greatly increased local costs, unnecessarily. For example, even by its own estimates, the municipal cost implication of implementing just one of these rule interpretations was estimated by EPA to exceed $150 billion nationwide, with similar extraordinary costs associated with the other provisions. It is time to put that confusion and conflict to rest. Accordingly, we respectfully request confirmation that EPA will apply the *Iowa League of Cities* decision uniformly across the country and so advise its Regions and delegated States.

Sincerely,

Tom Cochran
CEO and Executive Director
The U.S. Conference of Mayors

Clarence E. Anthony
Executive Director
National League of Cities

Matthew D. Chase
Executive Director
National Association of Counties

Chuck Thompson
Executive Director and General Council
International Municipal Lawyers Association

Ken Kirk
Executive Director
National Association of Clean Water Agencies