Building & Sustaining Collaborative Monitoring Councils

Chattanooga 2004 workshop
Monday, May 17
# Draft Outline for Part 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Details</th>
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<tbody>
<tr>
<td>8:30-9:15</td>
<td>Introduction to session—(45 minutes)</td>
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<tr>
<td></td>
<td>• Introduction—Why are we all here?</td>
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<td>• Overview of framework and relationship to 3 Cs—what are the values of building collaborative monitoring councils?</td>
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<td>• Overview of state/regional councils (different models, goals, structures)</td>
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<td>9:15-9:45</td>
<td>Identifying monitoring communities &amp; stakeholders (large group discussion)</td>
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<td>9:45-10:45</td>
<td>Building a monitoring map, Part 1 —What does monitoring look like NOW in my state/region</td>
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<td>10:45-11:15</td>
<td>What’s in it for me...Beginning to address WIFM</td>
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<td>11:15-11:30</td>
<td>Wrap-Up of morning session</td>
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Development of a national monitoring strategy requires that we create a framework for enhancing collaboration and comparability among programs.
What is a Monitoring Framework?

- The process of monitoring and assessment should principally be seen as a sequence of related activities that
  - start with the definition of information needs and
  - end with the use of the information product.

UN/ECE Task Force on Monitoring and Assessment (2000)
The Outer Circle Holds the Framework Together
Develop Monitoring Objectives

- Why are you monitoring?
- Who will use the data?
- What will the data be used for?

Increasing Time - Rigor - QA - Expense
Design Monitoring Program

- Identify the environmental setting and water-quality issues
- Articulate and document overall monitoring/information strategy
- Public participation process
- Communication strategy
- Sampling network design
  - Site selection, what to monitor
  - How often, for how long
- What methods to use for all aspects of program from sample collection to reporting results
Collect Field and Lab Data

- Identify optimal methods (NEMI)
- Sample management plan
- Train and certify personnel
- Document sampling site location
  - (GPS, photos)
- Coordination with partners
- Laboratory operations coordination
- Laboratory Analyses
- Data handling/Data audits/Meta data
Compile and Manage Data

• Capture field and lab data
  – electronic/PDA or paper or both
• Spreadsheet or Database?
• Database design / Security features
• Data validation/audits
• Meta data documentation
  – Water Quality Data Elements (WQDE)
• Data swap with partners
• Raw data products
• Archiving data
• Data Verification
Assess and Interpret Data
What Does It Say???

- Summary statistics
  - Max, min, mean, range
  - Parametric/non-parametric
- Meets State Standards?
- Threshold (action) levels
- Time series plots
- Indicators/indices
- GIS
- Water quality models
Assess and Interpret Data

What Are the Implications???

- historical evaluation
- water quality relevance
- management relevance
- professional judgment
- information goals met?
Convey Results & Findings

- Data summary
  - Oral and written reports
    - to public and managers
- Water quality information displays
- News releases
- Fact sheet
- Web page
- Management plan
- Interested party review
- Professional, peer reviewed, journal paper
Evaluate Program

- Did we meet our objectives?
- Identify monitoring problems?
- Evaluate cost
- Feedback from information users
- New opportunity to communicate, coordinate and collaborate
- Independent vs. internal review?
- “Lessons Learned”
- Adjustments? Redesign?
Getting Back to the 3C’s:

- The 3Cs:
  - Communicate
  - Coordinate
  - Collaborate

- Integrating the 3Cs into the monitoring process is more likely to enable us to truly understand, protect, and restore our waters.
• What is the condition of our surface, ground, estuarine, and coastal waters?
• Where, how, and why are water quality conditions changing over time?
• Where are the problems and what is causing them?
• Are programs to prevent or remediate problems working effectively?
• Are water quality goals and standards being met?
Participants identify and commit to shared goals and work collectively to deal with issues that they cannot solve individually; partnerships, alliances, teams.

It is easier to tell you about my goals & activities than to coordinate our activities. Harder still is developing a goal together and implementing the activities needed to reach it!

Collaboration is hardest to get to.

Participants link, harmonize or synchronize interaction and activities.

Communicate

Participants convey information; can be one way or an exchange of thoughts, messages, or ideas.
Collaboration has the most potential benefit

The 3 Cs are nested concepts—certainly, communication and coordination are critical elements of collaboration.

What could you do collaboratively that you couldn't do alone?

Councils are vehicles for moving building the "nest" and moving across the "continuum".
Types of Groups Working on the 3 C's

• Watershed Groups or Networks – local efforts to improve a watershed
• Watershed Collaboratives – local or regional efforts to pool resources to respond to similar monitoring needs
• State and Regional Councils – efforts to develop monitoring approaches that allow effective use of information collected for differing purposes
Assessment of State, Interstate, or Regional Watershed Monitoring Councils

• Council name, contact information
• Sponsoring organization(s)
• General description of your membership
• When was your Council created and why?:
• Charter, bylaws or other adopted written Council operating procedures?
• Meeting Schedule?
Assessment of State, Interstate, or Regional Watershed Monitoring Councils (cont.)

- Sub-committees?
- Funding?
- Staff Support?
- Products or Publications?
- Special Projects/Significant Accomplishments?
- Networking via Web, list serve, document sharing?
Types of Councils

• Legislatively mandated – Oklahoma, Texas, WI GW
• Organized voluntarily – Maryland, Virginia, Colorado, Lake Michigan, Montana, New England
• State agency organized – Kentucky
• Multi-State agreement – Chesapeake Bay
Common Council Themes

- Communication
- Coordination
- Collaborative Watershed Based Monitoring
- Document Monitoring Activities
- Efficient Use of Monitoring Resources
- Raise Public Awareness
- Inclusiveness
Common Council Activities

- Network design and coordination (6)
- Data Inventory and management (includes GIS) (6)
- Annual Conferences (5)
- Field and analytical methods and QAQC (5)
- Data Interpretation or Reporting (2)
- Issues Based Groups (3) - GW, TMDLs, etc.
Common Concerns

- Funding/Institutional Support
- Time - more meetings
- Efficiency - reinventing the wheel, time to build trust
- Capacity Building
Monitoring Councils
Hierarchy of Needs

- Charting What Monitoring Groups Are Active
- Inventories - How & When They Monitor
- Tech Transfer - How They Monitor
- Understanding How Monitoring Is Planned & Budgeted
- Collaborative Implementation

Communicating
Coordinating
Collaborating
Monitoring Councils
Hierarchy of Needs

- Charting What Monitoring Groups Are Active
- Inventories - How & When They Monitor
- Tech Transfer - How They Monitor
- Understanding How Monitoring Is Planned & Budgeted
- Collaborative Implementation

Sampling Procedures
Analytic Procedures
Data Documentation & Storage Procedures
Monitoring Councils
Hierarchy of Needs

- Monitoring Collaboratives
- Collaborative Implementation
  - Understanding How Monitoring is Planned & Budgeted
  - Tech Transfer - How They Monitor
  - Inventories - How & When They Monitor
  - Charting What Monitoring Groups Are Active

- Making Use of Volunteers
- Planning Together
Oklahoma Water Quality Monitoring Council

• An advisory body to the Secretary of the Environment, the 25 member Council includes:
  - 8 State environmental agencies
  - 5 Federal environmental agencies
  - 3 local government representatives
  - 2 Tribal environmental representatives
  - 2 environmental organization representatives
  - 2 academicians from State universities
  - 3 at-large members

• J.D. Strong, Chairman, Office of the Secretary of Environment
Organizational Structure

OWQMC Advisory Committee
Secretary of Environment
plus 6 State Monitoring Agencies

Oklahoma Water Quality Monitoring Council

Monitoring Program Committee
Responsible for developing the overall monitoring framework & strategy for Oklahoma.

QA/QC & Sampling Design Committee
Responsible for establishing common QA/QC procedures and designing efficient sampling programs.

Education & Outreach Committee
Responsible for improving the public’s access to & knowledge of WQ data/information.

GIS & Data Storage Committee
Responsible for establishing a clearinghouse for all WQ data & information, and making it more accessible.
OWQMC Goals

• Provide a forum for effective communication, cooperation, and collaboration among individuals and organizations involved in monitoring
• Develop and implement collaborative, watershed based monitoring strategies
• Document monitoring activities using state of the art tools such as GIS-based mapping techniques
• Promote the use of quality assured procedures for sample collection, analytical methods, assessment, and data management
Lake Michigan Monitoring Coordination Council (LMMCC)

• Organized to support the Lakewide Management Plan (LAMP) and respond to other Lake Michigan resource issues. Includes members from:
  • 2 from states of MI, IN, IL, WI
  • 7 from Federal Agencies
  • 2 Tribal Authorities
  • 2 Business, industry, consultants
  • 1 Agriculture
  • Local, volunteer monitoring groups
  • Sea Grant/University-based Institutes
  • Lake Michigan Lakewide Management Plan Forum
  • Local Government/planning agencies
  • Great Lakes Fisheries Commission
LMMCC Structure

• Secretariat support provided by Great Lakes Commission - funded by US EPA Lake Michigan team
• Chaired by 2 members (1 Federal and 1 State rep)
• Media based Monitoring Network Workgroups (Tributaries, GW, Fisheries, Wetlands, Open Lake, etc) focused on addressing common considerations (monitoring objectives, network designs, methods comparability, QAQC planning, database sharing, and data analyses approaches). Use existing groups when possible (GLFC).
• Meet twice per year, interim conf calls for workgroups
LMMCC GOALS

• Document monitoring activities, ID data gaps
• Contribute to developing monitoring framework
• Establish and maintain collaborative partnerships linking organizations and initiatives
• Encourage comparable, documentable monitoring
• Support linked info networks
• Provide guidance/assistance to improve awareness of monitoring
Opportunities: NWQMC and State/Regional Council Connections

- Working together (virtual Council) toward common goals - Networks, Methods, Data, Interpretation, Reporting and Outreach
- Active involvement at Council meetings and as members of Council Work Groups
- Important not to duplicate efforts with NWQMC activities and to share results between Councils
- Help guide activities of NWQMC
MONITORING COMMUNITIES & STAKEHOLDERS...
Communities

- A group of people with a common characteristic or interest who interact together within a larger society. Three broad categories of “community”
  - **geographic** (such as watersheds, towns, cities, states, regions)
  - **issue-based** (such as environment, economic and community development, human rights, the arts, education, human development, religion);
  - **affinity-based** (such as racial/ethnic, religious, ideas and values, classmates, coworkers).

Stakeholders

*People who are interested in, who are affected by, or who could possibly affect activities related to monitoring*
COMMUNITIES are groups of people organized around or who share a common location, characteristic, or interest.

- Geographic regions
- Levels of governments
- Waterbody types
- Volunteer Monitors
- Businesses & Regulated Communities
- Professional fields
- Academia

STAKEHOLDERs are individuals, groups, and institutions who are interested in, who are affected by, or who could possibly affect activities related to monitoring.

- Businesses & Regulated Communities
- Residents
- Watershed & Environmental Orgs
- Levels of governments

- Others??
- Academia
- Industries (Ag, Mining, Timber, etc)

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- Industries (Ag, Mining, Timber, etc)
BUILDING A MONITORING MAP...
Building a monitoring map
What does monitoring look like in your state or region?

WS #2
Initial Mapping--Concepts/relationships to map—
GETTING A PICTURE OF WHERE WE ARE...

• What does monitoring look like in your state/region?

• What kind of monitoring is done? By whom?

• Where does the data go? Who uses data? What is data used for?

• How are decisions about monitoring made?
GETTING TO THE TABLE... WHAT'S IN IT FOR ME?

WIFM
Getting People to the Table

Refer to your monitoring maps... What are some of the challenges/barriers you see to getting people to the table?

- Addressing most challenges/barriers will be related to identifying “WIFM” for various components of monitoring community and stakeholder groups.
- HOW do we “frame” WIFM for different segments of the monitoring community or stakeholders?

What's in it for me?
MORNING WRAP-UP...
<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>12:30-12:45</td>
<td>Review of morning—where are we now &amp; opportunity for participants to bring up any issues they want to make sure are addressed.</td>
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<tr>
<td>12:45-1:15</td>
<td>Visions &amp; Missions... In a perfect world... visioning the future, roles of Councils in getting there 30 min large group discussion</td>
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<td>1:15-2:15</td>
<td>Roles to Goals &amp; Activities 30 minute small group, 30 minute report back</td>
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<td>2:15-3:15</td>
<td>Asset Mapping 30 minute small group, 30 minute report back</td>
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<tr>
<td>3:15-3:30</td>
<td>Wrap-up—What is everyone taking home with them—one tangible thing we can do when they get home</td>
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VISIONS & MISSIONS...
In a perfect world...
Where we were truly able to understand, protect, and restore our waters...

What would monitoring “look like”?
What would be different about your map?
• What role(s) can a Council play in realizing the vision?
GOALS & ACTIVITIES
Goals

...Thinking and planning strategically in the long term, while...

Activities

Developing and delivering products in the short term
ALWAYS remember...

- Specific projects MUST be tied to overall mission & goals
  - Everything you do should have a clear and direct connection to your mission & goals
  - Everything you do should be a step along the way to achieving your goals!!!
• Be able to ask and answer…
  - Why are we doing this?
  - What do we want the project to accomplish?
  - How does the project further our goals?
  - How can we use this project to further our goals?
### Defining Goals & Identifying Activities

**WS #3**

<table>
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<tr>
<th>Council Role/Mission in reaching the vision</th>
<th>Goals</th>
<th>Activities (short &amp; long term)</th>
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IDENTIFYING & MAPPING ASSETS

PARK

School
- Parks & DIs for concerts, dances, ideas for park design & programming
- Space for Spotlight on Youth Culture: displays, workshops
- Space for Spotlight on Youth Culture: outdoor activities

Art Gallery
- Space to display works in progress

Banks
- Financial counseling, assistance with finding new
- New Market opportunities, decreased

Police
- New Market opportunities, increased
- New Market opportunities, increased

Day Care Center
- Space for resource, outreach
- Space for resource, outreach

Church or Other Religious Institution
- Space for resource, outreach
- Space for resource, outreach

Local Residents and Homeowners
- Gardens, homes tours, leadership and ideas

Records, artifacts of local history for use in plays, etc.

Social Housing
- Landscaping work, Source of local history, leadership

Bakery or Restaurant
- Cookout demonstration, catering for park events, food festival, etc.
- Food & beverage programs
- Food & beverage programs

Bowling Alley
- Space to display works in progress

Community-Based Organization
- Leadership training, conceptual design
- Leadership training, conceptual design

Social Service Agency
- Outreach, youth services
- Outreach, youth services

Volunteer contacts
- Outreach, youth services
- Outreach, youth services

Space for resource, outreach
- Outreach, youth services
- Outreach, youth services

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- Outreach, youth services
- Outreach, youth services
What Is An Asset Map?

- A drawing that illustrates the **skills and resources** of each group or individual as they relate to a central issue or activity.
Benefits of Asset Mapping

• Identifies assets of individuals, organizations, or institutions.
• Identifies existing or potential partnerships.
• Identifies needs.
• Helps with long-term planning.
Asset Map Exercise

• The subject and center of your asset map will be one of the activities you identified.
Asset Mapping

1. Decide on an activity to map (this activity will become the “subject” of the map).
2. List the assets (skills, resources) that each member of the group can bring to the activity—individually and through their agency/organization.
3. List the assets (benefits) of the activity.
4. Identify and briefly describe the mutually beneficial relationships that exist/can be built between the group members (selected in #1) and the subject based on their assets.
4. Map these relationships as shown.
✓ What is one specific thing everyone can take home with them?

✓ Did their ideas about Councils change at all?