

Specific comments with responses from GO4

- Comment 60
 - AEP - Suggest replacing impacted with adversely affected.
 - GO4 – Agree, change has been made.
- Comment 1
 - Sasson/Stark - This might need to be rewritten to clarify that the rule is covering stream segments that are not impounded. It could be interpreted quite differently depending on the circumstances.
 - AEP - If SNAP will also apply to streams that are impounded (for example, low head dams), should the phrase “free flowing” be deleted?
 - GO4 – SNAP was not developed for and will not be used for impounded streams. The term free flowing streams needs to be defined in the rule (see new Section III. Definitions).
- Comment 2
 - Sasson/Stark - What if another procedure would be more appropriate for streams at points where the drainage area is less than 1,000 square miles? The rule should reflect this, as the 1,000 square mile drainage limit might be too limiting. For example, it would eliminate the entire Sandusky River from applying another procedure, such as in the segment downstream of Fremont where measurement of benthic algae might not be appropriate.
 - GO4 – We believe that the language provided allows for this flexibility, because the less than 1000 mi² is qualified by also needing to be predominated by benthic algae. If a waterbody segment has characteristics that are similar to the characteristics in the waterbody used to develop the SNAP, then the SNAP can be applied. If the segment is dominated by sestonic algae then SNAP is not appropriate.
- Comment 81
 - AEP – replace “with aquatic life habitat use designations” with “having aquatic life use designations”.
 - GO4 – “aquatic life habitat use designations” is a complete term taken from existing OAC 3745-1-07. We have used this full term in this introductory section, and used simpler phrases in subsequent sections.
- Comment 61
 - AEP - Not sure what phrase “based on site specific criteria” means. The phrase has regulatory and legal implications which I believe is unintended.
 - GO4 – Agree and we have rephrased.
- Comment 82
 - AEP – insert “and chemical” following “biological”. New text: “...in a biological and chemical assessment study plan.”
 - GO4 – We have simplified text to clarify.

- Comment 3
 - Sasson/Stark - Does this need to specify a more precise type of document? TSD?
 - GO4 – No.
- Comment 4
 - Sasson/Stark - Flux, not “swing”? Which is used most frequently and has the best technical meaning?
 - GO4 – *In this context flux is not appropriate. Flux is a quantity flow rate per unit area. What we’re talking about is a concentration range (max value minus min value) over a daily period – “swing” is appropriate term, and has been used in this context in literature.*
- Comment 5
 - Sasson/Stark - Perhaps this should refer to only in the case of this rule. Or is it addressed in D.2.a (2. Permits without SNAP (Renewal/Modification)? The stream segment could be very enriched, and contribute to other problems, just not as determined by this rule. Other issues might be very relevant, such as downstream impacts. For example, the LENT (Lake Erie Nutrient Team Working Group) (2015) has recommended “phasing in growing season (April-September) average effluent limits of 0.6 milligrams total phosphorus per liter by 2020.”
 - GO4 – *Language is simplified and clarified.*
- Comment 6 and 62
 - Sasson/Stark - Drop last sentence? Recommend continued monitoring? What if the nutrients are in high concentrations? A stream might have a nutrient enrichment problem, but it is not shown in the attainment status. For example, it might have downstream impacts, or have anti-degradation impacts on sensitive species in Outstanding State Waters. To say it would not have an enrichment problem seems like an overstatement. So, this might need to limit or qualify this statement to pertain to this rule only. Or maybe say does not require further action in the procedure.
 - GO4 – *Language is simplified and clarified.*
- Comment 62
 - AEP – Alternative Language Proposed: Attaining and not threatened. If a stream segment is attaining and not threatened, no **further evaluations are necessary**. Delete 2nd sentence “The stream segment does not have a nutrient enrichment problem.”
 - GO4 – *Sentence dropped; this referenced the SNAP flow chart.*
- Comment 63
 - AEP – Alternative Language Proposed to replace a material cause with the principal pollutant stressor
 - GO4 – *The original text allows situation where there may be other material cause or stressor, but nutrients may still be identified as a problem to be solved. “Material” means significant, and is a fact-based judgment. We don’t want dischargers and Ohio EPA to have to spend money dealing with nutrients if they were a very minor stressor on a water body.*
- Comment 64
 - AEP – Alternative language proposed Table 1 – Equations used as guidance to assess whether biological indices are underperforming relative to existing habitat.

- *GO4 – Has been changed to “indices” . The language “help determine” suggests that other information could also be used; whereas “assess” suggests that this table would be the only information used and nothing else could be considered. Since nothing else is specifically suggested, use of this table would most likely be the determining factor – but language allows for other consideration.*
- Comment 83
 - AEP – suggests insertion of “ranges” after concentration.
 - GO4– Good edit, changes made.
- Comment 84
 - AEP – suggests deletion of “in or”.
 - GO4– Good edit, changes made.
- Comment 7
 - Sasson/Stark - The Nature Conservancy’s concerns on this and similar statements (NOTE: the statements that address the same point are not consistently written in this draft; see below.) would lead to undesirable, less stringent and inconsistent evaluation, and sometimes without credible data.
 - *GO4 – we have to build in some flexibility, we don’t know a better way to do it and the Director is still held to the law.*
- Comment 8
 - Sasson/Stark - Aren’t some of these established in standard methods, and shouldn’t this refer to that? Ohio EPA should have reference methods documents, such as for the QHEI, etc.
 - *GO4 - OEPA does not incorporate methods by reference into OAC so this is the better way to do it.*
- Comment 85
 - AEP – suggests insertion of “(preferable during or after)”.
 - *GO4 – We revised language.*
- Comment 9: Catastrophic (1st Occurrence)
 - Meyer - I would suggest a different word, maybe large
 - Sasson/Stark - The flow probably does not have to be “catastrophic.” It would probably take just enough to cause scouring of substrates and algae, which could be at to near “bankfull.” Also, it would not have to be “desiccation,” but some flow lower than average for that time of year. However, the low flows are the critical time for stream health, so maybe a low flow threshold should be if IBI and ICI scores can be determined.
 - *GO4– Use the word “extreme”. Desiccation is still appropriate as it is an extreme low flow.*
- Comment 10: Catastrophic (2nd Occurrence)
 - Meyer - I would suggest a different word, maybe large
 - Sasson/Stark - The flow probably does not have to be “catastrophic” or even flooding. Use another term. Probably just enough to cause scouring of substrates and algae, which could be at to near “bankfull.” Also, it would not have to be “desiccation,” but some flow lower than average for that time of year. However, the low flows are the critical time for stream health, so maybe a low flow threshold should be if IBI and ICI scores can be determined.

- AEP – Replace with “extreme”.
- GO4 – *Agreed, replaced with extreme.*
- Comment 11
 - Sasson/Stark - Could this use the same criteria as for the standard Ohio EPA QHEI measures? “Channel alterations” are a very appropriate condition for the SNAP to consider. Recall the discussion of habitat importance in the TAG meetings. The QHEI should be taken under the same conditions as established for other purposes.
 - GO4 – *QHEI data considerations have been simplified in table.*
- Comment 48
 - PCS – What is the difference between a reach and a segment?
 - GO4 - *The intent is to uniformly use “segment”.*
- Comment 49
 - PCS – It would be very unusual to need limits for both nitrogen and phosphorus. This should say the limiting nutrient.
 - GO4 – *agreed; language revised.*
- Comment 86
 - AEP – inserted “in stream” in two places
 - GO4 - *good edits, changes made.*
- Comment 12
 - Meyer - This (0.40 mg/L) is a bit high. I would recommend lowering this to .131 mg/l. Annex 4 recommends a flow weighted mean concentration of 0.23 mg/l for TP and 0.05 for DRP. I understand that this is not comparing apples to apples, but do believe that we need a lower threshold.
 - Sasson/Stark - Should the rule, in anticipation of the GLWQA Annex 4, reduce this “red flag” concentration to some lower concentration? 0.4 mg/l for TP is only about 15% (from Table 2) of all samples across Ohio, including those that are relatively low in eastern Ohio. How about calling for monitoring within one year if above 0.131 mg/l, the next highest tier for P? Or creating more concentration range categories (e.g., 0.13 to 0.23 mg/l, etc.) and including at least one more row (tier) that is “red flagged” for provisional WQTCs. The Recommended Phosphorus Loading Targets for Lake Erie in the document “Annex 4 Objectives and Targets Task Team Final Report to the Nutrients Annex Subcommittee, May 11, 2015,” includes a Flow Weighted Mean Concentration of 0.23 mg/L for TP and 0.05 mg/L for DRP. <http://binational.net/2015/06/30/draftptargets-ciblesproposeesdep/> While these numbers are not directly comparable, they should be noted as well below the stream numbers from the SNAP rule’s Table 2.
 - Neff - What is the source of the in stream target water quality? Does this comply with the Fairfield County case?
 - AEP – Should these be expressed as monthly average concentration for clarity sake?
 - GO4 – *These are the provisional target values if a model hasn’t been developed. The idea is not that these values will fix the problem as much as they are a placeholder until a model is developed. A danger with lower values is that more moderate values may result in sufficient loading reduction to sufficiently improve instream conditions. Restoring WQ will be an iterative process through adaptive management, and starting*

out with extremely low target values may unnecessarily expend scarce resources. Annex 4 presents recommendations for P loading targets into Lake Erie, which is substantially different than free flowing streams that are the focus of this WQS rule. Note also that Annex 4 expressly does not recommend concentration targets, but rather it recommends loading targets (which correspond to the recommended loading targets for tributaries at their mouth, intended to be used as benchmarks to track progress in achieving the loading targets) for the lake and specific watersheds. The nutrients annex subcommittee acknowledges the space and time variability of nutrient concentrations and accordingly the difficulty of monitoring concentrations in a meaningful way. The Annex 4 document presents flow weighted mean concentrations that correspond to the recommended loading targets as a means to track progress, which for the Maumee River are the values noted in the comment.

The basis for the TAG recommended value of 0.40 is derived from Table 2 (refer to nutrient concentration ranges for which low risk to attainment is expected if allied responses are within normal ranges) , which was developed by Ohio EPA based upon several years of monitoring data collected from the type of streams this rule will apply to. Note also that adaptive management is an iterative process, and that if controls implemented to achieve a WQBEL derived from the provisional WQ Target value do not subsequently result in biological WQ attainment, then future iterations will have to achieve further nutrient load reductions and/or other nutrient pollution abatement actions.

The problem and challenge with setting a “provisional” nutrient target value is that nutrient concentrations in-stream is poorly correlated with enrichment-caused impacts. This is a ‘second choice’ that is not as good as a model based target – and we cannot go too stringent with this provisional guess! Given all the inherent uncertainties with nutrient-related impacts to the water environment and how to remediate, it would not be appropriate to set what may be an excessively restrictive provisional target for the initial step in developing control actions or discharge load reductions.

- Comment 50
 - PCS – This needs to specify that the target concentration is a growing season average.
 - GO4 – Language added in II.A.1.b. to clarify that it is a growing season average.
- Comment 13
 - Stark/Sasson - Noting the above comment about the WQTCs and Annex 4, Ohio EPA should consider future needs to reduce P when developing provisional WQTCs. Annex 4 and related actions could lead to additional load reductions within a few years.
 - GO4– It is NOT appropriate to compare nutrient target values for Lake Erie with target values applicable to flowing streams. See previous response to Comment 12.
- Comment 51
 - PCS – Any limits imposed using these instream targets are provisional and not subject to anti-degradation considerations.
 - GO4 – Antideg only comes into play if the water body is in attainment, so that doesn’t apply. However, the GO4 discussed anti-backsliding and believe that the rule needs to address that anti-backsliding doesn’t apply to permit limits based on a provisional target.

- Comment 45
 - Neff - Is flow exceeded 80% of time the 73rd lowest day flow rate or is it the low 73 day period? These are likely significantly different. It would be unusual in Ohio to have 73 days without a significant flushing event and such events are important to benthic deposit transport.
 - *GO4– Clarified the language to read, "The WQTL shall be calculated using the stream flow exceeded 80 percent of the time during the growing season, based upon available streamflow data and use of suitable USGS procedures for estimation of low-flow characteristics"*
- Comment 46
 - Neff - How is ten years of daily flow data gathered? As SNAP applies to smaller streams or upper reaches it is likely that many segments do not have a gage. EPA has a bad record of making up unavailable data at values advantageous to their regulatory agenda.
 - *GO4 – The language was modified to indicate the intention to use USGS procedures.*
- Comment 14
 - Stark/Sasson - This amount of flow data does not exist for most Ohio stream points. So does this need to say something about USGS estimates? Is that said elsewhere and needs to be referenced here? Something like flow from USGS' regional regression calculations would cover it. For another application, in ~ 2012, TNC worked with USGS on how to do this, and assumes this is the standard to use.
 - *GO4– See response to comment 45.*
- Comment 15
 - Stark/Sasson - Check: Is this already addressed elsewhere in the OAC? 3745-2-05 Calculating wasteload allocations? 3745-2-12 Total maximum daily loads? And if not, why should it be here and not in a more general section? Can this only be used for nutrient calculations? Cite the U.S. EPA reference?
 - *GO4 –The WLA is slightly different here for nutrients than for other pollutants (toxics). In the final rule-making, OEPA may relocate this section or others. It is not necessary to cite the USEPA reference.*
- Comment 100
 - PCS/Hall – Insert requirement that "The WLA calculation shall not result in a WQBEL load limit which is less than the WQTC times the appropriate discharge flow."
 - *GO4 – it appears this is trying to make sure that the upstream concentration to a stream segment or nonpoint source concentrations to a segment are set to the WQTC (and not higher). The GO4 is concerned that making this a requirement in the rule could lead to inflexibility for nutrient trading between point sources or point to nonpoint sources. We therefore did not include it in the draft rule.*
- Comment 16
 - Meyer - This looks different than what is in OAC 3745-2-05.
 - Stark/Sasson - The Conservancy agrees with following a standard approach.
 - Neff - The document states that an allocation will be made between point, nonpoint, and background; but no clear description of how this allocation will be made. We have worked with multiple WWTP on small streams where stream was significantly degraded

by agricultural nutrient loads until the relatively large flow from the WWTP entered. Let's use the example of a stream with 2 cfs flow upstream of WWTP and a plant flow rate of 2 cfs. Then additional flow enters before the gage station finds a critical flow rate of 5 cfs. Does the WWTP get a flow allocation of its own flow rate plus some fraction of the base flow? Or just its own flow with 100% of stream flow allocated to nonpoint? Or worse (and I can think of one example in a draft permit years ago) the allocation to the treatment plant was actually less than its proportion of the flow?

- *GO4 – The nutrients rule will not use a WQ criterion value but instead will use a water quality target load. So this equation is simply a mass balance, subtracting NPS Loads (LA) and background source loads (BA). The standard WLA approach doesn't work for nutrients as it was developed for toxics. Note that this equation is equivalent to the definition of TMDL given in OAC 3745-2-02.*
- Comment 17
 - Stark/Sasson - Ohio should keep in mind that the critical loads period to Lake Erie have been determined to start in March, as determined by the Ohio Lake Erie P Task Force, http://epa.ohio.gov/portals/35/lakeerie/ptaskforce2/Task_Force_Report_October_2013.pdf . Would that affect PS discharge limits?
 - *GO4 – This rule applies to flowing streams not Lake Erie*
- Comment 52
 - PCS – PS allocation should consider the variability in discharge load if limits with shorter averaging periods are included in a permit. Σ Daily > Σ Monthly > Σ Growing Season
 - *GO4 – The rule specifies a seasonal load.*
- Comment 87
 - AEP – Delete “Because there is uncertainty regarding causal and restorative links between aquatic biology, nutrients, and other stressors,”
 - *GO4 – This phrase is useful to explain why adaptive management is a necessary part of the approach to solve nutrient-caused problems in the stream WQ. Since the impacts, effects and linkages among various stressors are typically not completely understood, AM is an appropriate means to approach and solve the problem.*
- Comment 88
 - AEP – Insert the phrase “probability of” in the sentence: “... evaluate the effectiveness of management alternatives that would reduce the probability of adverse biological impact caused by nutrients.”
 - *GO4 – This sentence was reworded to clarify.*
- Comment 89
 - AEP – Will proposed AMPs be subject to public comment?
 - *GO4– No, AMPs would be similar to NPDES facility engineering reports, basis of design reports, facility plans, design drawings, etc. Submittal of AMPs may be required under conditions of NPDES permit; they would be submitted to OEPA for review and approval, but would not be subject to public comment.*
- Comment 18
 - Stark/Sasson - Must address effectiveness of BMPs. Does the BMP(s) proposed provide measurable and significant benefits that are adequate to achieve the goals?

- *GO4 – Good question but not necessary to address in the rule, will be evaluated in AMP development and OEPA review. AM is defined as meaning actions that abate impairments and reduce threats associated with nutrients, so S/S concerns are inherent in the design and approval of AMPs.*
- Comment 19
 - Meyer - Only discusses PS. What about NPS?
 - *GO4 - See the NPS Section*
 - Stark/Sasson - What if the AMP determines the situation can be adequately addressed through NPS? Does that need a referral to another section?
 - *GO4 – Good question but not necessary to address in the rule, will be evaluated in AMP development and OEPA review. Also, see MPAM section*
- Comment 90
 - AEP – Regarding AMPs submitted to OEPA for review, replace “Upon approval...” with “If approved...”
 - *GO4 –These should be handled the same way PTIs apps are: the district person works with the permittee to put together an approval application. If an impasse arises, OEPA disapproves, and the permittee can appeal.*
- Comment 20
 - Stark/Sasson - Need consistent use of “AMP”
 - *GO4 – Agreed. Text has been edited throughout.*
- Comment 21
 - Meyer - OEPA should be the third party to ensure that benefits are actually gained. They likely will need to work with their sister agency to ensure benefits are achieved.
 - *GO4 - This is a different sort of third party – the coordinator who may put together groups of NPS parties. The PS is not going to coordinate or supervise what the NPS parties are doing – that would likely be unworkable, and unacceptable to the NPS parties – hence the need for a third party coordinator. OEPA’s role as regulator is completely outside of this agreement or contract.*
- Comment 22
 - Stark/Sasson - How are the BMPs verified? Just by stream monitoring? Other? Not necessarily an issue at this point in the rule, but it needs to be determined if this is successful.
 - *GO4 –BMP verification to be addressed in the post-implementation monitoring plan.*
- Comment 23
 - Stark/Sasson - This should be modified (maybe deleted) or refer to the previous wording in I.A.3. Why repeat?
 - *GO4 –Yes, revised to make reference to I.A.3.*
- Comment 91
 - AEP – If a facility has existing permit limits (e.g., technology-based) based on a previous permit, are these maintained as status quo?
 - *GO4 – This is addressed in a later section of the rule framework: II.D.2., paragraphs a. and b.*

- Comment 24
 - Stark/Sasson - Does this have to be reworded to address the possibility of the determination of downstream impacts in the future?
 - GO4 - *This was reworded.*
- Comment 25
 - Meyer - It a stream segment is placed on a watch list then it should include regular monitoring, continuous monitoring would be ideal.
 - GO4 – *A stream segment on the watch list will get monitoring and more attention than otherwise. But certainly not continuous monitoring. OEPA has budget and resource constraints.*
- Comment 26
 - Stark/Sasson - “Pollution prevention” is defined elsewhere in the OA. It is in the Antidegradation Rules, where in OAC 3745-1-05 (<http://codes.ohio.gov/oac/3745-1-05>) "Pollution prevention alternative" means the use of source reduction techniques in order to reduce risk to public health, safety, welfare and the environment and, as a second preference, the use of environmentally sound recycling to achieve these same goals. Pollution prevention avoids cross-media transfers of waste or pollutants and is multi-media in scope; it addresses all types of waste and environmental releases to the air, water and land.” It has been meant to mean source reduction and recycling, not treatment. There are Storm Water Pollution Prevention Plans (SWP3) http://www.epa.ohio.gov/dsw/storm/const_SWP3_check.aspx, but this is not the same as “pollution prevention” for an industry’s manufacturing operations that might reduce nutrient losses, especially through source reduction.
 - GO4 –*“Nutrient pollution prevention measures” should probably have a definition in the nutrient rule. (See new Section III – definitions.) Treatment is not intended here. TMDLS are pollutant specific – this language refers only to nutrient TMDLS. Other pollutants may still require TMDLS independently.*
- Comment 53
 - PCS – Why should industrial sources have to implement BMP at this point? Consistent with the approach to POTWs, just impose a load cap. These limits should not be considered water quality based limits subject to anti-backsliding since it still must be determined whether aquatic life uses are stable or improving and therefore not threatened.
 - GO4 - *The GO4 thinking was that “preliminary pollution prevention’ measures would be more flexible, less onerous than loading cap. We were concerned about industries’ potential need to increase production, etc. We have revised language to require cap at EEQ load, with an alternative for the industry to implement PP measures at their request.*
- Comment 27
 - Stark/Sasson - See comment above: “Pollution prevention” is defined elsewhere in the OAC. It is in the Antidegradation Rules, where in OAC 3745-1-05 (<http://codes.ohio.gov/oac/3745-1-05>) “Pollution prevention alternative" means the use of source reduction techniques in order to reduce risk to public health, safety, welfare and the environment and, as a second preference, the use of environmentally

sound recycling to achieve these same goals. Pollution prevention avoids cross-media transfers of waste or pollutants and is multi-media in scope; it addresses all types of waste and environmental releases to the air, water and land."It has been meant to mean source reduction and recycling, not treatment. SWP3, etc.

- *GO4 - See response to comment 26. We believe a separate definition for "nutrient pollution prevention measures" is appropriate.*
- Comment 92
 - AEP – Replace "a material cause of impairment" with "the principal stressor causing or contributing to impairment".
 - *GO4 - the original phrase is more appropriate, since it allows for a situation where nutrients may be a material cause but not the principal cause.*
- Comment 93
 - AEP – insert new phrase at end of sentence: for industrial sources "that contribute to said impairment based on existing information".
 - *GO4 – Some changes were made here, but we did not think that this language was necessary.*
- Comment 54
 - PCS – The initial measure for industrial discharges should be a load cap. Pollution prevention measures and load reductions should be subsequent management actions.
 - *GO4 – See response to comment 53.*
- Comment 55
 - PCS – This section is part of iii above and not a separate sub-section. Instead of saying "Following the completion of a SAP (sic), is should say, "Additionally, The Director shall..."
 - *GO4 – Agreed. Change made.*
- Comment 94
 - AEP – Replace phrase "stream biology" with "biological indices".
 - *GO4 – We changed the phrase to "biological criteria".*
- Comment 65
 - AEP - I suggest replacing this word with "sequential". Iterative means repetition of a step or process.
 - *GO4 - Adaptive Management is an iterative process. Implementation of AM does proceed through a sequence of steps, but then performs a reassessment step and when the results indicate insufficient improvement will reiterate from the beginning of the process – reevaluating the plan and proceeding through the subsequent steps again.*
- Comment 66
 - AEP – An annual progress report on activities/achievement of the AMP shall be required.
 - *GO4 – We don't want to force annual reports; that can be a permitting decision.*
- Comment 67
 - AEP – "promulgated" biological Criteria
 - *GO4 - We revised the text to "...designated aquatic life use..."*

- Comment 56
 - PCS – If the cause of impairment was not nutrients why are point sources on the hood for continuing AM measures to address a cause of impairment that they were not responsible for?
 - GO4 – *removed the word “continued”. Conditions must be maintained, but the iterative process is no longer necessary.*
- Comment 68
 - AEP - Not sure if this sentence is really needed as OEPA will make the modifications per existing programs.
 - GO4 – *Maybe, but we like calling it out so that everyone is clear that it is supposed to happen.*
- Comment 69
 - AEP - In my experience the agency is very hesitant to allow a permittee to conduct a UAA.
 - GO4 – *We want that to be an available option.*
- Comment 70
 - AEP – replace “permits for discharges to” with “facilities that discharge to”
 - GO4 – *Language updated.*
- Comment 28
 - Stark/Sasson - Should nutrient monitoring be included where there is nonattainment downstream of the point source?
 - GO4 – *Nothing in this rule outline precludes OEPA from requiring such monitoring. The state is now requiring this through legislation.*
- Comment 71
 - AEP – replace site with segment
 - GO4 – *This needs to be site specific.*
- Comment 72
 - AEP - This phrase is presumptuous and is probably not appropriate in rule language.
 - GO4 – *This is an unusual circumstance where there is a new approach to determine an appropriate WQBEL, and we want the permittee to be given a ‘hold’ on proceeding with upgrades to meet the previously determined limit (which did not utilize SNAP, AM, etc.) in the situation where permittee has not already started. This situation should not happen after current permits have proceeded through a renewal cycle following promulgation of the new nutrient rule.*
- Comment 73
 - AEP - Aren’t there cases where a limit based on EEQ could be higher than limits in a previous permit? An issue with antibacksliding??
 - GO4 – *In the situation covered here, the permittee is presumably operating under an existing interim limit but with a more stringent future limit for which they are about (but have not yet committed) to upgrade their treatment system. So I think(?) that antibacksliding would not yet apply since the future limit is not yet in effect. This would be messy if the permittee is not complying with current interim limit. Perhaps Language should be revised “... a modification to the limit which shall be based on EEQ that will delay effective date of the more stringent limit pending completion of SNAP and*

determination of whether a more stringent nutrient limit is needed.” There is an exception to antibacksliding [OAC 3745-33-05(F)] if the receiving water is in attainment as long as antideg requirements are met, so this could apply in some instances. There’s also an antideg exception for new information “other than revised regulations, guidance or test methods”. While the nutrient rule and SNAP procedure may be considered revised regulations, guidance or methods (although there is a difference between “revised” and “new”), the assessment results of the SNAP are certainly new scientific information that is highly relevant to setting WQBELs in such an instance.

- Comment 74
 - AEP - This seems to raise pragmatic problems. How does a facility “put on hold” the construction of treatment works pending the outcome of a regulatory determination? In such cases the vendor assumes all of the risks.
 - GO4 – *Since already committed, permittee goes ahead with construction and operation. If SNAP subsequently determines no or less stringent limits would be appropriate, the permittee may apply for permit modification.*
- Comment 29
 - Stark/Sasson - What happens when SNAP determines that more stringent nutrient limits are appropriate? Where are they sent to in this rule? Does that reference need to be here?
 - GO4 – *When subsequent SNAP is performed, the case moves into the following subsection D.3. “Permits with SNAP”*
- Comment 75
 - AEP – Insert “using a weight-of-evidence evaluation” at end of sentence.
 - GO4 – *We don’t believe that a change in language is needed because SNAP is a weight of evidence approach.*
- Comment 57
 - PCS – Evidence should be specific for the stream in question and not generic, literature based documentation.
 - GO4 - *Added the word site-specific and deleted co-limiting.*
- Comment 76
 - AEP – Considering both existing and emerging technologies.
 - GO4– *Permittees may consider emerging technologies on their own, but it should not be required for OEPA to consider unproven technologies. Since mandatory consideration of “emerging technologies” is not appropriate, this proposed phrase addition is unnecessary.*
- Comment 77
 - AEP – Add “(c) Any relevant technical information describing the relationship between environmental nutrient loads and/or concentrations and biological responses.”
 - GO4 – *Added new item (c): “Other relevant information pertaining to the relationship between nutrient loads and/or concentrations and biological responses.”*
- Comment 30
 - Stark/Sasson - Use a neutral term (“unit”) in case we advance to metric.
 - GO4 – *Updated.*

- Comment 58
 - PCS – Should this be more stringent limits?
 - GO4 – Yes.
- Comment 31
 - Stark/Sasson - Or its revisions/replacements.
 - GO4 – *The original text included reference to the November 24, 2014 USEPA financial capability assessment framework, and to the Environmental Financial Advisory Board (“EFAB”) analysis and recommendations on Financial Capability Assessment, dated September 22, 2014. These references have been replaced with listing of the specific items from those two sources to be considered with respect to affordability.*
- Comment 78
 - AEP – Add: “3. Any other relevant information.”
 - GO4 – *Added item to end of list: “Any other factor relevant to changes in financial circumstances or other financial or budgetary issues”.*
- Comment 95
 - AEP – insert “submittal and review of a permit-to-install application,”
 - GO4 – *Updated.*
- Comment 59
 - PCS – What happens if a permittee selects AM, implements non-nutrient reduction measures, but then finds it must go to extreme nutrient reduction to address downstream consideration. Does it still need to maintain AM measures? Permittee should not be required to go beyond zeroing out the load.
 - GO4 - *We agree with this concern; such a situation will have to be negotiated on a case-by-case basis as part of the AMP.*
- Comment 96
 - AEP – insert in text: “... shall provide adequate time for the Director to assess ...”
 - GO4 – *The rule will require the AMP party to develop and perform a post-implementation monitoring program to assess the results of plan implementation and provide a report to OEPA. While the Director/agency will review the assessment and approve next steps (and incorporate any new steps into permit), Director will not perform the assessment.*
- Comment 97
 - AEP – insert “and protect” in text
 - GO4 – *the rule terminology used is “maintain”*
- Comment 98
 - AEP – Suggested edits: “...has not attained ~~all~~ the designated aquatic life uses”, and “...implement the current AMP ~~is~~ would be expected to yield...”.
 - GO4 – *Updated the first suggestion in text.*
- Comment 79
 - AEP – suggests the Director
 - GO4 – *See comment response #96.*
- Comment 32
 - Stark/Sasson - This should be modified (maybe deleted) or refer to the previous wording in I.A.3. Also in D.1.a. Why repeat each time?

- *GO4 – Yes, revised to make reference to I.A.3.*
- Comment 33
 - Meyer - If included on a watch list it needs to also include regular monitoring.
 - *GO4 - See response to comment 25, no change needed here.*
- Comment 34
 - Stark/Sasson - See above comment. Pollution prevention is defined elsewhere in the OAC. It has been meant to mean source reduction and recycling, not treatment. "Pollution prevention" defined elsewhere in the OA. It is in the Antidegradation Rules, where in OAC 3745-1-05 (<http://codes.ohio.gov/oac/3745-1-05>) ""Pollution prevention alternative" means the use of source reduction techniques in order to reduce risk to public health, safety, welfare and the environment and, as a second preference, the use of environmentally sound recycling to achieve these same goals. Pollution prevention avoids cross-media transfers of waste or pollutants and is multi-media in scope; it addresses all types of waste and environmental releases to the air, water and land." It has been meant to mean source reduction and recycling, not treatment. There are Storm Water Pollution Prevention Plans (SWP3) http://www.epa.ohio.gov/dsw/storm/const_SWP3_check.aspx, but this is not the same as "pollution prevention" for an industry's manufacturing operations that might reduce nutrient losses, especially through source reduction.
 - *GO4 –See response to comment 26; no change is needed here.*
- Comment 35 –
 - Stark/Sasson - On a technical note: As stormwater can cause channel scouring and that might be a source of nutrients, BMPs should include those that address the impacts on hydrology/hydraulics in the stream (downstream of the BMP units). So the hydrology and hydraulics might be appropriate. Maybe that is included in "storm water management strategies."
 - *GO4 –Useful thought, but not necessary to include in the rule. Such evaluation of specific BMPS will be case-by-case.*
- Comment 36
 - Stark/Sasson - This section seems to leave out when the MS4 contribution, in combination with others, will materially improve biological criteria. That needs to be addressed. How will these contributions - identified in the SWMP - get incorporated into a WAP-AMP? Refer to the WAP-AMP section here?
 - *GO4 - MS4s and POTWs should be considered independently, when building new storm sewers will include more stringent controls. However, recognize that MS4s are likely not the best place to solve nutrient problems as controls on MS4s in most cases are extremely expensive.*
- Comment 47
 - Antosh - When dealing with nonpoint sources, the Clean Water Act clearly does not grant regulatory authority to enforce land management changes. As a result, the wording on page 18 (F.2. a and c) should not in any way implicate that "requirements" can be imposed on nonpoint sources. I think the intent was to say that in those situations where the SNAP assessment indicates that nonpoint nutrient sources have

been identified as a cause of biological nonattainment an AMP in the form of a WAP-AMP should be developed.

- *GO4— Whatever may be the reach of the CWA—the appellate court’s upholding of the Chesapeake Bay TMDL suggests that it thinks—we will have to wait and see what the Supreme Court does—that federal law does authorize EPA to enforce limitations on non-point sources. Ohio state law is substantially broader (“No person shall cause pollution or cause to be placed any . . . wastes in a location where they cause pollution of any waters of the state”). Whether and when and where and how the Ohio executive branch decides to adopt rules or otherwise enforce this state law against non-point sources, or some portion of them, are questions yet to be answered. We appreciate all the information that you and others have provided regarding just how complicated these questions are.*
- Comment 37
 - Meyer - Watch list should include regular monitoring. Ideally it would be continuous monitoring.
 - *GO4 – See response to comment 25*
- Comment 38
 - Meyer - The NPS reduction relies heavily on WAPs. Many watersheds throughout the state do not have a WAP. See: <https://gis.ohiodnr.gov/website/dsw/Watershed%20Action%20Plans/>. Where a WAP plan exists and is endorsed by the state, it should be revised to reduce the NP sources. The water segment should be monitored to determine if progress is being made and adjustments made accordingly. But this does not address the lack of support, funding and possibly technical, to carry out the WAP. If this is the route the state will the state needs to invest in making sure that these WAPs are in place, reducing nutrients, and are providing support to ensure that there is a coordinator, etc. Where a WAP is not in place a WAP could be developed by the local SWCD. A coordinator could be hired and housed within the SWCD to implement the plan. We only need to look to Cuyahoga SWCD to find a successful model. Resources would need to be given to this effort, however, to make sure real reductions are met. If it comes to revising a WAP or needing to develop a WAP, regular monitoring should be employed on the stream segment.
 - *GO4— The bottom line of all of this is that we put together something to start the ball rolling on NPS. We do not think that Ohio EPA is willing to do anything with NPS in this rulemaking. The GO4 does not want to include something that might scuttle the whole rule because the agricultural community and legislature are opposed. Of course, this inchoate approach to the NPS issues has “issues.”*
- Comment 99
 - AEP – Suggested edit: “...material improvement of the aquatic biology biocriteria scores”
 - *GO4 – Updated.*
- Comment 39
 - Stark/Sasson - The draft rule and the TAG’s process flow chart relies on WAPs to attain biocriteria and meet water quality goals. Unfortunately, WAPs are not in place for much of Ohio, so the mechanism to implement Adaptive Management appears to be an

outstanding shortcoming. Other impediments include: there might be no WAP or implementing entity indefinitely; they might be underfunded; or they might not have the direction/support to adequately address nutrients. Ohio EPA and ODNR need to significantly expand and improve the WAP program, and bring the parties involved into the SNAP effort as soon as possible. The SNAP seems less likely to be successful if the WAP program is not significantly more focused on nutrients. In addition, the State of Ohio should adequately fund WAPs and encourage local funding, as well as private funding. The State should provide technical support and regular review of WAPs-AMPs to determine if substantial relevant progress is being made. Reliance on WAPs could have significant shortcomings. If WAPs or AMPs do not produce adequate results, rather than leave these areas unaddressed and in nonattainment, we suggest a second option of an “alternative plan.” This alternative plan could address specific areas as identified by an entity (and partners) that intends to correct the nonattainment problem. This would rely on planning and management specifically designed to address the problem and the related TSD/TMDL data collected by Ohio EPA and other credible data (ORC/OAC-compliant) that is supplied by the entity or others. In many cases, private entities (e.g., Associations, individual farmers or their representatives) will have to be formally engaged.

- AEP - Question: are we certain that these groups want to assume the legal responsibility of developing watershed action plans? Their input on this is important.
- *GO4 – These are valid questions and concerns. These must be addressed – but we are not sure how, nor where funding support may come from.*
- Comment 40
 - Stark/Sasson - Or its revision/replacement
 - *GO4 – The Ohio EPA is legislatively prevented from incorporating references in this way, and we are uncertain as to whether it is wise to include any of these references in the rule, irrespective of whether they are automatically updated.*
- Comment 41
 - Stark/Sasson - Besides funding, there will need to be adequate support for action.
 - *GO4 – How do we address that in a rule-making?*
- Comment 42
 - Stark/Sasson - While we don’t like to bring this up, what happens when there is no WAP?
 - *GO4 – Unfortunately, not much. This is a concern.*
- Comment 80
 - AEP – Suggest removing the highlighted language
 - *GO4 – We think this language should remain in the rule, see response to comment 68.*
- Comment 43
 - Stark/Sasson - What does the “1” superscript below refer to?
 - *GO4– It is a reference to a missing footnote that got deleted inadvertently when Flow Charts B and C were inserted into this document. The footnote will be restored:*

stressor¹ → ¹ Stressors include pollutants and physical conditions.

- Comment 44
 - Stark/Sasson - “Do natural conditions dictate status (e.g., wetland/coldwater)” Why wouldn’t Coldwater use have an attainment goal? And why could it not be degraded by nutrients?
 - *GO4 “(e.g., wetland/coldwater)” has been deleted from Flow Chart B to avoid confusion. These examples were referring to (relatively unusual) instances where natural conditions prevent attainment of biocriteria. Examples referred to include (1) a stream segment receiving excessive nutrient loads from an upstream wetland, or (2) an undesignated stream segment that should ultimately be designated as coldwater (therefore it receives a default warmwater habitat (WWH) designation) and by its nature as a coldwater stream it has fewer fish species. There are no biocriteria for coldwater habitats, and hence SNAP cannot be evaluated. A third example of a natural condition with impaired biology would be a bedrock stream, where a shallow stream flows over largely bare bedrock. Bedrock can’t support biology to meet typical WWH biocriteria.*

GENERAL COMMENTS

Kristy Meyer - It seems to be that we did not address what should happen if collectively reducing nutrients from point sources and NPS, ag and stormwater, the stream segment could improve. What happens if nutrients from PS alone would not materially improve the situation and nutrients from NP alone would not materially improve the segment? What happens? Nothing? Reduction of both? Commonsense would say the later, but that is stating the obvious.

GO4– If THIS nutrient rule imposed nutrient limits on NPS, then Kristy’s point has merit. However, the GO4’s (and nearly all TAG members) believe that PSs should not have to expend limited resources under the current regime where NPS are the principal cause AND PS reductions of nutrients will not materially improve the situation.

Jason Tincu –

The rule does ***a great job***:

- Creating a uniform nutrient impairment identification tool
- Defining an implementation approach that considers many of the challenges and variables that tend to surface
- Creates uniformity with how we regulate PS discharges on impaired waterways and provides realistic and reasonable discharge limitations on them
- Utilizes Adaptive Management as a fundamental backbone

The rule, however, ***does not***:

- Provide enough oversight and meaningful regulation of Non-Point
 - Watered-down and loosely-regulated Watershed Action Plans and/or Nutrient Management Plans (with no additional financial support and oversight) will do little-to-nothing as far as meaningful reductions.

I know that I’m being a thorn in your side at this point...but I feel that I owe it to the AOMWA stakeholders that I represent to be disruptive with such a glaring deficiency.

Realizing that some is better than none (in Guy J’s terms), I ask you—will this rule, as it’s currently written (1) stand the test of time, (2) fix nutrient impairment on qualifying watersheds for the state of Ohio, and (3) meet the needs of the millions of people that we represent?

Or does it simply provide uniformity on how we identify nutrient impairment and apply regulations to Point Source dischargers?

As I play this approach out, it has us back at the table in 10-15 years (with hundreds of Millions of \$\$\$ invested at POTWs) trying to figure out how to manage the “pink elephant in the room”!

I don’t have all the answers and realize the political sensitivity involved in this discussion—but scan the news reel and look at the issues that continue to “eat our lunch”!