Summary of Outcomes and Suggestions:
- Common need of all councils and groups:
  - Data management for diverse sources
  - Outreach and education, especially to younger generation
- Value of councils:
  - Provide means of getting things done in a more efficient and effective manner
  - Bring people (individuals) together to build relationships
- Monitoring community involves anyone actively doing monitoring or using monitoring data
- Stakeholder is anyone impacted or affected by water quality
  - Needed to help promote issues
  - Some groups find term offensive or misrepresentative

What National Council may provide to help other Councils?
- Assist with Tribal and State interaction
- Common integrated data
  - Which may serve regulated community interests
  - Share tools (even in development) via newsletters, on the web, etc.
  - Data comparability/quality forum – workshop or webinar
  - Help with communication of results and glossary of common terms
- Disseminate information on monitoring certification
- Improve National Council website
- Consider National Quality Assurance Project Plan for both States and Tribes
  - Host a “Summit” to work out the details and develop a strategic plan
- Suggest ways involve use of volunteer monitoring

Welcome and Introductions
Abby Markowitz, Facilitator, Condatus Consulting, introduced herself. Council has always done something akin to this workshop to help councils in their development and sustainability
- Showed slide of National Council puzzle
- Three Cs: collaborate, coordinate, communicate
- Visions
- Reviewed 3 Important Steps:
  - Getting to the table
    - IDing the right people
    - Technical -> Mgt. communication
  - Defining goals & objectives
    - ID and define specific collaborative goals
  - Making it happen
    - Activities that are steps in accomplishing goals
• Specific projects MUST be tied to overall mission and goals

- Started w/ a small group
- Looked at how water monitoring councils developed in other states
- Used an approach to that similar in Maryland
- Held a 2-day retreat of various stakeholders – invited key people from those organizations
- Participants developed and prioritized a long wish list of their most critical needs
- ID’d most important projects; their “next steps”
  o ID’d options for a viable council structure
  o Produced a “communication strategy
  o Digital “Rolodex” – membership database
  o Developed a statewide data clearinghouse for monitoring information
  o Drafted charter and bylaws – elected interim board
  o Developed committee structure
    ▪ Communications
    ▪ Data Clearinghouse
      • IN Water Monitoring Inventory
      • Developed catalog of monitoring protocols online
  o Developed a webpage and began marketing the council
- Piggy-backed on Indiana Water Resources Association
- Wants to keep momentum and build continuity

Question: digital Rolodex: internal or external purposes? No database not for public use; only among members

- Has a lot of data
- 2005-06 – broad audience of stakeholders participated in preliminary meetings to organize a council
- FDEP established FWRMC, a purposely-small, targeted advisory council
- 10 council seats
  o 4 state agencies
  o Municipal representative seat
  o 5 Water management districts
- 4 council charges
  o Develop water resource metadata standards for adoption by state agencies
  o Support dev of a replacement for STORET for sharing water quality data
  o Coordinate FL’s ongoing fresh water monitoring with new coastal monitoring network
  o Coordinate FL’s state monitoring with federal and local
- Data Challenges
- Monitoring Program Challenges
- Monitoring Coordination Challenges
  o Includes coordination of freshwater and estuarine monitoring programs
- Work Products
  - Developed draft metadata standard that allows assessment of data’s suitability for user’s purposes and accommodates existing metadata standard formats
  - Monitoring Coordination Action Plan
  - Recommendation for new Council structure oversee Action Plan implementation
- Dissolved original council
- Re-assignment of council oversight within FDEP
- Re-emergence: See Org Chart slide

Question: Use of word “resources” why? Lot of biological and chemical monitoring considerations
Question: What is STORET? EPA’s database repository
Question: 5 sub-watershed councils? Fair amount of their data ends up at state and some at EPA. Just looking at things that are appropriate for collaboration and sharing

**California Water Quality Monitoring Council: A Relatively New Council – Jon Marshack, California Water Quality Monitoring Council and Env. Protection Admin.**
- Everyone needs data premise – provided state statistics
- Defective state data collection system – differences in assessment strategies in different parts of the state
- Response – Senate Bill 1070 – became state law in 2006
- Required formation of CA Water Quality Monitoring Council
- MOA signed
- Diverse members from many stakeholder groups
- Covered by CA open meetings act
- Focus first on streamlined data access
- Theme-specific workgroups and web portals (see diagram on slide 7)
- Overarching monitoring council guidance
- Role of Council
- My Water Quality website for public organized around themes/portals, i.e. drinkability, swimability, long-term trends in lakes, streams and ocean, etc. by specific location
  - Website also includes page for CA wetlands
- Proposing comprehensive water quality monitoring program strategy

Question: Who maintains portals? Continually adding on to a team. Bringing data in from a variety of sources; which is included on site. Wetlands group already had a web-tracking tool, which morphed into format of CA council

Question: Does council have a web person to maintain site? Yes, Jon Marshack himself does it

Question: How did you ID existing programs to incorporate? Started with projects already underway that needed guidance for user groups, including the public

Question: Doing anything to standardize info collected for presentation? Workgroups are responsible for portraying consistent quality for broader assessments to be made
Maryland Water Monitoring Council: Experienced State Councils – Dan Boward, Maryland Water Monitoring Council and Department of Natural Resources
- Council has been around for 16 years
- Recommendation of ITFM
- 12-member steering committee: state, federal, local, university
- Alignment under MD DNR
- Dan spends one-third of his time as exec secretary
- Vision statement
- Goals
  - Forum for effective communication, cooperation, and collaboration
  - Facilitate collaborative, watershed-based monitoring strategies
  - 2 more goals I missed!
- Board – Standing Committees – Ad-hoc committees structure
- General members – attendees at annual meetings and workshops
- 6 committees
  - Monitoring and Assessment
  - Info mgt and Communication
  - Community Outreach and Citizen Science
  - Annual Conference Planning
  - Nominating
  - Awards
- Has put on topical workshops over the years with low (~$25) fees and an Annual Conference. Invites “celebrities” to attract people and have good food!
- One good outcome: growth of Maryland Stream-Gaging Workshop
- Every 6 years “Stream Symposia” for Maryland Biological Stream Survey (MBSS)
  - Stream condition – good – fair – poor scale
- Has clickable map
- Conclusion points:
  - MWMC still going strong in 16th year
  - Forum for 3 Cs
  - Raised awareness of water monitoring in MD
  - Has led to solidarity for water monitoring
  - Has led to partnerships
  - Facilitates sustainability of networks in MD

No questions.

- Regional differences for councils
  - Water law depends who comes to the table and who does not
  - Money goes where the people are
  - Private property rights is a big deal in the West
  - Mining industry is affecting where water is needed
- To go Profit or Nonprofit?
  - Functions and structures may change over time
  - Questions to consider – see chart
  - Chose NOT to be a 501c3. Did not want all the requirements of a 501c3
  - General rule of thumb
- Long-term effort - nonprofit fits needs and energy output
- Short-term effort –
  - CO Water Quality Monitoring Council’s Data Sharing Network
    - SWAPs
      - Place-based one-day event-watershed scale
      - Exchange current projects, activities, future plans
      - Label participants data
      - Two more bullets I missed!
    - Data management from a variety of sources
      - Have it be part of a goal! Or it will die. Have map/directory link
      - Have some sort of continuum of standardization – database
      - Judgment – function and features
      - Upfront or backend? – Advantage – costs and effort vs. savings and benefits
      - Support
      - Tiered

Panel Discussion – Q&A – Addressing Needs of State and Regional Councils at any Stage in their Development – Facilitated by Abby Markowitz

Facilitator: Any commonalities or differences that stood out?
- Data Management: all are managing data from diverse sources
- Question: Are councils more of a citizen-friendly enterprise or state groups?
  - Depends if council starts from bottom-up or top-down (Jody Arthur, IN)
- Need more outreach and education to younger folks
  - Too many tasks, too little time.
  - Partner with other organizations doing it.
  - Use Earth Force to get kids involved in government

Facilitator: Value of council – provides means of getting things done in a more efficient and effective manner. This is what moves a council to get things done.
- Member organizations donate “people” time
- Steve, FL: If work the council is doing is intersection of members, volunteers, you’ll get more value out of it if doing within framework of council. Council members contribute toward works related to their primary job

Facilitator: Need to remember, “what’s in it for me”?
- Steve, FL: Get “buy-in” form other state agencies

Facilitator: Some states get along internally better than others. Councils can bring people (individuals) together to build relationships, reduce turf wars and build trust
- Need to build off a common ground – data sharing is likely fundamental common ground for each state

Facilitator: In a coalition, need to work on issues together at the table.
NJ: Built council from bottom-up. Limited resources; no requirements for NJ council. Has seen turf wars dissipate through collaboration working on common goals

Comment: Effective marketing and outreach (of/for common need).

BREAK
**West Virginia Case Study: Water Monitoring Partnerships and Alliances – Jim Laine, West Virginia Department of Environmental Protection**

- Doesn’t have money for state council
- This fall will be their 6th year of a state conference
- Not mandated from legislature
- Supervisor’s support
- Decisions and costs
- Invitations
- Topics (invited)
- Logistics
- Lessons learned

- Making your case
  - Hot potato issue can be impetus
  - Initial pitch – informal discussion
  - History between organizations (have they worked together on efforts in the past)

- Location, time of year, etc. can be critical

- Invitee list
  - Begin with associates
  - Other state agencies
  - Bringing in the feds
  - Prominent watershed associations

- Topics
  - Hot potato issue
  - Each org can give overview of charge or focus
  - Subsequent meetings can focus on the burning issue of the day and future monitoring plans
  - Ask coming attendees for topics of interest

- Communication essentials via email
- Contact info from attendees is key – esp. for sending evaluations and follow-up CD
- Agenda review
- Logistics of facility

Question: Follow-up throughout the year? Informal conversations between agencies help develop agenda items for future meetings. Helped with TMDL data, too.

Question: Who to invite. Started with large list; now invite states and major watershed people

**WV Capacity Building: Addressing Harmful Algal Blooms in a Multi-organization manner - Duane Nichols, Cheat Lake Environmental & Recreation Association**

- Upper Monongahela River – Has several tribs that flow into it – at various stages of health
- Monitoring has been erratic over the years from 1995 to today
- Reviewed threats and issues for WV streams
  - Legacy mining operations
  - Active monitoring operations
  - Coal-fired power plant wastes
  - Unregulated water withdrawals – gas well fracs and power plant cooling
- Volunteers as public citizens
  - Legacy problems, current & future issues are looming huge
Volunteers are at a substantial advantage compared with corporate entities
Govs, legislators, and agencies are heavily influenced by coal, chemical and oil & gas industries. Existing laws support development of these industries.

Iowa Case Study – Mary Skopec, Iowa Department of Natural Resources
- Lawsuits caused creation of new monitoring program in 1999
- State approps from Environment First Infrastructure Fund – a pool of funding from the Iowa state lottery
- Consent decree by EPA
- Program Dev Process
  - Input from 47 stakeholders groups
  - Formed TAC ~ 13 agencies
  - Feedback loop on periodic basis
  - Stakeholder group convened
    - Goal was to ID stakeholder priorities and issues; avoiding duplication of effort
  - Consensus approach to developing guiding principles
  - Program Priorities by nominal voting process
- Water Monitoring Plan 2000
- Reporting back to Iowans
  - Data interpretation
  - Annual Monitoring Conference
    - Modeled from NAWQA meetings
    - Multi-stakeholder
    - Produce fact sheets to share at conference
    - One-third to half of conference-goers are volunteers

Question: Other Funding? Try to leverage state funding for federal match requirements
Question: Staffing? Is done on a “team concept” from various departments in the Iowa DNR
Question: Do press come to conferences? Yes, come without special invitation
Comment: If legislators are invited, more press will come

Question: Challenge of finding the right stakeholders? Have been welcoming of all stakeholders – example: have Farm Bureau members who do volunteer monitoring. This trust in the program has helped maintain the $3M per year for water monitoring

Yukon River Inter-Tribal Watershed Council – Jon Waterhouse, Yukon River Inter-Tribal Watershed Council
- 70 native nations included
- Funding comes from EPA, USGS, private companies
- Considered a natural treasure
- Subsistence lifestyle – small villages mostly
- Lot of chemicals dumped in Yukon River
- Removed 15M pounds of hazardous waste from watershed
- Has staff of 12-25 during summer
- Can we drink the water and eat the fish are still important questions
- People are disconnected from environment – need to get word out further
- Vehicle used is called the “Healing ”
- Asked for sensors and probes to do the work
- Took real-time WQ monitoring data
- State scientists found out data was important
- Puget Sound is done by large Indian “war canoes” by tribes (Dave Fuller’s project)
- Work has spread to Russia, Peru, Brazil
- Produced video
  - Web: www.yritwc.org
  - Email: jwaterhouse@yritwc.org

Panel Discussion – Q&A – Addressing Needs of State and Regional Councils at any Stage in their Development and Alternatives to State Monitoring Councils – Facilitated by Abby Markowitz

Facilitator: Stakeholders definition: Do you see same or differences?

Comment: Stakeholder is anyone impacted or affected by water quality. Stakeholders are useful to help promote…

D. Fuller: Tribes find it offensive to be referred to as stakeholders; should have equal relationship with states. If you’re not working with tribes, you’re missing a whole bunch. Tribes may be extensive players for water quality networks of stakeholders.

Facilitator: Anyone can be a stakeholder. What is the monitoring community?

- Monitoring community includes those who conduct monitoring; stakeholders don’t have to do monitoring
- In CA, meetings are open to the public; widely noticed
- JW: Some people don’t realize they are stakeholders
- DN: Don’t need to use the term “stakeholders” – we’re all interested in water quality
- You become a community when people in a group find the common ground
- The term “community” is an aspiration; in real world some have acceptable level of risk and others don’t; thus water can be a political and contentious issue. Watershed councils’ work can help settle disputes before they become huge issues

Facilitator: Monitoring community: actively doing monitoring or using monitoring data; need stakeholders to help promote issues (difference between education and lobbying)

- IN: Defined stakeholders who represent larger groups of stakeholders
- More effective to have leaders ID problems and then ID “the right” stakeholders to solve identified problems; achievable tasks
- Need to build trust among potentially adversarial groups – i.e. home builders, Farm Bureau, etc.
- Subtle message is how you meet various stakeholders in the middle – how you frame your message to them is important

**What can National Council provide to help with State/Regional Councils?**
- Treating tribes on equal footing with states
- CA: Looking for data system that everyone buys into – everyone would have access to the same degree and makes decisions on it. It may serve regulated communities interests.
- Balance between the value of existing data and new data. Need to better mine existing data
- When we find out other states have ways of sharing data, i.e., share tools (even in development) via newsletters, on the web, etc.
- Data comparability/quality forum – workshop or webinar: Indiana suggestion
- Monitoring certification – survey needed – based on performance measures
  o Does not apply to tribal entities
  o Comment: Not a requirement necessarily; can be an educational tool – gives data more credibility to share with states
- Methods Board has addressed some of these issues with metadata performance standards
- Improved Tribal/State Interactions
- Re: Subcommittee on Groundwater has already wrestled with some of these issues
- National Council website needs to be marketed better
- National Quality Assurance Project Plan for both states and tribes
- Have a “Summit” to work out the details – develop a strategic plan (Jon Waterhouse)
- How to put out collaborative data assessments – what to do with data – National Council could look at how to communicate results of data
- Need a more common language – glossary of terminology – Council can provide examples of successful collaborations and strategies of how to do this
- Ways to get involved including use of volunteer monitoring

**Listing of Attendees and Participants**

Abby Markowitz, Condatus Consulting (facilitator)
Tracy Hancock, USGS and NWQMC (organizer)
John Hummer, Great Lakes Commission (organizer)
Jody Arthur, IN Dept. Env. Management and IN Monitoring Council (panelist)
Steve Wolfe, FLA DEP and GOMA (Panelist)
Jon Marshak, CA Water Monitoring Council and CA EPA (panelist)
Dan Boward, MD DNR and MD Monitoring Council (panelist)
Barb Horn, CO Div. Wildlife and Co Monitoring Council (panelist)
Jim Laine, WV DEP (panelist)
Duane Nichols, CLEAR (panelist)
Mary Skopec, IA DNR (panelist)
Jon Waterhouse, Yukon River Inter Tribal Water Council
Jennifer Morace, USGS
Jean Thomas, FS
Jenny Biddle, US EPA
Heidi Brow, Tribal Env. Office
Sarah Burger, Kaibab Paiute Tribe
Nancy Arazan, US EPA
David Chestnut SC DHEC
Roxanne Johnson, NDSU
Heather Williams, Pomona College
Kimberly Miller, Soboba Tribal Env. Dept.
David Fuller, Port Gamble S'Klallam Tribe
Amy Miguel, Salt River Pima-Maricopa Indian Community
Robert Schreiber, CDM and ASCE Rep. to ACWI SOGW
Alena Baldwin-Brown, NJ DEP and NJ Monitoring Council