

Notes - Water Information Strategies Workgroup

1. Conference ideas (Peter Tennant)

- Integrating Data from Diverse Sources to Address Water Issues (Workshop and session) (highlighting advancements since GAO critiques)
- Development of Water Indicators at Multiple Scales (Session)
- Possible consideration of Robert Ward for award

2. Comments on NEST for input to EMT (Mary Skopec, Peter Tennant)

- We endorse comparable monitoring data to address the concept of indicators. However, the process and uncertainty of the purpose of NEST thing are unclear. Comparable monitoring and exploration of indicators is one of the core missions of the Council. Thank them for an inclusive partnership process. (Check wording in NWQMC documents.)

Indicators need to be developed within the framework of collaboration, communication, and coordination, which is supported by the NWQMC (involving organizations at all governmental levels and non-government).

- Shortcomings of the current vision and process.
 - Why the urgent timing? June may not be realistic for sound implementation of this effort, given the scope and breadth.
 - Who is the audience?
 - What is the scale of issues?
 - State involvement; NEST must be a partnership from the beginning
 - Disparity between State and national findings
 - Core measures already in place by the States – asked to monitor for these - States don't necessarily want to do two things
 - Five questions were not framed as "indicators"; issue with definition of "indicator"
 - Seems like we are starting from square one – including integration of data bases. Need to educate on available tools and progress
 - Confusion among EMT about the metric – just a number or an analysis of bad/good, better/worse?
 - Who does the analysis? The mapping?
- Council recommendations to overcome it.
 - Frame the questions
 - Indicators need to be established within the context of a goal. And the CWA establishes the water-quality goals for the Nation. It also establishes the process by which those goals are to be achieved and reported. Therefore, remember the Clean Water Act goals that can serve as indicator questions (aquatic life use attainment and support for fish and wildlife propagation; water-quality uses being met and designated uses supported; drinking-water supply, recreational use, irrigation, fish and shellfish consumption. This is the mechanism in which improvements are made. Each State has assessment methodology public. May be different, but they are comparable.
 - Should be an effort to build on national, regional, and state indicator efforts, including the Heinz Center; National Estuary Programs (State of the Delaware Bay Estuary), and the State of the Lakes Ecosystem Conference indicators; State of Oregon environmental benchmarks; NJ Environmental Trends under the National Environmental Performance Partnership System
 - Multiple indicators, together, give an overall picture? Need to define the overall picture.
 - Indicators must address both status and trends.
 - Define the audiences
 - In reality the audience is large (including the public) and therefore covers different scales; levels of detail associated with the indicators will vary by the audience.

- Council endorses the attributes.
- Indicators reflect the quality of the data. Must have comparable information. Must include uncertainty with the indicators. Must include statistical variance. The population represented by the data must be included in the presentation of the indicator.
- The individual indicators should say something about status and trends.
- Indicators should include stressors - land use, population, etc. Put water monitoring data in context of landscape variables and stressors; must be an environmental indicator system that water indicators are part of. – must be associated with stressors/pressures; Indicators can not be in and of themselves; need to be prepared to answer why they are what they are.
- Use existing tools - we have advanced in data management (common web services; advanced models) and integration and statistical prowess to make statements on conditions and trends using existing data, as long as uncertainty is associated with the analysis.
- Multiple designs are needed to answer the multiple questions. No one design can answer all the questions.
- Recommend that you reaffirm the intent, timing, and objectives of the NEST with the current administration (i.e. interns at CEO); communicate with NEST stakeholders and partners
- Communication and education must be considered in the process of development indicators; must keep it in mind as releasing the information; associate the relevance to the public.
- Exercise caution in the use of maps with the indicators at the highest levels. In particular, avoid use of maps with national aquatic resource surveys as they may not accurately convey what the data represent at the local and State scale.

3. Integration of Diverse Sources of Data to Address Water Issues (Pixie Hamilton, Mary Skopec, Doug McLaughlin, Greg Pettit, Leslie McGeorge, Gary Kohlhepp)– Show case examples to show optimization of existing data through enhanced water-quality exchange tools and statistical, modeling, and geospatial data. Show value of leveraging existing data. Show value and validity of multiple data designs to answer multiple questions. Show value of highlighting success of Council goals and activities.

- Demonstration by some WIS members at next NWQMC meeting in July in Portland
- Possible workshop and session at the NWQMC conference in Denver in 2010

4. Assessment Techniques and Statistical procedures (Doug McLaughlin and Leslie McGeorge)

- What methods are available for analysis? Prepare a compendium of assessment and analysis tools (status and trends).
- Doug M. has summarized links to guidance documents for data analysis, such as EPA's data quality assessment guidance (currently in a WORD file)
- USGS site for statistical guidance (Helsel and Hirsch)
- Include Brown and Caldwell document – WERF (Lindsey Griffin); place on website? (WERF charge; download pdf?) (Dave Tucker will look into it).
- A lot of information available – textbooks and documents.
- How do we carry the information forward? What framework would work to host the information and be dynamic (added to)? NEMI? Website? Link with Methods Board.
- Covers the analysis and data preparation/screening
- Includes state assessments
- How do we put sensor data in the analysis framework?
- All states assessment methodology is available publicly.
- Be sure to keep the policy guidance separate from the assessment guidance.
- Start as a compendium
- Subgroup needed to discuss product (website; forum on which folks can add products), criteria for preferred approaches, sensor data

5. Creation of a clearinghouse of the Nation's State and Federal Water Quality Monitoring Programs (Jason Jones)

- White paper
- ASIWPCA survey of monitoring programs to be incorporated (33/50 states)
- Mike McDonald has probabilistic map
- National inventory of monitoring and contacts for the program
- Challenge with maintaining.
- Use EPA STORET standard metadata record (WQX)
- How storing data (biological)
- Social media tool – WIKI's
- Jason will contact Susan Holdsworth about regional contacts for monitoring
- Must be able to filter historic and up-to-date monitoring programs.

Notes - Collaboration and Outreach Workgroup

1. Newsletter

Audience:

- Anyone in monitoring community
- Existing interests and recruiting new interests
- Specifically State and Regional Monitoring Councils (to help manage process and learn of standards)
- Volunteer Monitors
- Water Resource and Monitoring Managers
- Feedback loop with groups to get hot tips (e.g. sensors)
- Those outside monitoring community: decision/policy makers (particularly with theme topics)

Purpose:

- Sustain monitoring community
- Encourage mobilization of new Councils
- Connect people in monitoring community - foster communication and updates (in snippets)
- Build on spokes on Council wheel
- Inform monitoring community of new technologies
- Condensed version of Council meeting minutes and updates with future plans
- Show that Council is on top of specialized areas (latest in volunteer monitoring, updates on data management, energy concerns, working set of topics) – building a community by informing re the spokes of Council wheel, working list from NMC
- Advertise NMC requests for abstracts, sponsors, vendors
- Influence and nudge water resource & monitoring managers and policy makers about monitoring issues important to community (e.g. NEST indicators for management decisions)

Organization and Format:

- Format:
 - Short, 4-5 pages (not a book) with many weblinks
 - Email with cover letter which links (opens) to the newsletter with live links
 - printer friendly with the format
 - readable via PDA/Blackberry version
 - Don't worry about fancy layout at first, focus on content
- Consider a theme newsletter:
 - based on a hot topic of the day – timely (sensors, state and regional councils)
 - First issue would include an introduction to the concept of the Newsletter
- Defined segments of newsletter