Iowa's Perspective on Developing a State Monitoring Strategy

Mary Skopec

Iowa Department of Natural Resources

Region 7's Steps for Constructing a Strategy

- Describe the state's program (+ understand what other agencies are doing to monitor in the state)
- Identify and lay out all program objectives
- Inventory all water resource classes (How much of each kind)
- Examine the monitoring of design for each class to identify the resource coverage gaps or design (science) issues.
- Examine the monitoring system for ability to meet program objectives and other science issues (program weaknesses) such as inadequate indicators or reference condition, etc.
- Evaluate the system against the remainder of the 10 elements.
- Develop a strategy to address each gap and weakness (include what other agencies are doing)
- Prioritize the gaps and weaknesses
- Address the implementation issues early and often

Iowa Strategy as a Region 7 Model

- *Features:*
  - Complete description of the current monitoring program
  - A Description of all the following:
    - gaps = primarily unmonitored or unassessed resource classes
    - weaknesses = assessment deficiency (e.g., lack of appropriately defined reference conditions and/or indicators)
    - opportunities to improve the program (e.g., coordination)
  - A discussion of Root Causes of the gaps and weaknesses
  - A detailed plan to address each gap and weakness (including timeline, costs, priority, etc.)

Quick Background Info

- Prior to 1999, Iowa spent $0 on surface water monitoring ($125K EPA funded)
- New Governor in 2000 – WQ is Priority
- $1 Million in 2000; now $2.95 Million
- Stakeholder and Technical Groups
- Nonexistent TMDL program in 2000
- Iowa Environmental Council – pressure State on TMDLs, Standards

Positive Side of Strategies ☺

- Ten Elements seemingly spell out requirements
- Beneficial – link Objectives to Design
- Data Management is Relatively Easy
- General Support/Infrastructure is Good
- QA/QC is painful, but clearly defined

Gaps and Weakness Identification

- Allows staff to look at the program through “new eyes” and prioritize
  - Fish Tissue
  - Wetland monitoring
  - Precipitation

Negative Side of Strategies ☹

- The Devil is in the Detail
- How Does One Define a “Strategy”
  - What is it?
  - Who do you bring to the table?
  - When do you bring them to the table?

Problem Areas for Iowa

- What is “comprehensive monitoring?”
  - Long discussions about intermittent and headwater streams, farm ponds, wetlands, private lakes, beaches
  - Which analytes to include? Are you limited to those with WQS?
  - How do you achieve balance?
  - Has identified a “niche” for our volunteers

Problem Areas for Iowa

- Core Indicators of Water Quality
  - Governor wants something simple (1 “measure”). Is the WQ better or worse?
  - Just beginning to develop IBIs
  - Many of our WQ issues are nutrient related, but no standards yet...
  - How to integrate Biological, Habitat Data with CWA standards and TMDLs?

Strategies are Dynamic

- Constant Battle to Keep Management Informed, Engaged
  - Resources pulled toward TMDLs
  - Diverting resources toward gaps and weaknesses without maintaining existing monitoring just creates new gaps….
  - Long-term payoff vs. short term needs (why are you doing biological monitoring anyway?)
  - Building monitoring partnerships takes time and commitment

Future Needs

- Have Yet to Address How to Implement On-going Program Evaluation.
- Data Analysis & Reporting

Overall Impression

- Has Helped to Improve the Monitoring
- EPA and IDNR are on the same page
- Resources are more effectively targeted
- Puts pressure on data analysis, reporting, evaluation pieces