

Perspectives on TMDLs in Ohio

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Maumee River Basin
Partnership of Local Governments
July 30, 2002

I envision TMDLs to be a kind of information-based strategy which, if done properly, can inform, empower, and energize citizens, local communities, and States to improve water quality at the local, watershed level. The basic information derived from a sound TMDL could liberate the creative energies of those most likely to benefit from reduced pollutant loadings to their own waters.

-- G. Tracy Mehan

Assistant Administrator for Water, U.S. EPA

in subcommittee testimony before U.S. House of Representatives

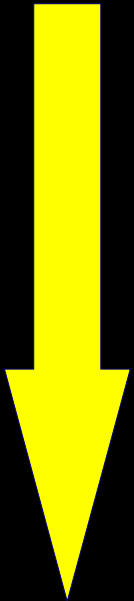
Nov 15, 2001

Today's Discussion

- The Clean Water Act
 - History
- TMDLs
 - History
 - Overview
- Ohio and TMDLs
 - Process
 - Projects
 - List of impaired waters

Path to the Clean Water Act

**Use
Focus**



**Quality
Focus**

Treat rivers as an integrated system	U.S. Inland Waterways Comm.	1890s
Surgeon General assist states in developing pollution controls; funds for public sewage works	Water Pollution Control Act	1948, 1956 am.
States develop standards for interstate waters	Water Quality Act	1965
Restore and maintain the integrity of waters	Water Pollution Control Act	1972

Clean Water Act: What

- Federal Water Pollution Control Act of 1972, amended in 1977, 1981, 1987
- First comprehensive national clean water legislation
- Response to growing public concern about serious and widespread water pollution
- Primary federal law that protects our nation's waters

Clean Water Act: Why

- Main objective is to restore and maintain the "chemical, physical, and biological integrity of the Nation's waters"
- Two fundamental national goals:
 - eliminate the discharge of pollutants into the nation's waters
 - achieve water quality levels that are fishable and swimmable

Clean Water Act: How

- Comprehensive framework of standards, technical tools and financial assistance to address the many causes of pollution and poor water quality
- Requires major industries to meet performance standards to ensure pollution control

Clean Water Act: How

- Requires states to set specific water quality criteria appropriate for their waters and to develop pollution control programs to meet them
- Provides funding to meet clean water infrastructure needs

Clean Water Act: The Significance of Section 303(d)

- 1972 Act was first appearance of a permitting system, joining the standards approach
- 303(d) is safety net for when the technological controls don't work
- States must
 - List and prioritize impaired waters
 - Evaluate what action is needed to fix the problems

TMDL: Missing in Action

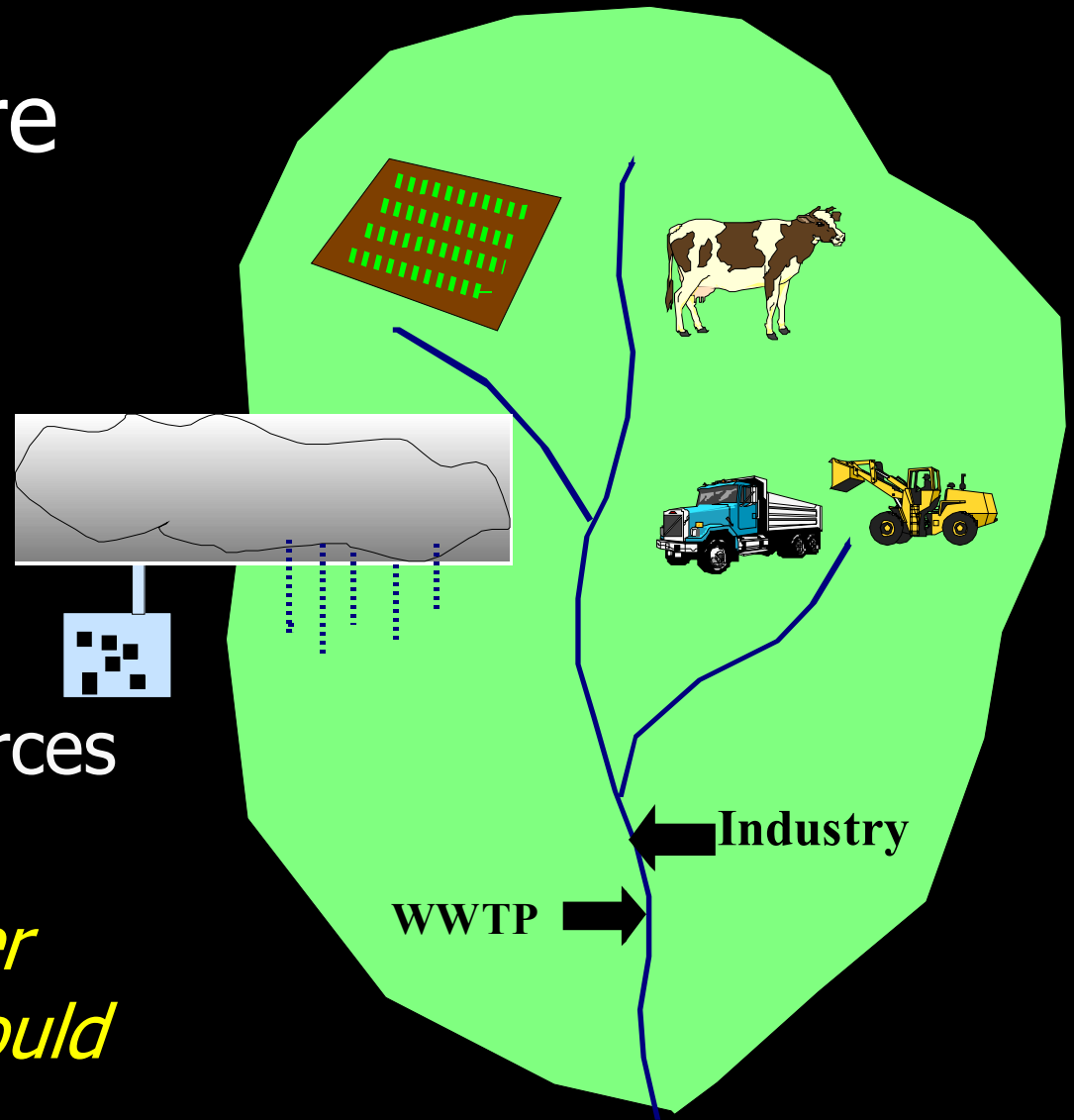
- Largely ignored as U.S. EPA set up a permit system and defined technology controls for industries and sewage treatment facilities; states ignored
- Early lawsuits to get states and U.S. EPA to comply
- 1989 GAO report: U.S. EPA had virtually no TMDL program at all
- In 1991, U.S. EPA published first guidelines for state implementation

What Is a TMDL?

- The maximum amount of a pollutant a waterbody can contain and still maintain water quality standards
- $\text{TMDL} = \text{point source load} + \text{nonpoint source load} + \text{background} + \text{margin of safety}$
- A plan to bring waters into attainment with water quality standards

TMDLs: A Picture

- Holistic approach
- Watershed focus
- Pollutant specific
- Account for all sources
- *If waters reach attainment by other means, a TMDL would not be necessary*



TMDL History (1)

- Until early-to-mid 1990s, U.S. EPA accepted Ohio wasteload allocations as TMDLs
- 1990s: lawsuits nationwide charging U.S. EPA with not enforcing CWA
- GLI in mid-1990s likely delayed TMDL controversy in Region 5; Ohio TMDL rule adopted in GLI (1997)
- As a grant requirement, Ohio EPA prepared its first TMDL schedule (1999)

TMDL History (2)

- Ohio defined a TMDL process using an external advisory group (1999-2000)
- 2002-2003 budget request for additional \$4+ million not granted by legislature (Jun 2001)
- Ohio EPA notified U.S. EPA that schedule would not be maintained (Aug 2001)
- On Oct 29, 2001, Ohio became 41st state to be targeted in litigation



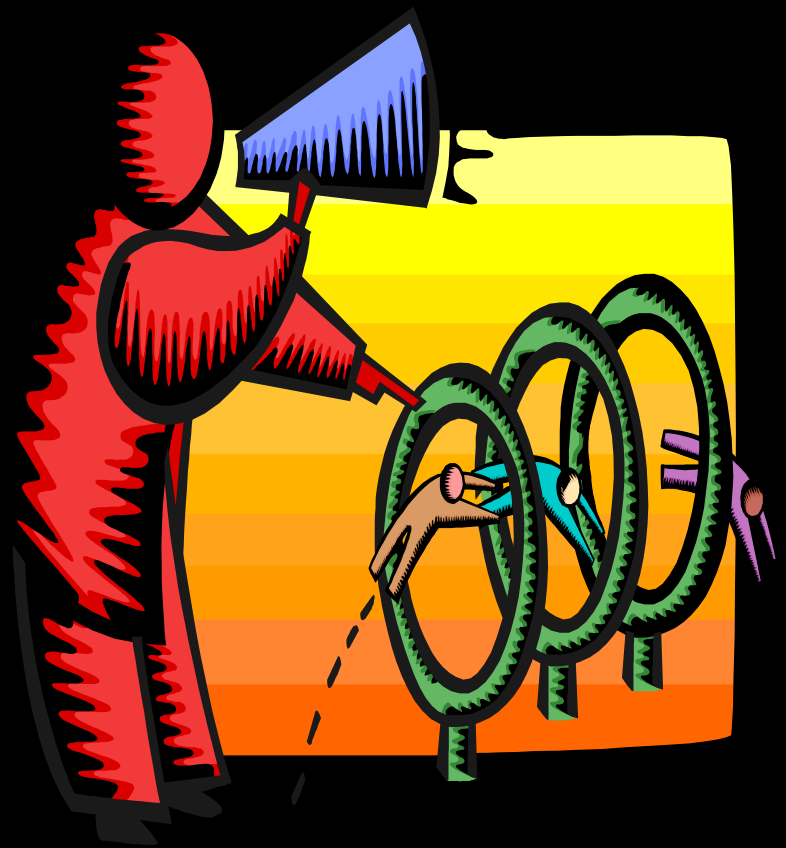
Ohio Litigation

- Plaintiffs are National Wildlife Federation, League of Ohio Sportsmen, and Ohio Environmental Council
- Asking for 8-year schedule, disapproval of Ohio TMDL submittals to date, and other remedies
- Four interveners: major municipalities, Ohio CoC, electric utilities, Ohio EPA

Ohio TMDL Process

- Initial instructions, continuing support:

*Meet the federal requirement ...
but do what
makes sense for
Ohio*



What Makes Sense for Ohio

- Make the work count
- Build on our strengths; integrate internally
- Build support and alignment by focusing on resource and goal
 - We can't do this alone
 - Need best decisions and sustainable solutions
 - Other organizations have money, experts, field presence to address problems
 - Involve local stakeholders: decision-making, resources, authority, follow-through

Ohio TMDL Process Overview

1. Design survey
2. Collect data
3. Assess data
4. Define goal
5. Develop targets
6. Select scenario
7. Prepare plan
8. Submit report
9. Implement internally
10. Implement externally
11. Annual validation
12. Check status

Assess

Develop

Implement

Validate

Ohio TMDL Process

- Project management format; scale flexible to project
- Program integration focus
- Interdisciplinary project teams
- Incorporate environmental indicators
- Endorsed by external advisory group
- Approach supported by NAS study
- Involve public to promote problem-solving and decision-making

Ohio TMDL Projects

- 20 projects in progress
- From 1 to 67 “TMDLs” per project
- Size range: from 83 to 660 sq mi
- Focus so far on nutrients, sediment, dissolved oxygen, habitat
- Reduce loads *and* expand capacity (habitat enhancements)

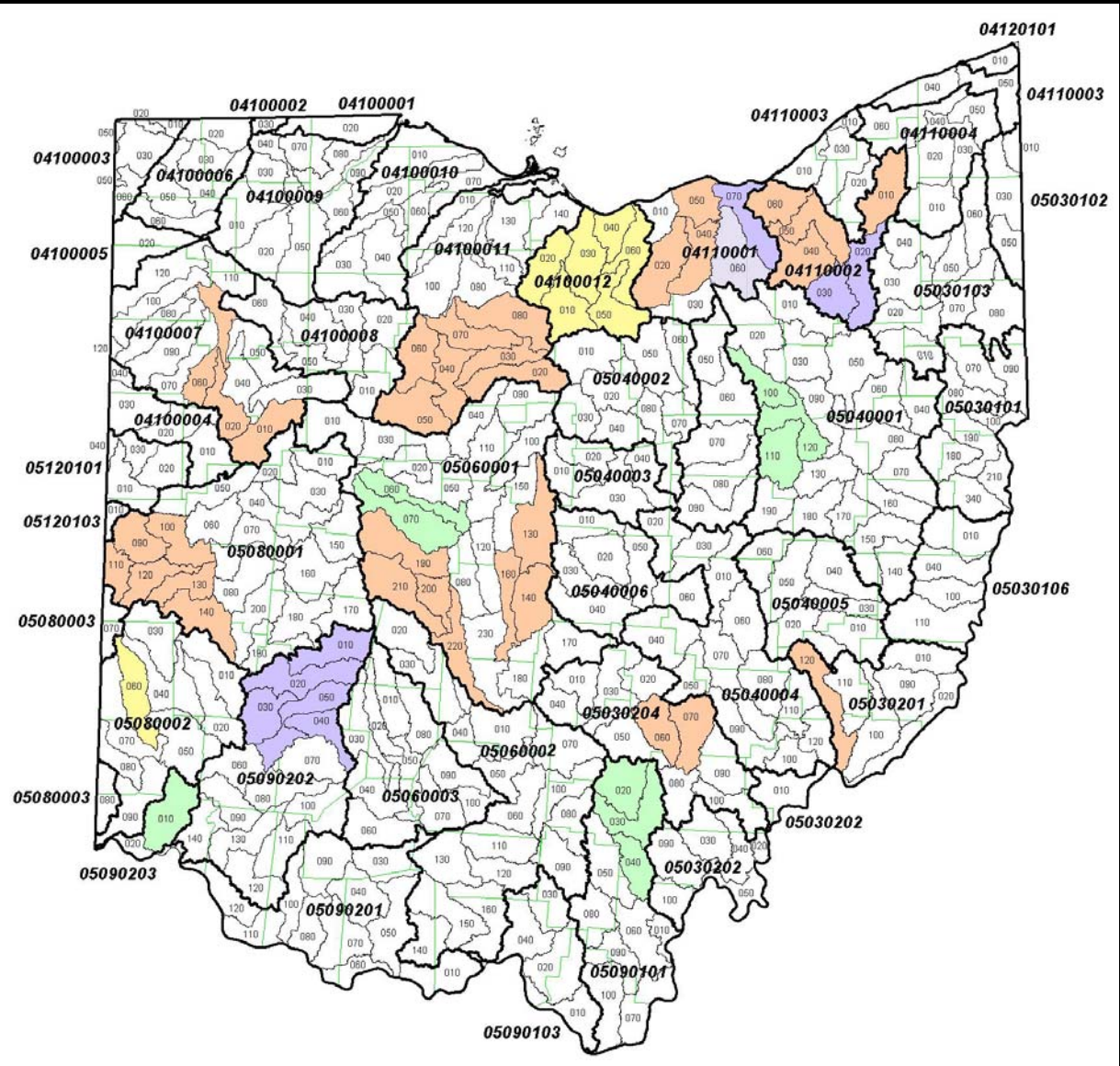
TMDL Status

U.S. EPA
approved

Draft report

Development
phase

Assessment
phase



What Have We Learned?

- Importance of
 - Partnering with other agencies: resources, expertise, authorities
 - Local involvement: decision-making, resources, authority, follow-through
 - Public participation
- Time demands of the above
- U.S. EPA approval isn't the end: implementing changes is big effort

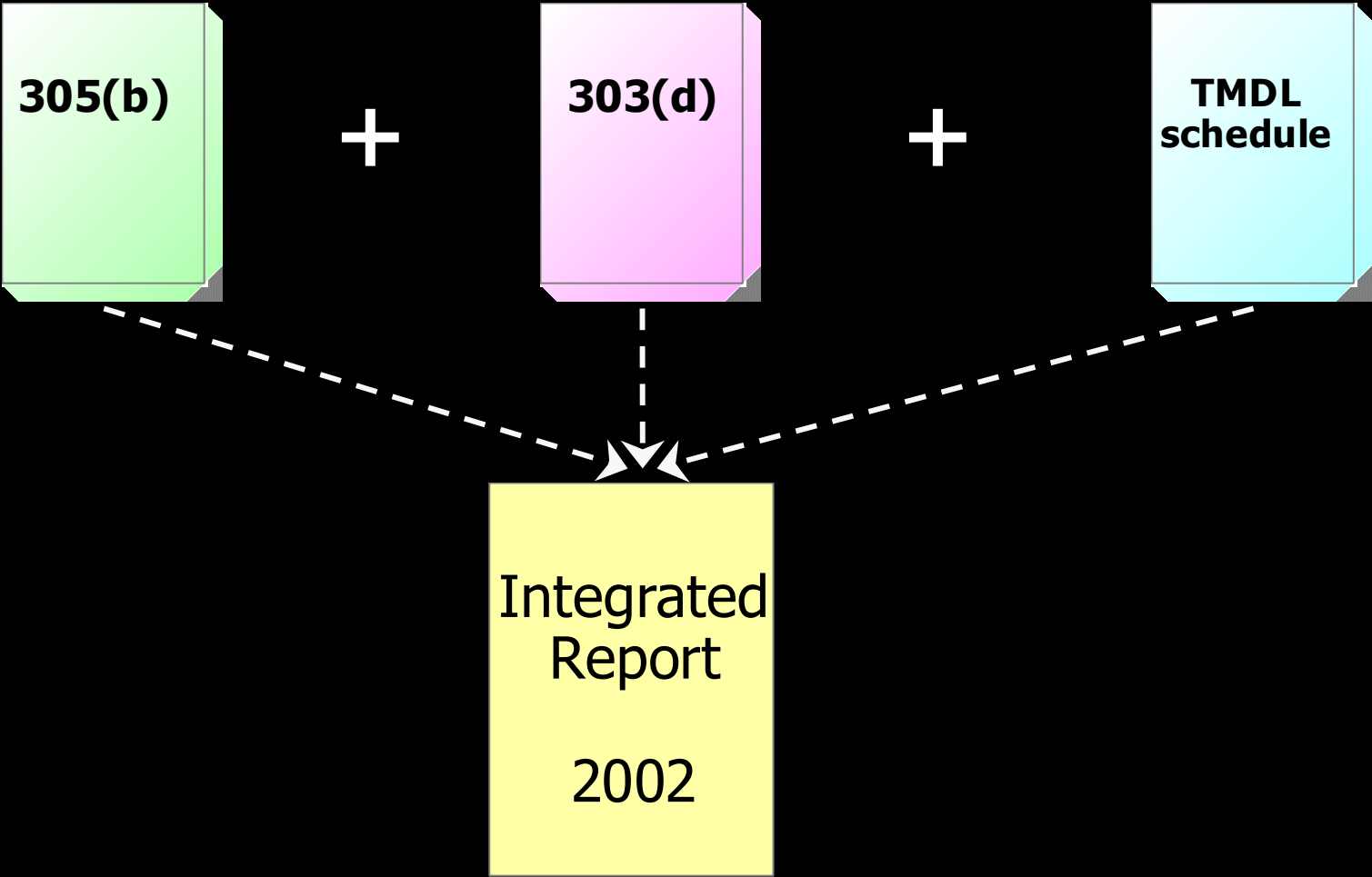
What's Next in Ohio?

- Monitor/adjust resources to budget
- Continue ongoing projects, working toward full implementation of TMDL process
- Evaluate/comment on federal rules being reconsidered
- Attend to lawsuit

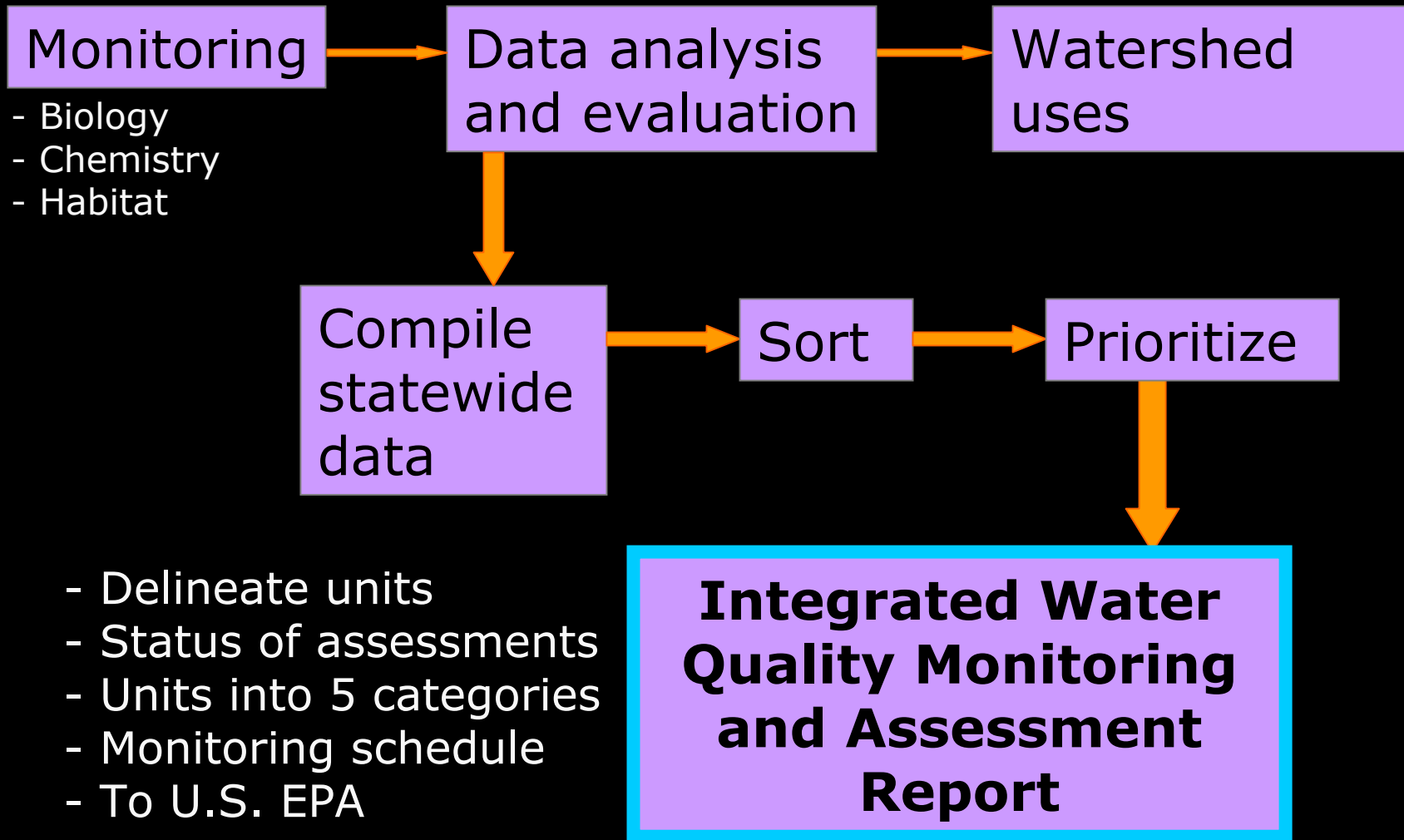
What's Next in Ohio?

- Incorporate EAG recommendations
- Find ways to work with other watershed efforts: efficient use of public and private monies and energies for real environmental gain
- Complete new 303(d) list, schedule 2002

Listing in a Nutshell



2002 Integrated Listing




2002 Integrated Report Guidance

- State assessment methodology
- Integrated list of State waters categorized by
 - Water quality standards attainment status
 - Need for a TMDL
 - Availability of data for attainment determinations
- Data supporting the listing of each water
 - Geo-referenced location based on NHD
 - Causes and sources
 - TMDL and monitoring schedules
- Summary of public comments and responses

2002 Assessment Categories

1. Attaining WQS; no use threatened
2. Attaining some uses; insufficient data
3. Insufficient data to decide any use
4. Impaired but doesn't require TMDL
 - TMDL complete
 - Other control requirement is sufficient
 - Impairment not caused by pollutant
5. Impaired and requires TMDL



**303(d)
List**

2002 IR Timeline and Status

- “305(b)” statistics available April 1, per CWA
- Report to U.S. EPA Oct 1, 2002
- Public comment in August
- Methodology development and initial sorting in progress
- Will post on web page as available

TMDL Information

- Ohio EPA:
www.epa.state.oh.us/dsw/programs/
- U.S. EPA:
www.epa.gov/owow/tmdl
- ASIWPCA:
www.asiwpca.org
www.tmdls.net

Watershed efforts do not function
as a rationally designed
engineering or legal process,
however, but as turbulent
democracy at work.

– from Environment.gov
November 2000

National Academy of Public Administration