

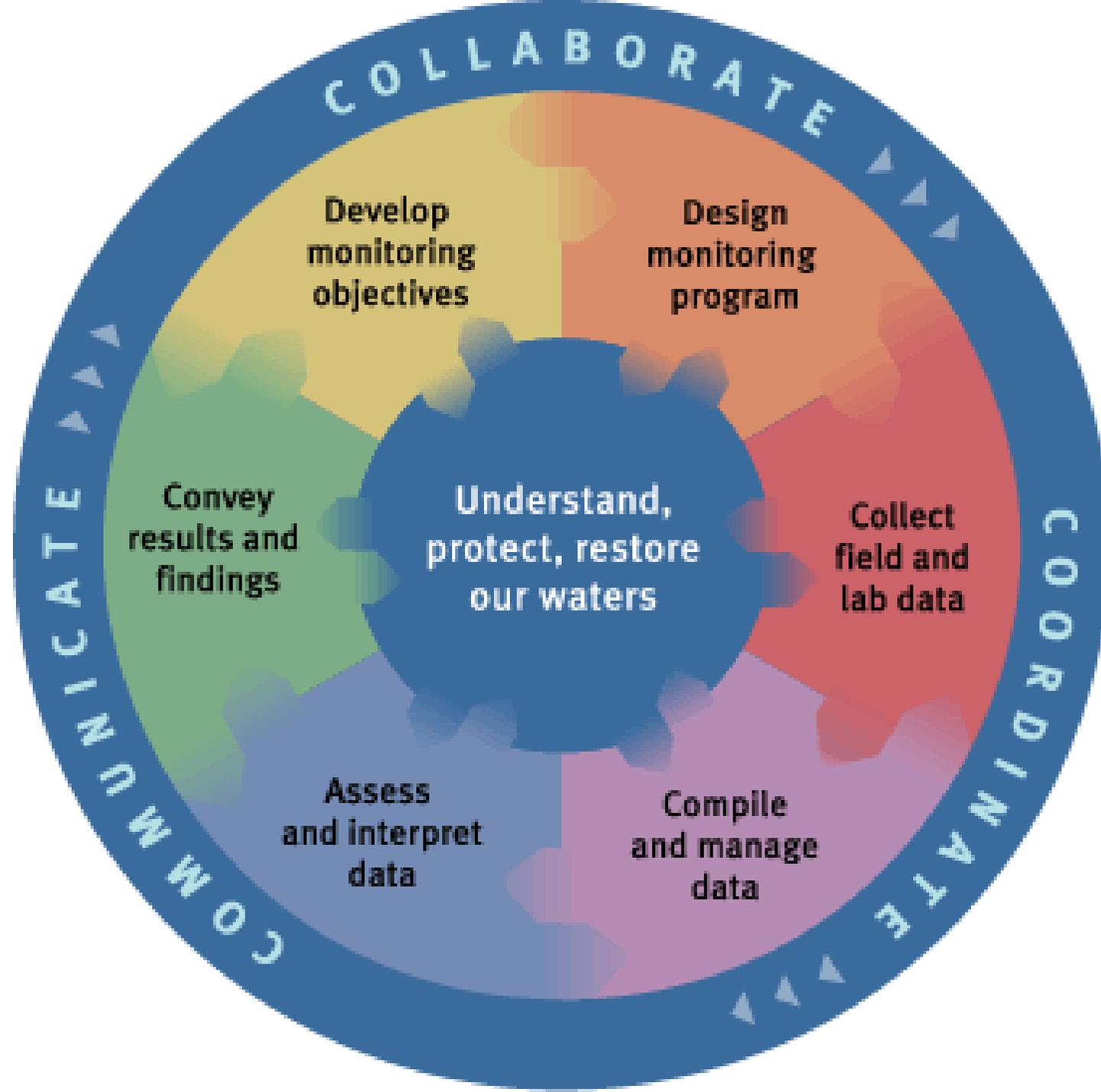
Objectives of this session

- Review our purpose and functions
- Discuss our progress, gaps, opportunities
- Propose next steps

Strategy for Monitoring

Final Report of the Intergovernmental Task Force on Water Quality Monitoring, 1995

- Vision - To support sound water quality decision making at all levels of government and private sector. Programs pursue their own goals and better use information from others. Through collaboration taxpayers and resource managers will get better answers to the following questions:
 - What is the condition of the nations' waters
 - Where, how and why are water quality conditions changing
 - Where are the water quality problems, what is causing them
 - Are programs to prevent or remediate problems working effectively
 - Are water quality goals and standards being met
- Elements of the strategy
 - Goal oriented monitoring and indicators
 - Build on existing information
 - Flexible, collaborative and comprehensive
 - Comparable, documented, accessible
 - Communicate assessment and report findings



NWQMC Purpose

Terms of Reference from Advisory Committee on Water Information and ITFM Final Report, 1995

- Champion and support water quality information for natural resource management and environmental protection, including consideration of quantity
- Coordinate and provide guidance and technical support for implementation of ITFM recommendations
- Stimulate monitoring improvements to achieve comparable and scientifically defensible information water quality conditions
- Support decision making at local, state, interstate, regional, tribal, national scale

Council Functions and Tasks

- Maintain institutional framework
- Evaluate progress
- Method and data comparability
- Data quality and documentation
- Information management and sharing
- Data elements, codes and reference tables
- National assessment
- Reporting and public education
- Information dissemination
- National and international activities

Maintain Institutional Framework

- Implement the strategy
- Establish and maintain collaborative partnerships
- Link organizations at national, tribal, regional, state and watershed levels
- Membership - 35 members: 10 state, 10 federal, 11 NGO
 - Affiliation - Federal, tribal, interstate, state, local, municipal gov; watershed groups; national associations, incl volunteer monitoring groups
 - Experience - Collect, analyze, interpret, disseminate, or use water quality monitoring info, develop technology, etc.
 - Interests – tribal, agriculture, environment, industry, local, municipal, river basin commission/association, universities, volunteer monitoring groups

Evaluate Progress

- Evaluate and report progress in implementing the strategy
- Accomplishments, plans, recommendations
- Organizations that participate in implementing the strategy and framework

Methods and Data Comparability

- Establish Methods and Data Comparability Board
- Provide technical guidance and coordinate other support
- Document and recommend adoption of comparable measurements that have known quality
- Develop and adopt standard data-element based names and definitions
- Implement a performance-based methods system
- Establish reference conditions for shared use in bio/eco monitoring

Data Quality and Documentation

- Foster implementation of monitoring where data quality is known
- Data quality documentation is adequate for information sharing
- Data quality objectives identify the precision and accuracy of data needed to achieve the program monitoring goal
- QA/QC procedures are appropriate to purposes of the program, followed correctly, and documented with data in storage systems

Methods and Data Elements

- Establish and maintain process to identify and distribute comparable physical, chemical and biological methods and data elements
- Produce guidance for use of comparable methods and data elements
- Encourage collaboration to achieve comparable and relevant methods and data elements at state and watershed level

Information Management and Sharing

- Provide easy access to and support sharing of information
- Create links among information systems that will constitute a nationwide distributed water information network
- Facilitate sharing of water quality information that would be useful to secondary users, but is not currently available
- Identify requirements and recommend activities to facilitate data quality, comparability and sharing

Data Elements, Codes and Reference Tables

- Adopt and maintain agreed-upon water quality data elements glossary promoting common data element definitions and format
- Update and refine to meet additional requirements
- Metadata standards describe the content, quality, condition and other characteristics of data essential to evaluating potential for secondary use
- Share and maintain ancillary data widely used for interpretation, such as land use/land cover, demographics, etc.

National Assessment

- Foster collaboration among organizations that participate in national, multistate, or state assessments of water quality conditions and trends
- Develop and distribute guidelines and procedures to improve the interpretation of the physical, chemical and biological/ecological data

Reporting and Public Education

- Foster better understanding of water quality conditions and trends among decisionmakers and the general public
- Develop common or linked information presentation and reporting methods

Information Dissemination

- Use modern information technology to make the activities, conventions, protocols and guidelines widely accessible

Other National and International Activities

- Collaborate with other national (or large scale sub-national) monitoring and assessment activities
- Use existing mechanisms like conferences to foster communication, collaboration and consensus to improve the availability and utility of water quality information internationally

Discussion

- Breakout groups each assigned 2 topics
- Identify a different person to report out for each topic
- Discuss each topic, for example
 - What it means to you, to your organization
 - What you, the council or others have contributed to date
 - Important gaps
 - Advances you'd like to see
 - Ideas on how the council could lead or support
- Share, discuss, select priority topics

Report out

- Maintain institutional framework, membership
 - Oil and gas industry – have lots of data
 - Ag industry and nracs – also have lots of data
 - Disseminate information
 - Bring water quantity perspective to council
 - Methods board?
- Evaluate progress
 - Systematic evaluation of progress with respect to functions
 - Impacts of council on advancing monitoring
 - Share importance of monitoring in briefings, convey key mssg of fact sheets
 - Seek support from ACWI to help champion increased data submission and attention to data quality documentation

Report out

- Method and data comparability
 - Certification for young water quality professionals, e.g., data submission?
 - Improve use and clarity in reporting non-detect, reporting limits, detection limits
 - Biological data comparability
 - Incentives for getting data in portal
 - BCG as comparable data
 - Get consistent use of methods and consistent, complete reporting
 - Prioritize contaminants

Report out

- Data quality and documentation
 - Use models for information
 - Foster use and recording of observational data
 - Launch council products
 - Work on data quality issues – webinars on why and how
- Information Dissemination
 - Outcome measure for dissemination of info, like web search, track hits
 - Virtual conference attendance
 - Use portal as gateway to other information and tools
 - Marketing to people to add data and improve documentation
 - Explore more media options, eg. tweets

Report out

- National and international activities
 - Presentations at conference
 - Focus on transboundary
- Other
 - Relationship of standards and implementation

Report Out

Information Management and Sharing:

- Accomplishments:
 - WQP, NMN Conference, WIS fact sheets
- Gaps:
 - Getting key data sets into WQP including NOAA, NPS, academic data (CUAHSI), and volmon/citizen science datasets
 - Addition of QA/QC data to WQP
 - Addition of metadata for current and future data in WQP
 - Identifying requirements for continuous QW data for the WQP (or alternate web portal)
 - Develop clearinghouse for state water-quality and bioassessment methods

Report Out

Data Elements, codes, and reference tables

- Accomplishments:
 - Minimum QW data elements, NEMI
- Gaps:
 - Develop crosswalk of water-quality parameters
 - Get list of reference tables
 - Work on metadata requirements for all data
 - Tiered framework for quality of data

Report Out

National Assessment

- Accomplishments:
 - Have been able to get NAWQA, NARS, and ATTAIN programs working together.
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- Gaps:
 - Advertise impacts of national assessments
 - Bring assessment teams (programs?) together to tackle causal analysis at national level
 - Foster better data
 - Promote assessment results as much as the data collected to support the assessment

Report Out

- Reporting and public education
- Accomplishments:
 - NMN Conference, website, webinars, newsletter
- Gaps
 - More webinars, fact sheets
 - Get more individuals on the ground promoting Council activities
 - Need to conduct more listening sessions to better understand QW information needs
 - Include narrative data (semi and non-quantitative data)
 - Conduct QW information campaign in city we hold National Monitoring Conference

Report Out

- National and International Activities
- Accomplishments:
- International participation at the National Monitoring Conference and newsletter articles.
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- Gaps
- International data; recommend focus on transboundary data sets for Canada and Mexico