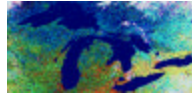


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*Great Lakes Trading Network*



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January 14, 1999

Comment Clerk for the  
TMDL Program Rule (Water Docket W-98-31) and  
NPDES/WQS Proposed Rule (Water Docket W-99-04)  
United States Environmental Protection Agency  
401 M Street, SW (4101)  
Washington, DC 20460

Dear Comment Clerk:

The Great Lakes Trading Network (GLTN) appreciates the opportunity to comment on the United States Environmental Protection Agency's (EPA's) proposed changes to the water quality planning and management regulations at 40 *CFR* 130, the federal antidegradation policy at 40 *CFR* 131, and the National Pollutant Discharge Elimination System (NPDES) program at 40 *CFR* 122, 123 and 124. In review the proposed changes, the GLTN believes that EPA is taking a significant step forward in developing effective watershed-based plans and programs to meet the goals of the Clean Water Act (CWA).

Research on water quality trading and trading demonstration projects clearly demonstrated the potential environmental and economic benefits that trading offers. Generally, immediate opportunities for and greatest water quality and economic benefits from trading exist where pollutant reductions are needed to achieve and/or maintain water quality standards. Watershed-based trading programs that achieve a net loading reduction for each trade can improve water quality and achieve progress towards attainment pending the development of a TMDL. Trading among and between point and nonpoint sources (NPS) provides flexibility and can optimize the cost of achieving the reductions established under a TMDL. Trading where water quality standards are being met can establish incentives for environmentally sound development, accommodate growth and maintain high water quality. These goals are consistent with the CWA.

Studies have also shown, however, that prior agency approval and permit requirements increase administrative and transaction costs in environmental trading programs. EPA could achieve reductions in transaction costs by (1) establishing a clear legal authority for water quality trading and (2) creating the possibility for alternative institutional arrangements for implementation of the Clean Water Act. For example, the State of Michigan is promulgating regulations for a statewide water quality trading program that would allow trading by sources of nutrients (phosphorus and nitrogen) provided that each source follows the program's rules to establish "real," "surplus," and "quantifiable" nutrient credits to trade. The program also requires a percentage of all reductions made to generate credits to be retired to achieve a net loading reduction and improvement in water



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quality. These trades would be incorporated into NPDES permits through permit modifications by rule. This approach is very similar to the general permit program administered by the state. It reduces the level of agency resources needed to review permits, resulting in enforceable permit changes and significantly lowers the transaction costs of individual trades, thereby facilitating realization of the environmental and economic benefits associated with trading.

At a meeting on September 10, 1999, Mr. Fox stated that the proposed changes to EPA's regulations are "all about trading." The GLTN is encouraged to hear that EPA endorses water quality trading (as evidenced by the stated spirit of the proposed regulations) and is also pleased to hear that EPA supports the use of trading in situations where a water body is not attaining water quality standards but has not yet had a TMDL developed. Our comments focus on ways that we believe EPA can improve upon the proposed regulations to capitalize on the flexibility and environmental potential of water quality trading programs.

The following comments discuss key issues and offer suggestions that would facilitate offsetting and allow broader application of trading under state programs that go beyond the federal clean water act. The additional regulatory flexibility that is embodied in EPA's proposed regulations and recommended herein by the GLTN is vital to the implementation of successful trading programs. In an attempt to facilitate EPA's consideration of these comments, the GLTN is suggesting specific language and places where it may be included in the proposed regulations.

### **Discussion of Proposed Regulations**

One of the primary objectives of the proposed water quality planning and management regulations (in conjunction with the proposed NPDES program revisions) is to provide greater assurances that TMDLs will be implemented. Although EPA's Draft Framework for Watershed-Based Trading (Framework) recommends that trading be done in the context of a TMDL or a TMDL-equivalent, the proposed regulations make no provision for trading to achieve the reductions under a TMDL. Trading is discussed in the preamble but the concept is not defined, referenced or included in the proposed regulations. The proposed regulations establish a new requirement that implementation plans are included in the minimum elements of TMDLs submitted for approval by EPA (40 CFR 130.33(b)(10)). Each plan must include all the information in 40 CFR 130.33(b)(10)(i – viii). These regulations make no provision for trading as an instrument to provide flexibility and optimize the cost of implementation.

The proposed revisions collectively provide for NPDES permits to be issued to new and increased uses in impaired waters for which a total maximum daily load (TMDL) has not been developed. The proposed regulations establish permit conditions and offset requirements necessary for this to occur. To achieve reasonable further progress towards attainment pending the development of a TMDL, significant new and increased discharges would be required to be 'offset' at a ratio of 1.5:1. Offset reductions may be



obtained from another point source or NPS. Where offsets are provided by another point source, the proposed regulations require that the permit for that source be modified to include revised effluent limits. Where offsets are provided by a NPS, the NPS offset requirements must be incorporated in the new or increased use permit. The only mechanism for offsetting to occur under the proposed regulations is in the context of NPDES permits. Offsetting by permit is a very narrow application of trading and would also be very time and resource intensive for sources and states. A recent point/nonpoint source trade in Minnesota took over two years to consummate by permit. This clearly illustrates how resource intensive trading by permits can be. Most state agencies do not have the resources to issue permits or require formal permit modifications for every trade.

### *Water Quality Planning*

The proposed water quality planning and management regulations should be revised to expressly allow trading under state water quality trading programs for the following purposes:

1. To obtain offsets;
2. To improve water quality in impaired waters pending the development of a TMDL; and
3. To implement a TMDL as part of an approved TMDL implementation strategy.

TMDLs provide the greatest driver for trading and the baselines necessary for trading to occur. Trading is an instrument to implement TMDLs. In fact, achieving the reductions required under a TMDL in certain watersheds may not be possible without the flexibility and cost savings that trading offers. It is extremely important that the proposed regulations allow trading as a means of achieving offsets and improving water quality pending TMDL development. This is vital to the Chesapeake Bay Program, Michigan's statewide water quality trading program and a number of other programs that are emerging across the country.

The GLTN recommends the following changes to the proposed regulations:

### Recommended Changes to the proposed 40 CFR 130.50 (Continuing Planning Process)

Insert the following paragraph at an appropriate location within the proposed 40 *CFR* 130.50(b)(1) through (9) (i.e., creating 10 subparts to 40 *CFR* 130.50(b)):

*The provision and process for establishing a water quality trading program and how the program will be consistent with water quality standards, consistent with the development of TMDLs, and incorporated into NPDES permits.*



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### Recommended Changes to the proposed 40 CFR 130.51 (Water Quality Plans)

Insert the following paragraph at an appropriate location within the proposed water quality plan elements at 40 *CFR* 130.51(c)(1) through (9) (i.e., creating 10 subparts to 40 *CFR* 130.51(c)):

*Water Quality Trading. The plan may include and shall describe any water quality trading program that you implement to achieve your water quality standards. This description will identify how the program is consistent with water quality standards, consistent with the development of TMDLs, and incorporated into NPDES permits.*

#### *TMDL Program*

The proposed regulations must be revised to make it clear that formal TMDL modifications are not required before water quality trades can occur once a TMDL has been established. Requiring a formal TMDL modification for each trade is a prescription for failure. It would be agency-intensive, overly burdensome, and unnecessary. Such an approach would provide no flexibility and would be beyond the requirements of Section 303(d)(1) of the CWA.

For trading to occur, the caps established by a TMDL must remain in place. The exchange of credits through a trading program that provides a net loading reduction does change the waste load and load allocations. However, this should not be construed as a change to the TMDL as it does not affect the pollutant loading cap. We completely agree that the assimilative capacity must remain fixed to assure the integrity of the TMDL, as well as our own trading programs. Section 303(d) of the CWA requires that a *load* be established at a level necessary to achieve water quality standards with seasonal variations and a margin of safety. The current (and proposed) regulations further refine the TMDL as the sum of point source waste load allocations, nonpoint source load allocations, natural background, a margin of safety, and now an implementation plan. While the GLTN supports EPA's efforts to ensure the attainment of water quality standards, the proposed regulations would "lock down" individual allocations and thereby eliminate the flexibility needed for creative solutions. The GLTN believes that the CWA provides authority for EPA to interpret TMDL's as a load (cap), rather than how the loading cap is allocated among and between sources. This approach would allow trading to occur under a cap as long as the allocations do not exceed the TMDL.

The GLTN strongly believes that a change in an individual point source waste load or NPS load allocation that *does not result in an increase in the net load* should not be construed to be a modification of the TMDL. To do so would discourage sources and states from making any voluntary reductions and making reductions beyond the level required under the TMDL. It is an extremely resource-intensive and unnecessary requirement for EPA and the states. This interpretation will frustrate rather than facilitate implementation of TMDLs and voluntary community-based watershed initiatives.



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### Recommended Changes to the proposed 40 CFR 130.33 (TMDLs)

The GLTN believes that as long as trading occurs in a manner consistent with State or Tribal Water Quality Standards, water quality trades should not constitute a change in a TMDL. The GLTN recommends the following language to clearly state that reductions from individual sources, offsets and net load reductions greater than required under a TMDL shall not be construed to constitute a change to the TMDL for which a formal modification is required:

*130.33(e) You do not need to revise an EPA-approved TMDL if you allow water quality trading among or between point and nonpoint sources if all of the following conditions are met:*

- 1. Water quality trades occur under a water quality trading program that is consistent with State or Tribal water quality standards;*
- 2. Any water quality trade does not result in the exceedance of the allowable pollutant load identified according to 40 CFR 130.33(b)(2) while accounting for the margin of safety identified according to 40 CFR 133.30(b)(7); and*
- 3. Any water quality trade results in a “real,” “surplus,” and “quantifiable” reduction in pollutant load to the water body.*

It is recommended that the following terms be defined under the proposed regulations:

*“Real” means “a change that results in a point source discharge or nonpoint source reduction.”*

*“Quantifiable” means “that the amount, rate, and characteristics of a discharge reduction or increase can be determined or measured through an accurate, reliable, and replicable method, procedure, or set of calculations established by an applicable requirement or approved by the department or the administrator.”*

*“Surplus” means “a point source discharge or nonpoint source load reduction greater than that required by an applicable requirement.”*

### Recommended Changes to the proposed 40 CFR 130.33(b)(10) (TMDL Implementation)

The GLTN also suggests that EPA consider including language in the proposed regulations to specifically allow for water quality trading as part of a TMDL implementation plan. We recommend the following language at the end of proposed 40 CFR 133.33(b)(10).

*Where you partially or fully implement your TMDL by means of a water quality trading program, your implementation plan must include:*

- 1. A program description;*



2. A discussion of how your water quality trading program is consistent with your Water Quality Standards and this TMDL; and
3. A discussion of how you will issue NPDES permits through your water quality trading program in a manner consistent with your Water Quality Standards and this TMDL.

### *NPDES Permit Program*

Establishing offsets to facilitate permitting new and increased uses while improving water quality pending TMDL development is appropriate. The proposed regulations (40 CFR 122.4(j)(2)(v) and (vi)) require existing point source permits to be modified where an offset is provided by another point source; or, for NPS offset requirements to be incorporated into the permit issued for the new or increased use. Requiring a permit modification for each offset is extremely resource intensive. It is overly burdensome on the sources and the states. Most importantly, it is not necessary to establish NPS accountability.

The proposed NPDES program regulations should be revised to allow offsetting for nutrients and pre-TMDL nutrient trading to occur by rule under a state water quality trading program approved by EPA. This would provide a uniform approach and greater flexibility for the states to develop and implement watershed based management programs. Language should provide that nutrient trading by rule constitutes a permit modification for a point source that generates or uses credits under the EPA approved program.

NPS reductions that are used as offsets or to create credits that can be traded under a state program should not be required to be incorporated in NPDES permits. While this may be appropriate in some cases, it is a prescription for failure if required for all trades. Incorporating NPS requirements in a point source permit is viewed by many as a backdoor approach to regulating nonpoint sources. Point sources view this approach as highly inequitable since they have borne the burden of improving water quality under existing regulatory programs. There is no support for this approach from point or nonpoint sources in a number of states. NPS accountability can and should be established directly by rule or under other voluntary state programs that meet EPA's reasonable assurance criteria.

The GLTN offers the following language for incorporation into the proposed regulations at 40 *CFR* 122.4:

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(j)(2)(iii) The pollutant load reductions must *be real, surplus, and quantifiable and must be* the result of pollutant control measures implemented by a responsible individual in a water quality trading program established in State or Tribal water quality standards or implemented by, or secured and assured by, the new discharger or existing discharger



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undergoing a significant expansion (credit will not be given for reductions already required for some other reason);

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(j)(2)(v) *Any obtained pollutant load reductions must either be consistent with a water quality trading program adopted into State or Tribal water quality standards or:*

(1) Where a discharger obtains pollutant load reductions from an existing point source(s), the NPDES permit(s) for the existing point source(s) must be modified to reflect those reductions on or before the date the permit is issued to the new discharger or existing discharger undergoing a significant expansion; and

~~(j)(2)(vi)~~ (2) Where a discharger obtains pollutant load reductions from an existing nonpoint source(s), the discharger's permit must include any conditions, including the offset requirements and any accompanying monitoring and reporting requirements necessary to ensure continued achievement of the pollutant load reductions from the nonpoint source(s).

#### *Antidegradation Policy*

In *Arkansas v Oklahoma*, the United States Supreme Court found that the CWA does not prohibit the issuance of permits to new or increased uses in impaired waters. The court also noted that the CWA vests the EPA and states with broad authority to develop long-range, area wide programs to control pollution (503 U.S. 91). Establishing a reasonable further progress (offset) requirement in impaired waters for which a TMDL has not yet been established while accommodating growth and development is within the authority vested with EPA under the CWA. Offsets and other water quality trading that achieve a net loading reduction and does not result in an adverse localized impact is consistent with CWA. Establishing an offset requirement for the permitting of new or increased uses in impaired waters would improve water quality and facilitate attainment of water quality standards. It would establish a driver for trading.

As noted above, the CWA provides EPA with the authority to establish an offset requirement. The proposed offsetting requirements are intended to apply only to waters that do not fully support designated uses. Revising the federal antidegradation policy to require progress towards attainment goes beyond the current 'no lowering of water quality' policy established under the Great Lakes Initiative. Some commentors may question whether this approach is consistent with the basic framework created under Sections 303(d)(4)(A) and (B) of the CWA. It may be more straightforward and less confusing to incorporate the offset requirement as an interim permitting requirement for impaired waters for which a TMDL has not been established.

EPA may also want to move the offset requirement from 40 CFR 131.12 to a separate "pre-TMDL" or "interim-TMDL" section under 40 CFR 130. The proposed regulations



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should be very clear that offset requirements only apply until a TMDL has been established or the water segment is de-listed as provided under the CWA. EPA may also want to consider making it clear that relaxing a point source effluent limitation or a nonpoint source requirement through an offset would not constitute “backsliding” if a higher limit or less restrictive nonpoint source is allowable under state Water Quality Standards or an EPA-approved TMDL, whichever applies. The GLTN also feels that this should apply to water quality trading programs consistent with Water Quality Standards. (See “backsliding” discussion below.)

The proposed regulations should also be amended to expressly allow trading as a means of providing offsets to improve water quality pending TMDL development. The regulations should clearly state that a 1.5:1 offset ratio shall constitute reasonable further progress towards attainment unless a different offset ratio is established by a state under a program approved by EPA as provided under the proposed regulations. Where a different ratio is established, the regulations should include language to have the alternate ratio constitute reasonable further progress.

The proposed 1.5:1 offset ratio is acceptable in default of states establishing a different ratio that is consistent with state water quality standards. The proposed offset ratio raises a number of technical considerations that should be clarified.

The GLTN would like to pose a couple of questions regarding the proposed antidegradation requirements for EPA’s consideration.

- a) Why does the proposed offset ratio only apply to significant (greater than 20%) new and increased uses? A fundamental difference between the air and water programs is that federal renewable operating permit requirements apply to major sources and major modifications. NPDES permits are required for all sources that discharge to the nation’s navigable waters. EPA may desire to consider applying the offset ratio to all new and increased use permits issued in impaired waters pending a TMDL.
- b) Does the 1.5:1 ratio apply to all pollutants, conventional pollutants, or only nutrients? EPA may wish to explicitly allow flexibility in the ratio according to the pollutant of concern, in addition to other factors.
- c) Are cross-pollutant and multi-media offsets allowed and if so at what ratio. Is the concept of offsets for bioaccumulative chemicals of concern consistent with the Great Lakes Initiative?

We offer the following recommendations to address these issues.

1. Language should be added to make it clear that providing an offset shall constitute reasonable further progress towards attainment, pending development and implementation of TMDLs required under the act. We recommend additional language at 40 *CFR* 131.12(a)(ii)(D) reading:





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*“The Director may determine that a different net loading reduction may be appropriate once the TMDL has been established for the relevant water body.”*

2. A 1.5:1 ratio is appropriate for nutrients. The regulations should provide language to allow different ratios to be established by the states for cross-pollutant trading or pollutants other than nutrients.
3. Offsets for oxygen demanding pollutants should be contemporaneous with the period for which they are used.
4. Offsetting should not be allowed for bioaccumulative chemicals of concern.
5. Offsets should be media specific but the regulations should not preclude the use of atmospheric emission reductions to offset for new or increased use water discharges. These types of offsets should be allowed on a case by case basis subject to state and EPA approval.
6. A 1.5:1 offset ratio may or may not be appropriate for different sources in various watersheds. The regulations appropriately allow states to establish a different offset ratio where it can be shown that a different ratio is consistent with the attainment of water quality standards.

#### *Antibacksliding*

The proposed regulations do not address antibacksliding. This is an issue that the GLTN feels the regulations need to address as both offsets and water quality trades could result in an increase in certain point source effluent limits while the net pollutant reduction to the water body decreases. EPA should add language to clarify that a point source that provides offsets or generates credits that are traded under a state program approved by EPA shall not be considered to backslide if at a later time the source decides to discontinue providing offsets or making voluntary surplus reductions to generate credits under a state program. At that time the source should be allowed to discharge at a level consistent with technology-based or water quality-based effluent limitations, whichever is applicable.

If you need additional information, please contact me at (517) 373-2677 or by email at [Batcheld@state.mi.us](mailto:Batcheld@state.mi.us).

Sincerely,

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