



# **WEF NUTRIENT TMDL DEVELOPMENT WORKSHOP**

Crowne Plaza Old Town  
Alexandria, VA, USA  
September 4-5, 2007





## Nutrient TMDLs – Where are we?

Cause of Impairment	# of Impairments	# of Approved TMDLs
Nutrients	5,617	3,102
Oxygen Depletion	4,540	1,375
Causes Unknown – Biological Integrity	2,867	0
Turbidity	2,050	581
Algal Growth	510	65
Ammonia	416	0
Fish Consumption Advisory-Pollutant Unspecified	260	0
Noxious Aquatic Plants	247	21
Taste, Color & Odor	83	5
Harmful Algal Blooms	4	0
Cause Unknown – Biotoxins	4	0
<b>CATEGORY TOTALS</b>	<b>16,598</b>	<b>5,149</b>
<b>TOTAL IMPAIRMENTS</b>	<b>63,620</b>	<b>24,814</b>



Source: [http://iaspub.epa.gov/waters/national\\_rept.control](http://iaspub.epa.gov/waters/national_rept.control)



- EPA has focused greater attention on nutrient-related impairments and the development of numeric nutrient criteria.
- EPA's 1999 "Protocol for Developing Nutrient TMDLs" is available at:  
[www.epa.gov/owow/tmdl/nutrient/pdf/nutrient.pdf](http://www.epa.gov/owow/tmdl/nutrient/pdf/nutrient.pdf)
- Workshop developed by WEF under a cooperative agreement with the EPA to contribute to the reduction of nutrient levels in impaired waterbodies by building the capacity of State, local, regional, and Tribal officials and third-parties to develop approvable and implementable nutrient TMDLs.





# Agenda – September 4

- 9:00am - Welcome
- 9:10am - Pre-Training Exam
- 9:20am - Problem Identification
- 9:45am - Identification of Water Quality Indicators and Target Values
- 10:45am - Networking Break
- 11:00am - Sources and Surface Water Assessment
- 12:00pm - Lunch and Moderated Q&A
- 1:00pm - Linking Targets and Sources
- 2:45pm - Networking Break
- 3:00pm - Load Allocations and Margin of Safety
- 4:30pm - Adjourn





# Agenda – September 5

- 9:00am - Monitoring Plans
- 10:00am - TMDL Submission
- 10:30am - Networking Break
- 10:45am - Implementation
- 12:00pm - Implementation Roundtable
- 12:20pm - Wrap-up
- 12:25pm - Post-training Exam
- 12:30pm - Adjourn





## Exams

- Administered pre- and post-workshop
- Anonymous
- Designed to allow WEF to measure and report “environmental outcomes” of the workshop to EPA
- Please take the next 5 minutes to complete the “Pre-Training Exam”





## Third-Party TMDLs

- A third-party TMDL is a TMDL in which an organization or group other than the lead water quality agency takes responsibility for developing the TMDL document and supporting analysis.
- WEF recently released a Tool Kit to educate stakeholders and encourage greater third-party participation in TMDL development.
- Extra copies available from WEF

