

State-EPA Numeric Nutrient Criteria Implementation Workgroup
Recommended Options to Address Numeric Nutrient Criteria Implementation Barriers
(Executive Summary)

A. Water Quality Standards

Barrier A-1: Variances are an available tool that could be applied or considered where it is not economically or otherwise feasible to meet uses and nutrient criteria in the near term, but there are several barriers to fully utilizing this tool.

Options to Address A-1: Consider developing:

- a. Guidance on a recommended process/framework for developing and applying nutrient-related variances and
- b. An evaluation of available data associated with each of the significant decision points in the framework and possible conclusions.

Barrier A-2: The lack of stakeholder understanding and acceptance of the link between TN and TP criteria, and the protection of designated uses and benefits of nutrient reductions (i.e., environmental responses), potentially high initial cost to meet uses and criteria, along with lack of confidence that incurring the cost will produce results, hinder states' ability to adopt and implement NNC in water quality standards (WQS).

Options to Address A-2:

- a. Consider providing technical/policy guidance for using biological indicators in conjunction with NNC and implementation to better link criteria with water quality goals to increase public buy-in and acceptance of NNC and nutrient controls.
- b. Conduct an economic study (not limited to WQS program) on the costs of enhanced nutrient removal to show what is possible, what is affordable, and that the cost to treat nutrients is not unreasonable.

B. Assessment, Listing, TMDLs, and Non-point Sources

Barrier B-1: (a) States and dischargers desire to apply adaptive management approaches to implement nutrient TMDLs, but have not been able to effectively utilize such approaches; and (b) TMDLs are resource-intensive to develop and take significant time to implement and to see improvement.

Option to Address B-1: Consider:

- a. Developing a strategy to clarify adaptive management approaches and flexibility in TMDL development and implementation. A possible strategy/set of guiding principles for national application could include consideration of State/Regional “best practices” or models of good examples, allocating more of the WLAs to point sources (as opposed to allocating all of load to nonpoint sources, resulting in less stringent limits for point sources), and providing extended timeframe for TMDL implementation and tracking

results, which may allow interim compliance with less stringent criteria, WLAs or LAs while control measures are put in place; and

- b. Phased TMDL implementation (on point source and NPS controls).

Barrier B-2: Nonpoint sources (NPS) of nutrients are a significant contribution to water quality impairment, but are very challenging to control.

Options to Address B-2

- a. Consider gathering and promoting information on or inventory of accountability frameworks for monitoring/tracking nonpoint source controls to promote accountability.
- b. Consider developing and communicating information on the cost and effectiveness of NPS controls.
- c. Explore benefits of developing new approaches/flexibilities that encourage and facilitate trading in watersheds with both point and NPS of impairment.

C. NPDES permits, technology, and compliance

Barrier C-1: While it may not be feasible for some dischargers to meet WQBELs in the immediate term, states are hindered in implementing interim technology-based permit limits for POTWs and achieving a minimum level of nutrient reductions, since there is no federal effluent guideline for nutrients.

Option to Address C-1: Explore whether to develop technology-based standards for nutrient controls.

Barrier C-2: Without NNC in the form of TN and TP (or a TMDL) in-place, permit writers have difficulty developing permit limits for TN and TP since they lack a translator with supporting data/guidance to interpret a narrative criterion and to write permits based on response variables (e.g., chlorophyll a).

Option to Address C-2: Complete the EPA nutrient permitting guidance on how to translate narrative nutrient criteria and response variables into numeric permit limits.

Barrier C-3: Facility operators have difficulty using daily and monthly maximum limits for nutrients in permits and find it burdensome to make the “impracticable” showing on a case-by-case basis (as required in 40 CFR §122.45(d), which states that “weekly” and “monthly” permit limitations are required if “practicable.”)