

Ohio Nutrient Forum

Panel Session 1.1
Setting the Right Standards and
Loading Targets



Why Consider Nutrient Standards?

- High levels of nutrients impair beneficial uses of water
- Legal framework in Clean Water Act for adopting criteria
- National recommendations were published in 2000



Recent Events (more reasons)

- 2011 U.S. EPA guidance to states:
 - Initiate effective steps to reduce nutrient pollution; and
 - Continue development of numeric nutrient WQS and work to adopt in regulation
- Threat of 3rd party intervention
 - Florida & Mississippi River Basin (Gulf hypoxia)



What has Ohio done?

- Ohio EPA field studies support development of Trophic Index Criterion (TIC)
- A multi-metric approach of diagnosing nutrient pollution in streams & rivers
 - Biological responses (Chlorophyll, fish & bugs)
 - Dissolved oxygen response
 - Total phosphorus and nitrogen levels



TIC Scores Provide Stream Status

Status of Stream	Action Taken
Impaired – nutrient enrichment is documented	TP and N targets set the TMDL load reductions goals; Highest priority implementation
Threatened – nutrient enrichment is likely now or in the future	Place on watch or study list; TMDL may be required; Moderate – high priority
Acceptable – nutrient enrichment is not likely	No TMDL needed; Re-assess in future



Bottom Line

- Confirm the problem is from nutrients using several lines of evidence
- Expect load reduction goals of 50% or more
- Initiate steps to correct with all available tools



Let's ask the panel to weigh in:

- Should there be water quality criteria for nutrients? What should it look like?
- Should TIC be in the tool box (adopt as WQS)?
- How do we go about achieving at least a 50% load reduction in all of the impaired waters?

