The Clean Water Act

Section 101(a)

• Objective: “restore and maintain the chemical, physical and biological integrity of the Nation’s waters”

• (1) Goal: “the discharge of pollutants into navigable waters be eliminated by 1985”

• (2) Interim goal: “water quality which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water”, wherever attainable
States and Authorized Tribes Administer the WQS Program

• Charged with monitoring and assessing the water quality of surface waters (Sections 106, 305b, 303d)

• Have the primary authority to adopt, review and revise water quality standards (Section 303 (c) of the CWA)
EPA Provides Oversight and Assistance to States and Authorized Tribes

- Primary contacts with States and Tribes for water programs
- Provide technical assistance
- Ensure consistency with the CWA and across State/Tribal programs
Water Quality Standards

- Designated Uses
- Criteria to protect those uses
- Antidegradation Policy
What’s the bottom line?

Are the designated uses protected?
How do we determine whether designated Uses are protected?

Need benchmarks!

CWA calls these water quality criteria.

States have the flexibility to derive their own criteria as long as uses are protected.

For shared waters, EPA wants maximum consistency.
Forms of Criteria

• States should adopt (1) Numerical Criteria based on:
  – 304(a) Guidance, or
  – 304(a) Guidance Modified to Reflect Site-Specific Conditions, or
  – Other Scientifically Defensible Methods

• And (2) Narrative Criteria or Criteria based on Biological Monitoring and Assessment Methods to Supplement Numerical Criteria
Monitoring Approaches….

Indicators?

Sampling design?

Assessment approach?
Benchmarks/Criteria

Indicators and Sampling Design
Water Quality-based Adaptive Management

1. Determine Protection Level (EPA Criteria/State WQS)
2. Conduct WQ Assessment (Identify Impaired Waters)
3. Set Priorities (Rank/Target Waterbodies)
4. Evaluate Appropriateness of WQS for Specific Waters (Reaffirm WQS)
5. Identify appropriate water quality restoration strategy
6. Implement restoration activities
7. Monitor and Enforce Compliance
8. Measure Progress