NWQMC
NATIONAL WATER QUALITY MONITORING COUNCIL
Working Together for Clean Water

Methods and Data Comparability Board

Highlights of Work Group Activities from Across the Board

What if ..

- What if monitoring programs could, at the same time, pursue their own goals and activities and also integrate information from other sources to support their needs?
- What if data and information from a variety of sources could be aggregated to improve coverage across jurisdictions?
- What if we could design programs and use monitoring information collaboratively to better understand how to protect and manage our waters andwatersheds?
- What if this integration, aggregration, and collaboration enabled us to achieve a better return on public and private investments?

These "what ifs" can only be realized if we all strive for comparability!

A Strategy to Achieve Comparability

The Methods Board has devised an operational strategy for comparability that includes four key elements to ensure that data are well documented, consistent, and of known quality. It is critical in the planning and implementation stage of any monitoring program to address each of these elements and associated considerations to optimize the benefit of the resources spent on monitoring sources to support their needs.

Elements	Key Considerations
Identify objectives and design monitoring program	• Study objectives • Monitoring questions • Data-quality objectives and requirements • Measurement quality objectives • Sampling design
Collect data in the field	• Field accreditation/certification and training • Field-activity protocols • Field-method quality control and assessment • Sample handling and preservation
Collect data in the laboratory	• Method comparability • Laboratory accreditation • Reference materials availability • Laboratory method verification
Manage data	• Required metadata • Data-quality documentation • Data verification and analysis

About the Methods and Data Comparabiltiy Board

The Methods and Data Comparability Board (Methods Board) is a partnership of water quality experts from Federal agencies, tribal, states, municipalities, industry, and private organizations who all share a commitment to developing water quality monitoring approaches that facilitate collaboration and comparability among all data-gathering organizations.

Both the Methods Board and its parent organization, the National Water Quality Monitoring Council (National Council) are co-chaired by USGS and USEPA. The National Council is a subgroup under the Advisory Committee on Water Information, chartered under the Federal Advisory Committee Act. The Methods Board and the National Council are charged with developing a voluntary, integrated, and nationwide water quality monitoring strategy.

National Environmental Methods Index

NEMI is the one-stop for environmental monitoring methods.

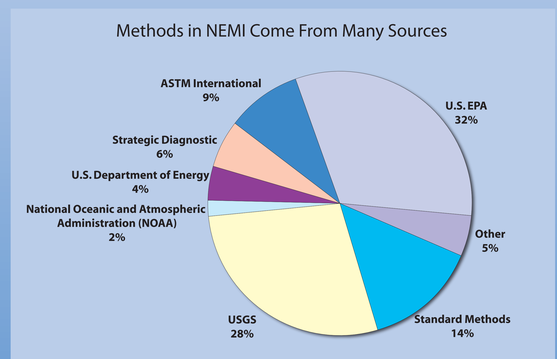
Over 1,000 methods from Federal, State and Private Sources.

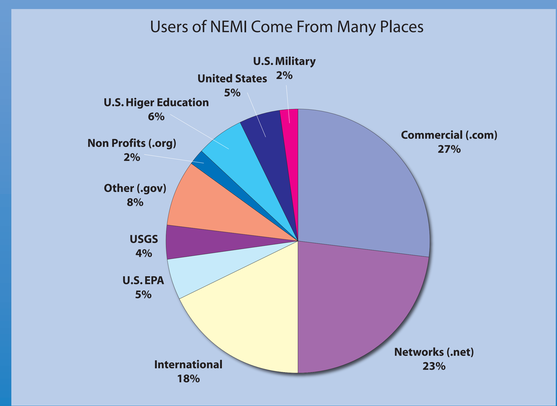
Population/Community, Toxicity and Field-Analysis Methods Being Added.

"Green" methods rating being developed to define, identify, and promote analytical chemistry mothods that:
- use fewer harmful solvents
- use safer chemicals
- and prevent waste

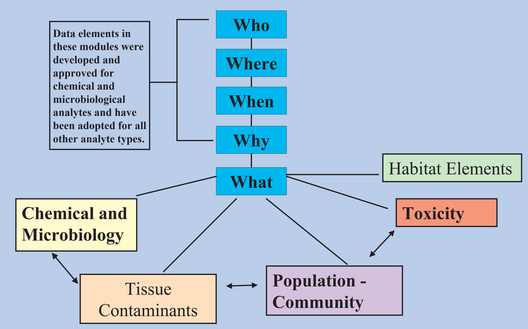
Green Chemistry Institute, American Chemical Society

Available free on the internet at http://www.nemi.gov





Water Quality Data Elements



Modular Framework for the Water Quality Data Elements (WQDE)

Who, where, when, why, and what correspond to the WQDE modules:

- Point of Contact, Sampling Location, Date/Time, Reason for Sampling, and Result
- Sample collection module for processing, analyzing, and QA/QC
- Toxicity and population/comunity WQDE are newly developed
- Chemical and Microbiological WQDE are published in NWQMC Technical Report Volume 3
- Habitat and Tissue Contaminant data are currently under development

Help NEMI grow...

Join our Cooperative Research and Development Agreement (CRADA).

Cooperative partners will gain visibility through public recognition and strategic interaction with other leaders in the environmental monitoring field !

Go to
http://www.nemi.gov
to find out more.

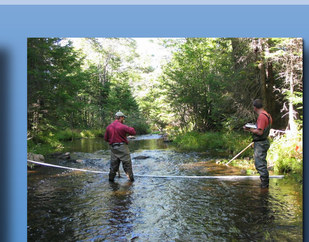
Sensors and Sensor Technology

- New Work Group forming to address issues common to use of sensors in monitoring situations
- Includes representation from resource management community, research, and private sector

Additional new Work Groups are forming related to:

- Contaminants
- Event monitoring
- Statistics

If you are interested in participating in any of these Work Groups, then go to the Board's home page and contact the USGS and USEPA Co-Chairs and Executive Secretary to determine how you can help.



For More Information on Methods and Data Comparability Board:
http://acwi.gov/methods/