NATIONAL WATER QUALITY MONITORING COUNCIL

*Working Together for Clean Water*

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# Building, Empowering & Sustaining State, Regional and Tribal Water Monitoring Councils and Water Monitoring Partnerships and Alliances

NWQMC 8th Annual Conference

May 2012

# Workshop Goals

We are all unique

We do have a common ground

We are not alone

UP the VIBRATION of Collaboration

Learn what is out there

Help each other

Learn about NWQMC

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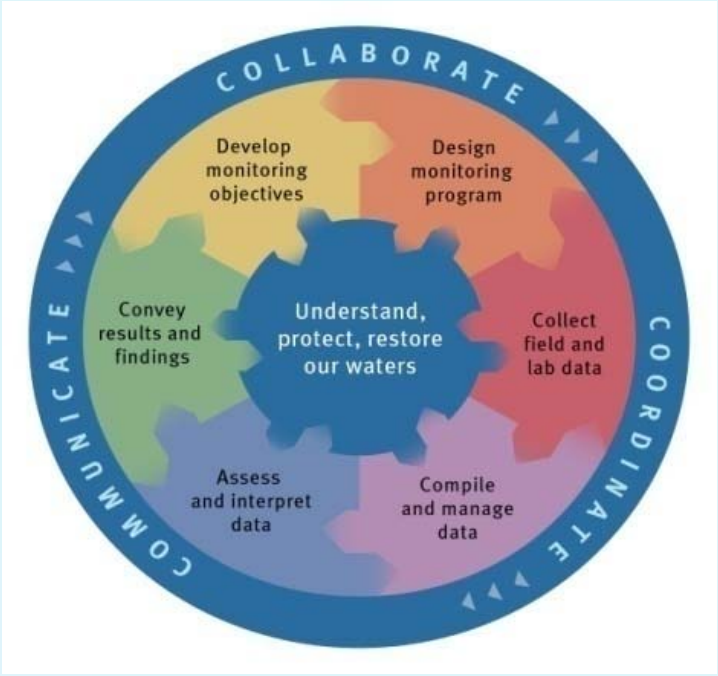
# Council Products and Tools to Help Councils

*Cathy Tate, Co-chair*
*Collaboration & Outreach Workgroup*



# Web Seminars

- Sponsor web seminars or ***webinars*** at least quarterly
- Webinars represent a wide range of topics and audiences including State and regional councils, volunteer and tribal monitoring, *aquatic sensors*, *NEMI*, data exchanges, data elements, and much more!

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# 2012 Web Seminars

- Statistical NEMI – An online searchable clearinghouse of methods to analyze water quality data and help support water quality assessments; May/June 2012
- Social Water – a citizen monitoring project in Wisconsin; July 2012
- Rapid methods for recreational criteria as related to the new EPA criteria – organized by Rachel Noble; Fall 2012

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# "National Water Monitoring News"

## An Online Newsletter for the Water Monitoring Community

- Produce Spring and Fall Editions
- Editorial Board

  Cathy Tate, cmtate@usgs.gov
  John Hummer, jhummer@glc.org
  Alice Mayio, mayio.alice@epa.gov
  Dan Sullivan, djsulliv@usgs.gov
  Wendy Norton, wenorton@usgs.gov
- Layout

  Kim Martz, kimmartz@usgs.gov

http://acwi.gov/monitoring/newsletter/index.html

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National Council Highlights | Collaboration through Partnerships | Council Workgroup Updates | National Monitoring Network

**National Water Monitoring News**

**Highlights**

- 2012 Conference
- Water Quality Portal
- Statistical NEMI
- Volunteer Monitoring Web page
- Forest Service's Inventory, Monitoring, & Assessments
- National Aquatic Surveys
- Spotlight on States
- Volunteer Monitoring News
- Tribal Water Quality Monitoring
- Monitoring Around the U.S.
  - California's San Gabriel Watershed
  - North Carolina's Coastal Waters
  - Lake Michigan near Chicago
- Tools and Technology
- National Monitoring Network

The San Gabriel River Watershed supports a population of more than 2.3 million people. Protection and management ensuring sustainability of this resource requires an understanding of the watershed's overall health. *(Photo courtesy of Council for Watershed Health)*

National Wetland Condition Assessment field crew identifying wetland vegetation as a part of the National Aquatic Resource Surveys. *(Photo by Joanna Lemly)*

*The National Water Quality Monitoring Council provides a voice for monitoring practitioners across the Nation and fosters increased understanding and stewardship of our water resources.*

*The National Water Quality Monitoring Council*
*Editor: Cathy Tate*
*(303) 236-6927 (phone) • email: cmtate@usgs.gov*
*http://acwi.gov/monitoring/*

Spring 2012

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# Council's Display for Your Local Council Meeting

Displayed at the First North Dakota Water Quality Conference in Feb. 2012

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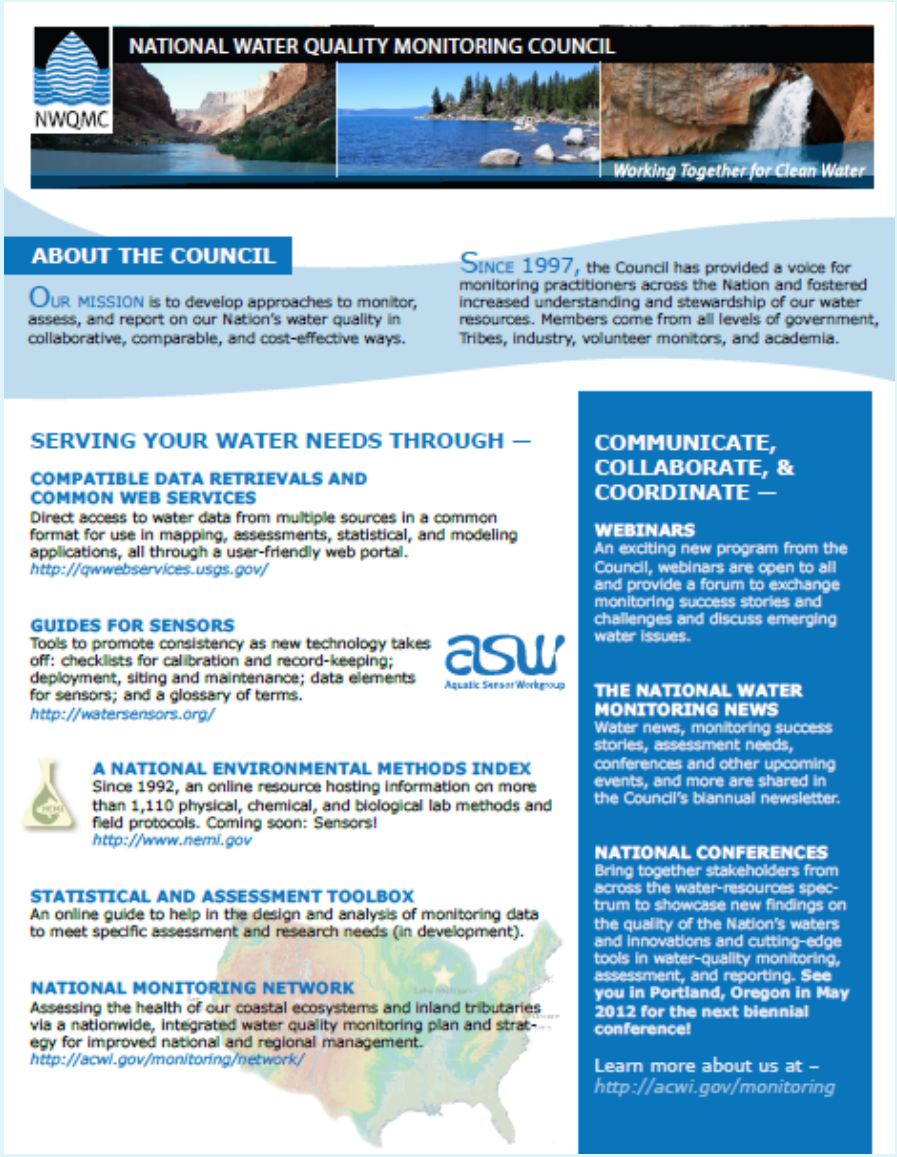
# Expanding Communication

Council "Calling Card"

- Create more than one for different audiences

*http://acwi.gov/monitoring/workgroups/co/NWQMC_callingcard.pdf*




ACWI
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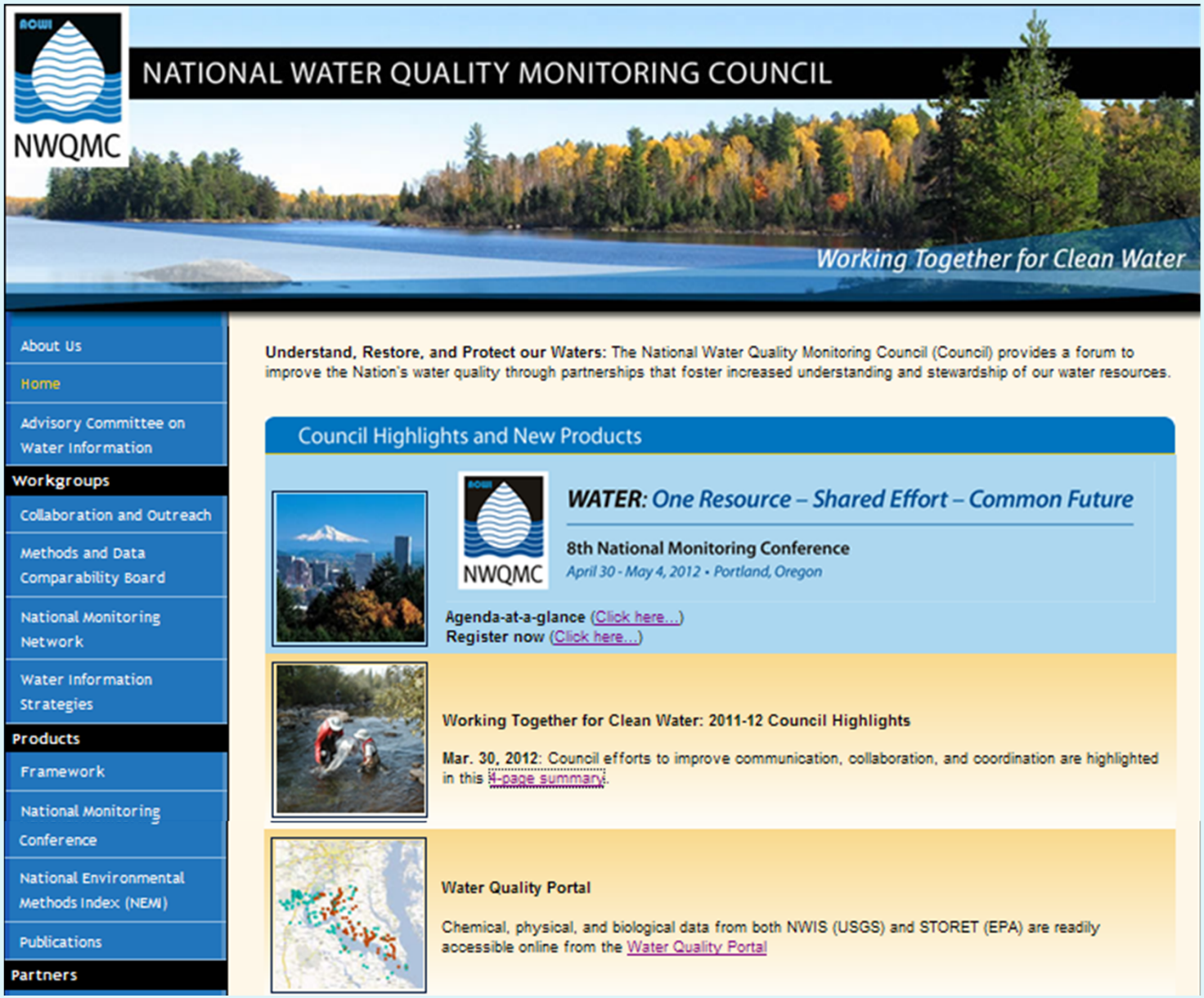
# Updating the Council's Web Site

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# We're Getting Advice!

WATER WORDS THAT WORK

Search

Toll Free: 800.861.6012
Local: 703.829.6732

Home | About | Custom Projects | The Method | Our Tools | Clients | Portfolio | Testimonials | Appearances | Contact Us | Blog

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# Summary of Council Activities

*http://acwi.gov/monitoring/activities/Council-Summary_2011-12.pdf*

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## *Working Together For Clean Water: 2011-2012 Council Highlights*

Water issues are becoming more complex. Resources to monitor, assess, protect and restore our waters are tighter, and the demand for high-quality water continues to grow to support a complex web of human activities and aquatic ecosystem needs. The Council is a vehicle for bringing together the diverse expertise needed to develop collaborative, comparable, and cost-effective approaches for monitoring and assessing our Nation's water quality (http://acwi.gov/monitoring). The approaches are fundamental to the successful management and sustainability of our waters.

Council goals to improve data comparability and reliability; data management, assessment, sharing, and reporting; and collaboration are increasingly achievable as technology and expertise advance in data collection and exchange, assessment, and reporting. As a result, the Council and its partners have made significant advances in its priorities, including data management and information dissemination; compatible web services; State and regional councils; volunteer monitoring; assessment and statistical tools; sensors and real-time monitoring; and integrated land-to-sea assessments through the Network. Multiple Council products and services are now available to help meet water needs across the Nation.

*Created in 1997, the National Water Quality Monitoring Council (Council) is a national forum for coordination of comparable and scientifically defensible methods and strategies to improve water quality monitoring, assessment and reporting. The Council promotes partnerships to foster collaboration, advance the science, and improve management within all elements of the water quality monitoring community. Vital to this role, the Council provides a voice for monitoring practitioners across the Nation and fosters increased understanding and stewardship of our water resources. The Council is chartered as a subgroup of the Advisory Committee on Water Information (ACWI) under the Federal Advisory Committee Act.*

The Monitoring Framework

1

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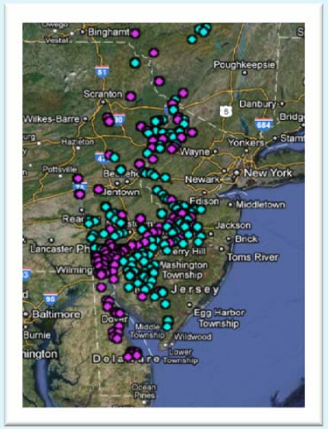
# Summary of Council Activities

- Council Workgroups
  - Methods and Data Comparability Board
  - Aquatic Sensor Workgroup
  - Water Information Strategies Workgroup
  - Collaboration and Outreach Workgroup




- Water Quality Portal- Web access to over 150 million water-quality data records

- Network of Reference Watersheds for Freshwater Streams

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# Summary of Council Activities

- National Environmental Methods Index
- Water Quality Statistical and Assessment Methods Online Database

- Integrating Volunteer Monitoring – A New Council Resource and Web page

- National Monitoring Network for Coastal Waters and Their Tributaries

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# *Building, Empowering & Sustaining State, Regional and Tribal Water Monitoring Councils and Water Monitoring Partnerships and Alliances*

- Workshop organized by:
  - Barb Horn, Colorado Parks and Wildlife
  - Cathy Tate, U.S. Geological Survey
  - John Hummer, Great Lakes Commission
  - Leslie McGeorge and Alena Baldwin-Brown, New Jersey Department of Environmental Protection

# Water Monitoring Councils Posters Wednesday, May 2, 9:30 am – 10:30 am

- 06A ***The Maryland Water Monitoring Council: Furthering the Cause of Water Monitoring in Maryland***, Daniel Boward, Maryland Department of Natural Resources
- 07A ***New Jersey Water Monitoring Council: Strengthening Monitoring Collaboration and Partnerships Across a State Water Monitoring Community***, Leslie McGeorge, New Jersey Department of Environmental Protection

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# NWQMC Collaboration & Outreach

We always welcome new members to the workgroup.

We want your ideas for web seminars, articles for the newsletter, and other ways to **Collaborate, Communicate, Coordinate**!

Cathy Tate and Barb Horn
(cmtate@usgs.gov) or (Barb.Horn@state.co.us)

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# Summary of Inventory of State, Regional, Tribal Monitoring Councils

# Share

## Who is Out There?

Composition

Location

Why Started

Geographic Scope

## Administrative

Leadership

Structure

Finances

Decision Making

## Programmatic

Decision Making

Objectives

Products

# Inventory of Councils

## Inventory Categories

1. Primary Information
2. Composition, Scope and Initiation
3. Finances
4. Leadership
5. Objectives

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# Inventory of Councils

**To Input or Update:**

1) Go to site
2) User name, password
3) Four sections, can enter in shifts

https://infotrek.er.usgs.gov/apex/f?p=207:101

This is on handout

User Name: reg_council

Password: Council4u

# Inventory of Councils

## To View or Download

1) Go to site
2) User name, password
3) By individual Council or 1question for all Councils

https://infotrek.er.usgs.gov/apex/f?p=207:29

User Name: reg_council
Password: Council4u

# Inventory of Councils

## Completed Inventory

- Ohio Resource Council, Water Monitoring Work Group
- NJ Water Monitoring Council
- Colorado Water Quality Monitoring Council
- California Water Quality Monitoring Council
- Florida Water Resources Monitoring Council
- Lake Michigan Monitoring Coordination Council
- North Dakota Water Quality Monitoring Council
- Maryland Water Monitoring Council
- New England Regional  Monitoring Collaborative

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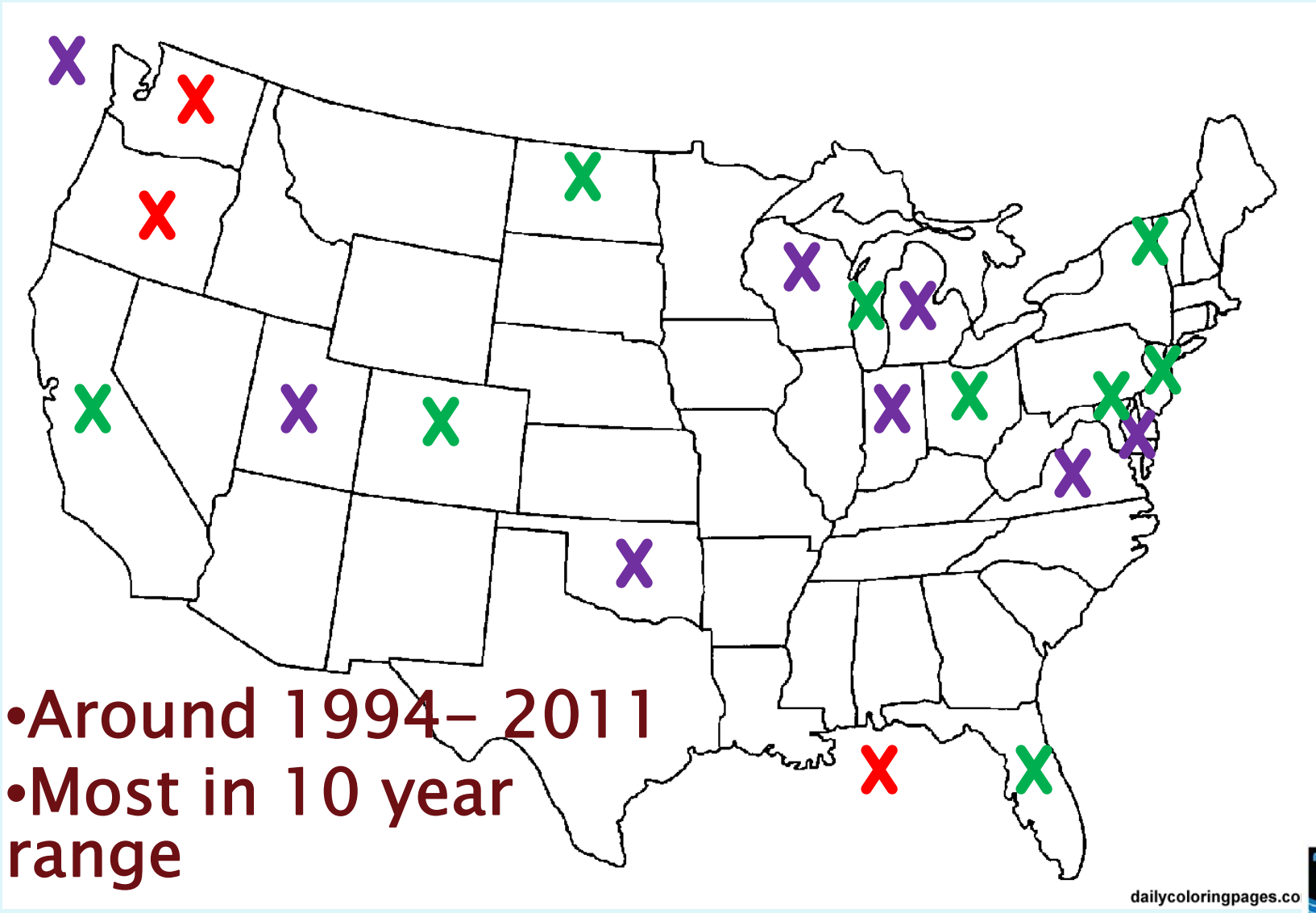
# Inventory of Councils

## Have Not Completed…..Yet

- Utah Monitoring Council
- Chesapeake Bay Program
- Indiana Water Monitoring Council
- Michigan Clean Water Corps
- National Tribal Water Council
- Oklahoma Water Quality Monitoring Council
- Virginia Water Monitoring Council
- Wisconsin Groundwater Coordinating Council

# Inventory of Councils




- Around 1994- 2011
- Most in 10 year range

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# Composition

| | Minimum | Maximum | Average |
|---|---|---|---|
| State | 5 | 46 | 26 |
| Federal | 0 | 30 | 16 |
| Local | 0 | 27 | 11 |
| Tribal | 0 | 2 | 0.2 |
| Landowner | 0 | 0 | 0 |
| Academia | 0 | 7 | 19 |
| Special District | 0 | 27 | 9 |
| Private | 0 | 30 | 7 |
| Non Profit | 0 | 10 | 5 |
| Other | | | 8 |

- 7 focus statewide
- 1 interstate and 1 regional
- 1 multi-basin, larger watershed

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# % Composition

- Everyone had state involved
- Maximum # State (46), Fed (30), local (27), special district (27), private (30)
- Only one had tribal representation
- None involved landowners (FS, BLM, State not distinguished as LO)
- Everyone had Fed but 1
- Everyone had Academia but 1
- Everyone had Local but 2
- 4 of 8 had special Districts, private, NP
- Other included public, intergov, interstate

| TYPES | #Avg |
|---|---|
| State | 26 |
| Federal | 16 |
| Local | 11 |
| Tribal | 0.2 |
| Landowner | 0 |
| Academia | 10 |
| Special District | 9 |
| Private | 7 |
| Non Profit | 5 |
| Other | 8 |

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# Geographic Scope

- 7 focus statewide
- 1 interstate and 1 regional
- 1 multi-basin, larger watershed

# Mandate To Start

- 6 Top-Down Effort
  - 1 – State of Federal Initiative, Legislative Mandate (no $)
  - 2- State Legislation/statute (no $)
- 3 Combo if Grassroots and Above
- 7 State Type Initiative formal/informal

# Driver To Organize

- Lack of monitoring & assessment coordination and reporting
- Inconsistent monitoring objectives, assessment strategies & methods
- Lack of single place, accessible data with ease
- Support to save gage network
- Need for systematic information on meta data
- Provide guidance, consistency
- Forum to communicate, collaborate

•All still goal to collaborate, share data, foster communication

•6 have evolved from start

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# Affiliated with State Clean Water Act Monitoring Program

- 1 Indirectly
- All other 8 Directly

# Who Does the Work?

| Who | Number | Comment |
|---|---|---|
| Paid Staff | 6 | 3 of those were half time or less |
| | | Coordinate, Tech Tasks, Record Keeping |
| Volunteers | 0-30 | Leaders, only one or volunteer doing more |
| | | |
| Members | 3-300 | Average 70 |
| | | Participate in Committees, events |
| | | Develop Recom, provide data/info |
| | | Outreach, implement project |
| | | Provide purpose, knowledge |
| | | Provide training, assistance, mentor |
| | | Develop internet portals, use products |

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# Estimated Costs

| $ Ranking | Fed | State | Tribal | Fees | Municipal | Sp District | Industry | Acad | Non Profit | Foundation |
|---|---|---|---|---|---|---|---|---|---|---|
| #1 | 3 | 4 | | | | | | | | |
| #2 | 2 | 2 | | 1 | | 1 | | 1 | | |
| #3 | 1 | | | | | 1 | | 1 | 1 | |
| #4 | | | | | 1 | | | | | |
| #5 | 1 | | | | | | 1 | | | |
| Not a source | 2 | 2 | 9 | 7 | 8 | 6 | 7 | 7 | 8 | 9 |

- Only 1 had 6 sources
- 1 had 3 sources
- 6, the rest, had two sources

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# Income Source

| Source |
| --- |
| Fed |
| State |
| Tribal |
| Fees |
| Municipal |
| Special District |
| Industry |
| Academia |
| Non Profit |
| Foundation |

- Most $ State/Federal
- 2 – No State/Federal $
- 0 – $ from Tribes or Foundations
- Only 1 had 6 sources
- 1 had 3 sources
- 6, the rest had only 2 sources
- 0, had all

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# Estimated Costs

| Number | Estimated Budget Range |
|---|---|
| 1 | $250,000 – $499, 999 |
| 2 | $75,000 – $99,999 |
| 1 | $10,000 – $24,999 |
| 3 | <$10,000 |
| 5 reported this | Don't Really Know |

**If don't know costs, hard to know what to ask for**

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# % In Kind / Cash

4 of 9 Depended Upon in Kind
Up to 50, 85 and 100%

3 of 9 Depended Upon cash
Up to 15, 25 and 50%

# Financial Structure

| # | Type | Role |
|---|---|---|
| 1 | Formal | Contractual, legislation provides permission, EPA funding until state recovers |
| 5 | Informal | Fiscal agent, agency provides, grants, no need state does it |
| 2 | | Didn't know yet or didn't describe |
| | | NO ONE REQUIRED DUES |
| | | NO ONE was a 501c(3) |

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# Leadership Selection

(1) Recommend by Agency Staff, appointed by state EPA/DNR

(3) Self Select or volunteer

(1) Chair asked by agency, others nominated by peers

(1) If help get grant get a say

(1) No process default who shows up

ALL VOLUNTEERS

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# Leadership Structure

- (4) Co-Chair Model, from key lead organizations
- All but one "chair" as lead
- (2) No formal leadership, w/in State Agency Unit serving that role, act as "chairs"
- Leadership Team, Members, Board, Steering Committee = rest of leadership (8-25 people)
- (1) Owner of grant, grant structure

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# Leadership Organized by a Group

| # | Type of Group |
|---|---|
| 1 | By Waterbody Type (Wetland, Estuary, Streams/River/Lakes, Swimming safe, Aquatic Life Consumption) |
| 1 | Technical Advances, Outreach, Leadership, Mentoring |
| 1 | Indicators, Monitoring & Assessment, Annual Conference, Info Management and Comm, Community Outreach |
| 1 | Communications |

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# Decision Process Re: Administration

| Type | Number of Orgs |
|---|---|
| Dictator | |
| Majority Vote | |
| Executive Committee | 1 |
| Roberts Rule | |
| Consensus | 3 |
| Consensus-1 | |
| Other | |
| Mix | 2 (function of decision), majority vote, C-1, Excom, Roberts Rules |
| No Process | 2 No$, no administration |

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# Decision Process Re: Programmatic

| Type | Number of Orgs |
|---|---|
| Dictator | |
| Majority Vote | 1 |
| Executive Committee | |
| Roberts Rule | |
| Consensus | |
| Consensus-1 | 2 |
| Other | 1 (function of grant obj) |
| Mix | 3 (function of decision), majority vote, use C-1, Excom, Roberts Rules |
| No Process | 1 – no program decisions |

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# Leadership Meeting Frequency

| Frequency | # of Orgs |
|---|---|
| Bimonthly | 1 |
| Quarterly | 1 |
| Annual | 2 |
| Other | 3 |
| | In Development |
| | 3 times per year |
| | When need to |

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# Leadership Meeting Frequency

| Comments on Meeting |
| --- |
| Subcommittees meet more |
| Annual events, other activities count |
| Combination of in person and teleconference calls |

# Leadership Meeting Purposes

| Purpose |
| --- |
| Coordination of reports/data |
| Leadership functions, adminstration, plan, collaborate |
| Engage others, discuss projects, share information |

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# Products

| # Orgs | Product Type | Purpose |
|---|---|---|
| 2 yes, 1 in Development | Webinars | Support monitoring, collaboration, training |
| 2- One only, or do when can | Newsletters | Communicate who are, value, purpose, activities |
| 8 of 8 | Websites | Access data/information, communication, give/rc info |
| 6, weekly as needed | Email Blasts/equivalent | Announcements |
| 5, in dev<br>2-3 a year<br>Every 2-3 years occasionally | Workshops | Training, info exchange, educate, upload assistance |
| 1 | Other- One on one | Upload assistance |
| 1 | Other – Brochure | Communicate who are, value, purpose |
| 1 | Other – Outreach at other events | Ditto |
| 1 | Other- needs assessment | Stay relevant |

# Products

| Product Type |
| --- |
| Webinars |
| Newsletters |
| Websites |
| Email Blasts/equivalent |
| Workshops |
| Other- One on one |
| Other – Brochure |
| Other – Outreach at other events |
| Other- needs assessment |

- All had websites
- Most used email – for announcements
- 2 of 8 used webinars/newsletters
- Most did NOT use a variety
- Only 1 program used all

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# Program Objectives

| Meet These Objectives | Number of Organizations |
|---|---|
| Federal | 1 |
| Regional | 3 |
| Non Profit | 3 |
| State | 4 |
| Local | 2 |
| Private | 1 |
| Tribal | 0 |
| Academia | 1 |
| Stakeholder | 3 |

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# Program Objectives

- 4 had multiple goals
- 2 are still deciding, in development
- 1 facilitated or commented on Federal plans
- 1 coordinated workshops and summits to comment on state plans
- 6 commented help do all or most indirectly, role is to help others do it on their own
- All participants in organization do this work

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# Program Objectives Data Products

| Products Around Data | Number of Organizations |
|---|---|
| Summary Stats | 1 |
| Advanced Stats | 1 |
| Graphing Capacity | 2 |
| Data Clean Up | 1 |
| Station Gap Analyses | 1 |
| Trend Analyses | 1 |
| Mapping Tools | 3 |

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# Program Objectives Data Products

- 1 Program provided all of these, assessments done by different groups
- 3 Did not respond, in development
- 2 Data Objective is to provide comprehensive data FOR others to do these on own versus do AS a council

# Program Objectives Reporting Products

| Reporting Products | Number of Organizations |
|---|---|
| Dev Tools | 3 |
| Provide Tools | 4 |
| Have Reports on site | 4 |
| Web portals to Access | 2 |
| Have Tips | 1 |
| Host Forum | 4 |
| Use GIS | 3 |

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# Program Objectives Reporting Products

- Many in development or goal
- Goal is to provide data for others to report vs report as a council
- 1 no reply

Note more emphasis on reporting vs data products other than a common database or exchange

# Program Objectives Data Exchange

| Reporting Products (3 no response) | #of Orgs |
|---|---|
| Provide Collective Database | 2 |
| Provide training | 2 |
| Host a data exchange | 3 |
| You ARE an EPA STORET Node | 1 |
| You are an up/download node | 1 |
| Host webinars for exchange | 3 |
| Provide data (vs database) | 2 |
| Facilitate data exchange | 3 |
| Conduct database work | 1 |
| Other | 0 |

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# Program Objectives

## Do you participate in Federal Legislation?

| YES | 1 |
|---|---|
| NO | 7 |
| Members do, not Council, Council helps members | |

## Do you participate in State Legislation?

| YES | 0 |
|---|---|
| NO | 8 |
| May in Future, not directly but through members and WILL NOT EVER | |

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# Inventory of Councils

## To Input or Update:

https://infotrek.er.usgs.gov/apex/f?p=207:101

This is on handout

## To View or Download

https://infotrek.er.usgs.gov/apex/f?p=207:29

User Name: reg_council
Password: Council4u

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# Group Share

# Group Share

## FORMAT

## Administrative

1. How does Structure serve functions?

   Jon Marshack, CA WQMC

2. Membership

   Steve Wolfe, Gulf of Mexico Alliance

3. Funding and Support

   Barb Horn, CO WQMC

4. Critical and/or Partnerships & Collaborations

   Mary Skopec, Iowa Dept NR

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# Group Share

## FORMAT

## Programmatic

5. Monitoring & Information Exchange

Dan Boward, Maryland WQMC, Leslie McGeorge, NJ WMCC

6. Inventories and Data Exchange

Barb Horn, CO WQMC, Jon Marshack, CA WQMC

7. Outreach and Communication

Dave Fuller, National Tribal WC, Peter Tango, Chesapeake Bay

8. Training

Elizabeth Herron, New England MC

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# Group Share

FORMAT

Other Topics

Sign up for NWQMC Webinars

What do you need?

Lunch BREAK notice

# Group Share

GROUND RULES

Brevity

- If you do same as another don't repeat say "here/here"
- Share new information, questions or methods
- Stick to point – not entire "story"
- Network with each other MORE!

- Time Keepers – WE ALL ARE

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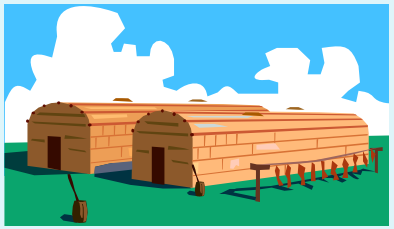
# Let's Share!

# What House or Structure best serves your function right now?



# To “Profit” or “Non Profit”

- General Rule of Thumb
- Long Term Effort – non profit fits needs and energy outputs
- Short Term Effort – non profit often too formal and excessive

# Questions to Consider

| Question or Issue | Non Profit | Other |
|---|---|---|
| Decision making | Structure/rules provided | Have to define – flexible, can change easy |
| Ability to receive $ | Yes | Figure out, will cost you |
| Ability to expend $ | Yes | Figure out, will cost you |
| Ability to account for $ | Yes | Figure out, will cost you |
| Ability to account for $ | Yes | Figure out, will cost you |

# Questions to Consider

| Question or Issue | Non Profit | Other |
|---|---|---|
| Ability to raise $ | Yes | Figure out, may cost you |
| Ability to build reserve $ | Yes | Not usually |
| Leadership | Structure assigns roles | Have to create, subjected to others |
| Vision/Plan | Structure encourages | Have to make structure, subjected to others |

# Questions to Consider

| Question or Issue | Non Profit | Other |
|---|---|---|
| Membership/levels | Still need to define | May or may not create |
| Programs/Activity/Action | Often more formal, expansion | Maybe more/less flexible |
| Evaluate all aspects | Structure requires aspects | Not as much |
| Reporting | Structure requires aspects | Have to create |
| Outreach | Can be easier | Can be easier |
| Hirer/fire staff | You are in charge, inc unemp, health, ss, etc. | Dependent upon another, costs |

# Questions to Consider

| Question or Issue | Non Profit | Other |
|---|---|---|
| Make own resource/prgm decisions | You are in charge | Subjected to others |
| Liability | Fiscal is removed from personal, if work entails risks, need structure to handle | Harder to address w/out a structure if need to |
| Insurance | Easier to get, many grants require multiple types of insurance | If need will cost to 'use' someone else's but can |
| Longevity | Can contribute | May inhibit – may be irrelevant |
| Credibility | Can help for certain audiences | May matter to certain audiences |

# Questions to Consider

| Question or Issue | Non Profit | Other |
|---|---|---|
| Collaboration/partners | Some entities will prefer/require it | More flexible, may loose some |
| Organization Energy | 1/3-1/2 toward administration/structure | Most towards work/programs vs administration |
| Costs | Up front registration, annual fee, fiscal audits, costs with staff, can be high if operating in many states | Can be same, more or less, depends on charges for services |
| Overhead | Have it, keep funds rec' so in charge of it, can do in-kind | Usually lower, more inkind |
| Extra support | Accounting, legal, human resources | Less need, may cost more if need |
| Technology | Intensive or not? | Intensive or not, harder to access |