

## **CT Volunteer Water Quality Monitor Survey**

Survey responses collected February-March 2014

Compiled April 3, 2014

### Contact Information:

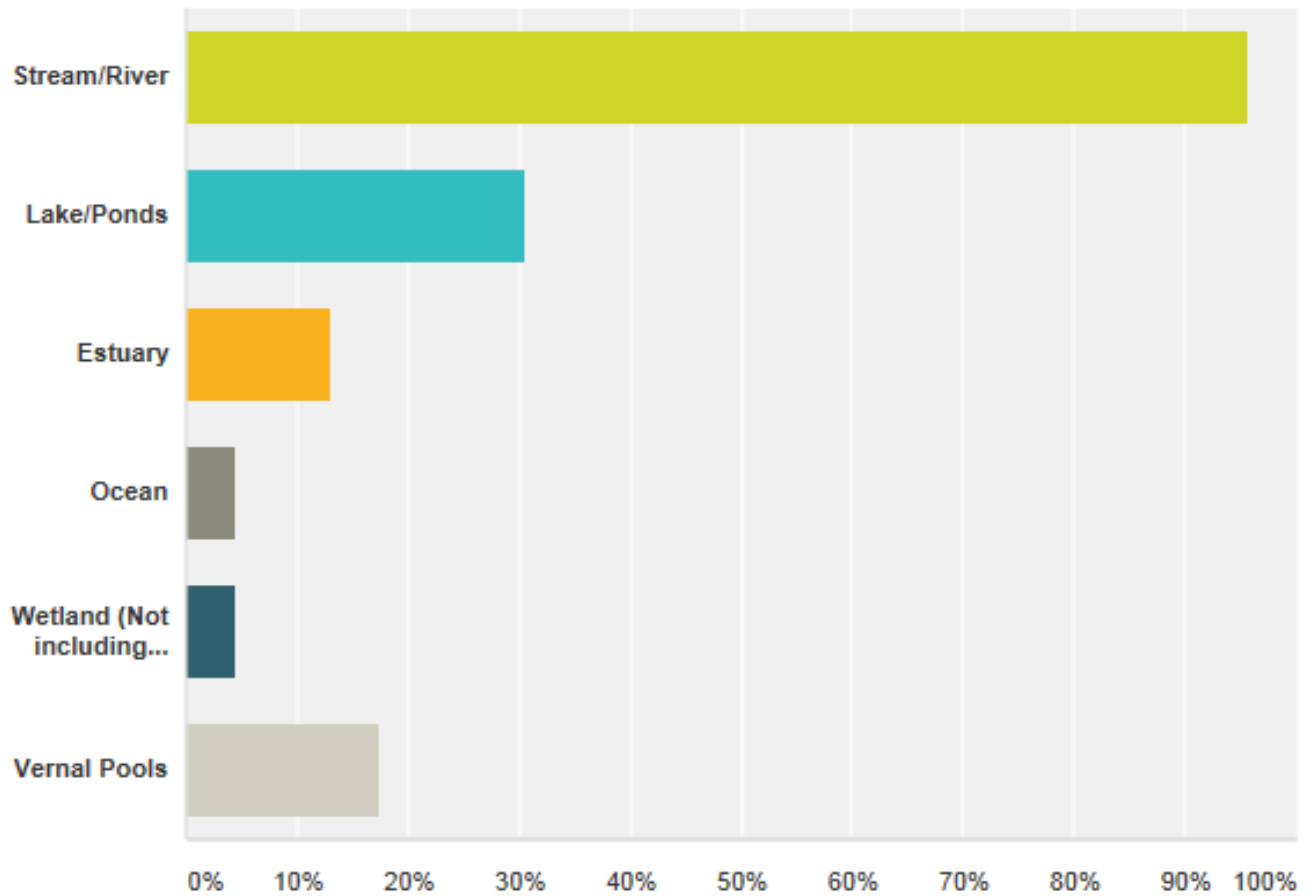
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## Q 1 & Q2: Survey Participants and self described monitoring areas

Organization	Monitoring Area(s)
Salmon River Watershed Partnership	Salmon River Watershed (Bolton, Colchester, Columbia, East Haddam, East Hampton, Glastonbury, Haddam, Hebron, Lebanon and Marlborough)
Pootatuck Watershed Association / Candlewood Valley Trout Unlimited	Newtown
Eightmile River Wild & Scenic Watershed	Eightmile River Watershed: Salem, East Haddam and Lyme
Pomperaug River Watershed Coalition	Pomperaug River, Nonnewaug River, Weekepeemee River -- Woodbury, Southbury, Bethlehem
Friends of Bolton Lakes	Vernon and Bolton. Future plans include Tolland and Coventry
Connecticut River Coastal Conservation District	Coginchaug River Watershed (Current). Helped initiate and now provide support to community-based monitoring efforts in the Hockanum/Tankerhoosen, Salmon and Eightmile River watersheds.
Natural Resource Conservation Academy	Trout Brook West Hartford
Farmington River Watershed Association	Farmington River watershed in CT and MA
Central Connecticut State University Geography Department	Any
Kent Conservation Commission	Kent
Yale School of Forestry and Environmental Studies	New Haven
CT Audubon Society Center at Pomfret	Northeastern CT
Wepawaug River Watershed Alliance	Milford, Orange, Woodbury, Bethany
Trinity College Environmental Science Program	Park River Watershed (Hartford area)
Harbor Watch	Norwalk, Silvermine, Pequonnock, Five Mile Rivers, Sasco, Keeler, New Creek, Stoney, Steep Brooks, Norwalk Harbor
Park Watershed	Primarily in Hartford, West Hartford, and Bloomfield, (municipalities in the North Branch Park River watershed). However large areas of Newington, New Britain, and the eastern 3rd of Farmington, as well as small fragments of Windsor, Rocky Hill, Simsbury and Avon are also within the watershed, and so the organizational territory.
The Nature Conservancy	Saugatuck watershed
Winding Trails	Farmington: Poplar Swamp Brook watershed Dunning Lake watershed
The Last Green Valley Water Quality Monitoring Program	Primarily the 26 CT and 9 MA towns in TLGV National Heritage Corridor, but also expanded to include the entire Thames River watershed and the SE coastal region.
Niantic River Watershed Committee	East Lyme, Waterford, Montville, Salem
Clean Up Sound and Harbors (CUSH)	Regular monitoring in the Towns of Stonington and North Stonington, Southeast Shoreline, Mystic River, and Anguilla Brook watersheds. Occasional monitoring of 3 Groton streams.
East Lyme Conservation Commission	East Lyme
Friends of the Lake	Lake Lillinonah, Bridgewater, Brookfield, New Milford, Newtown, Roxbury and Southbury. "lower housatonic watershed"

**Q3. Which of the following water body types does your organization currently (e.g. 2013-2014) monitor?**

Answered: 23 Skipped: 0

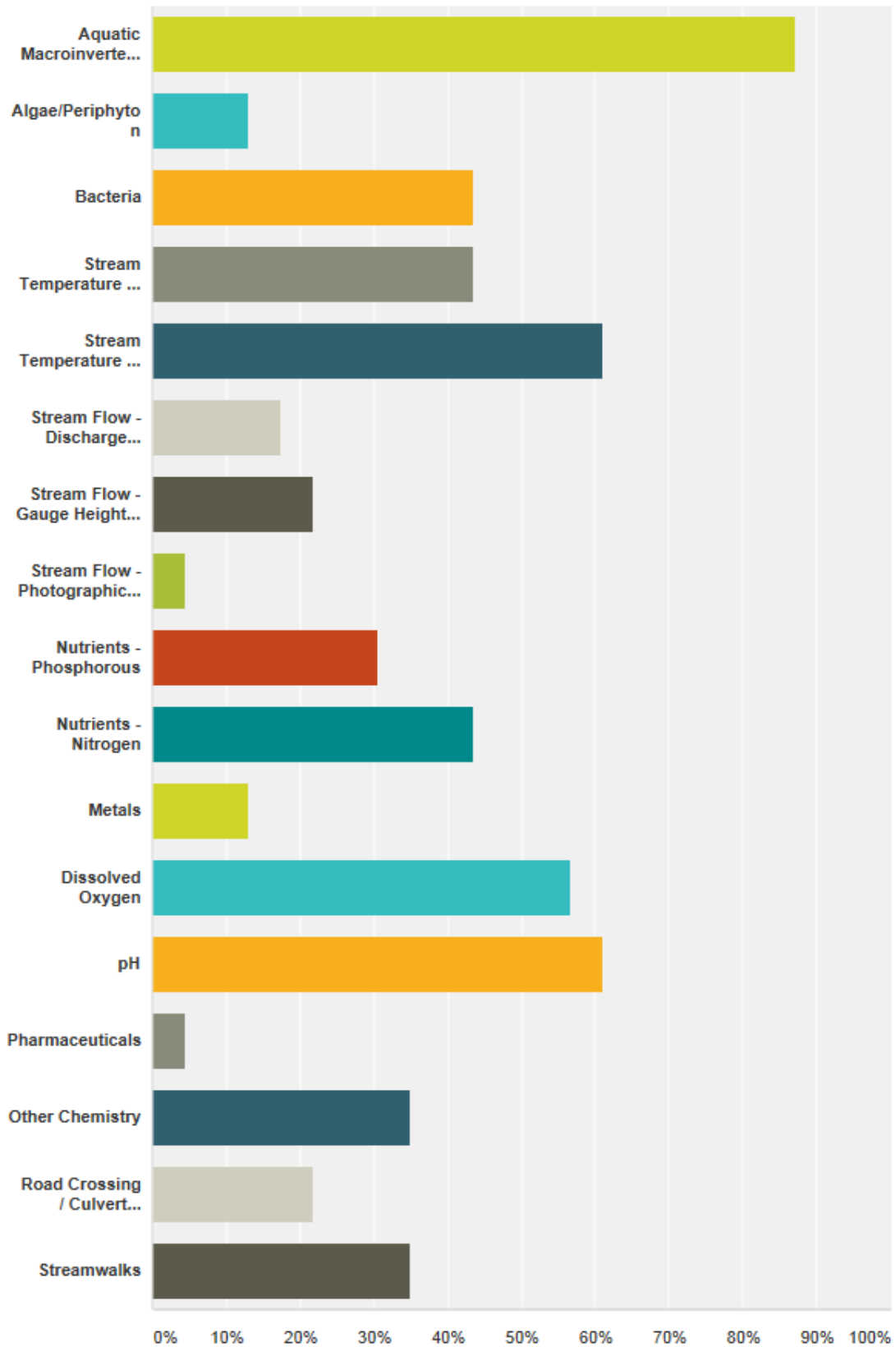


Answer Choices	Responses
Stream/River	95.65% 22
Lake/Ponds	30.43% 7
Estuary	13.04% 3
Ocean	4.35% 1
Wetland (Not including Vernal Pools)	4.35% 1
Vernal Pools	17.39% 4

Total Respondents: 23

**Q4. What type(s) of water quality related monitoring activities does your organization currently engage in? (Please include only those activity types that you conducted in 2013 or will conduct in 2014.)**

Answered: 23 Skipped: 0



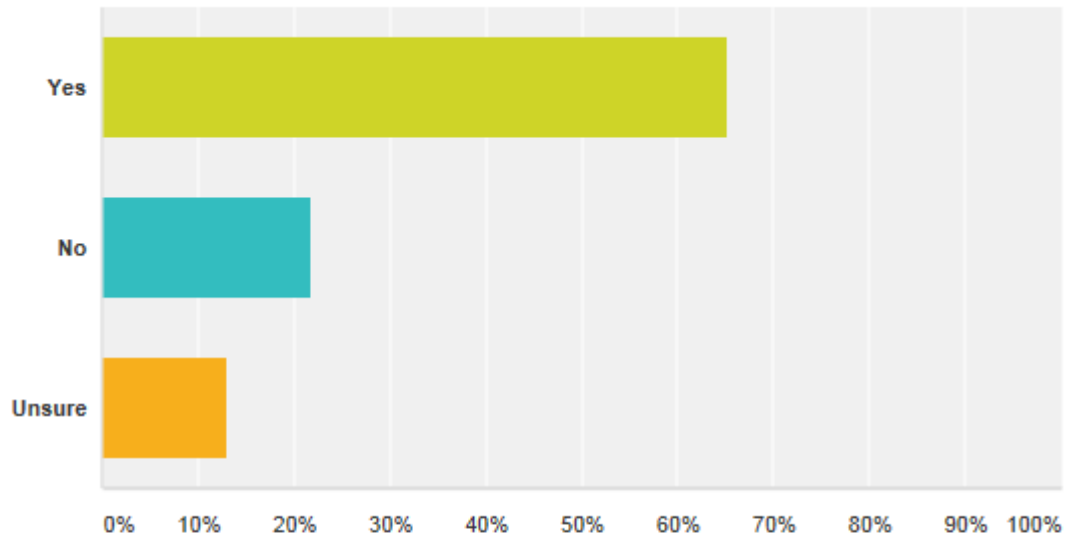
Answer Choices	Responses
▼ Aquatic Macroinvertebrates	86.96% 20
▼ Algae/Periphyton	13.04% 3
▼ Bacteria	43.48% 10
▼ Stream Temperature - deployed data loggers	43.48% 10
▼ Stream Temperature - manual measurements	60.87% 14
▼ Stream Flow - Discharge Measurements	17.39% 4
▼ Stream Flow - Gauge Height Readings	21.74% 5
▼ Stream Flow - Photographic Record	4.35% 1
▼ Nutrients - Phosphorous	30.43% 7
▼ Nutrients - Nitrogen	43.48% 10
▼ Metals	13.04% 3
▼ Dissolved Oxygen	56.52% 13
▼ pH	60.87% 14
▼ Pharmaceuticals	4.35% 1
▼ Other Chemistry	34.78% 8
▼ Road Crossing / Culvert Assessments	21.74% 5
▼ Streamwalks	34.78% 8
Total Respondents: 23	

### Comments:

- Conductivity, ecoli
- stream flow - 3 USGS gauges
- Track Down Surveys (impairment focused stream walks)
- Physical Integrity of streams/rivers
- dependent breeding amphibians
- vernal pools
- metals in sediments
- Storm water pipelines, Norwalk, Ridgefield and Wilton
- it depends upon the group (K-12 school or college)
- local health district does the bacteria testing; we send out to Averill for other testing; not all tests are done yearly
- secchi disk, chlorophyll A
- cyano probe, zebra mussel monitoring

**Q5. Does your organization utilize written Standard Operating Procedures, a Quality Assurance Project Plan (QAPP), or other quality control/quality assurance documents?**

Answered: 23 Skipped: 0



Answer Choices	Responses
Yes	65.22% 15
No	21.74% 5
Unsure	13.04% 3
Total	23

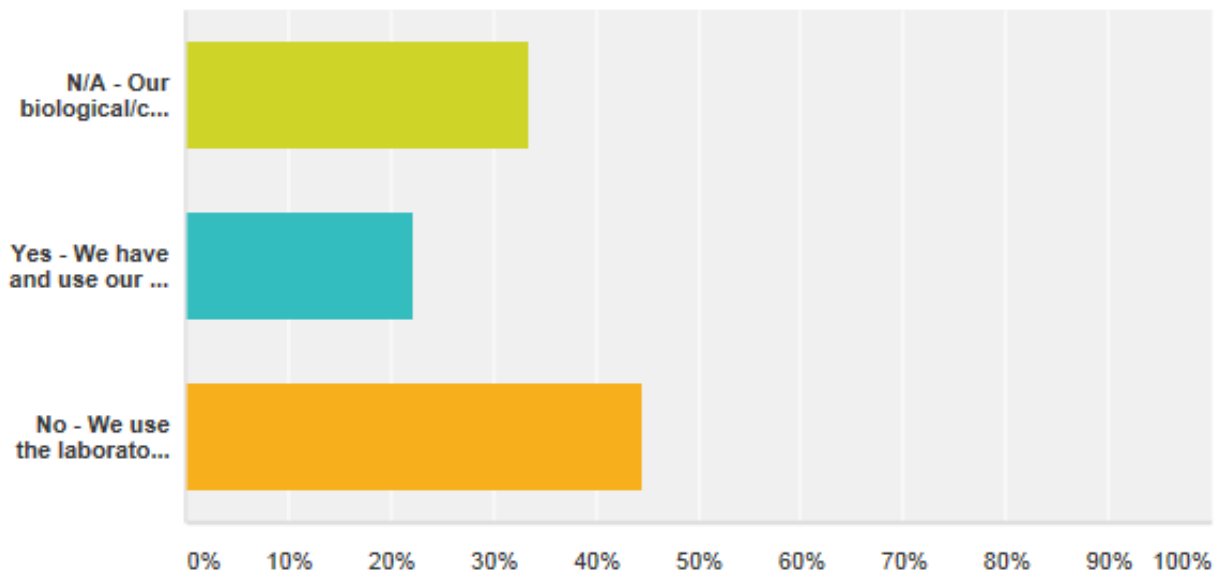
**Comments:**

- Varies depending on activity
- As needed--Complexity depends on project/funding
- We follow DEEP protocols for RBV & Thermal. Flow follows USGS methods, Pharms in collaboration with UConn.
- We have been taking secchi disk readings for several years and noting the general agreement between our results and those of professionals. However, until recently we have been unable to obtain professional assistance in setting up a more extensive monitoring program. Now, the town of Vernon has arranged for its consultant to train us in proper procedures and pay for water sample analysis. We have been fortunate in raising money to purchase a depth water sampler, pH probe, and Dissolved Oxygen probe. Our program is just getting off the ground, and our goals for 2014 are to learn to use the equipment with proper controls and to begin to gather data on water quality at the inflows and through flows of the three lake system. After several years of declining water quality and over production of weeds and algae the Bolton Lakes system needs remediation and our longer term goal is to define the causes of the decline and contribute scientific data to the lakes system restoration. At this time we are waiting to get training started and enlist the cooperation of the town of Bolton.
- Rapid Bio-Assessment, Stroud Leaf-Pack
- We work at the research level, so our results must achieve a high level of QA/QC. We have internal operating procedures, but are not required to use a QAPP by funding constraints or the like.

- Stream Walk RBV
- will be utilizing the QAPP from Harborwatch who will be analyzing our bacteria samples.
- We have developed some SOPs for some of our methods. We use a USGS method for our metals in sediment.
- EPA approved QAPPs on all projects.
- During the North Branch Park River Watershed Management Plan (2008-2010) Trinity College faculty assisted with water quality monitoring yet were evidently not able to satisfy QUAPP requirements due to the need for different lab equipment.
- We defer to the State's protocols for these, where applicable.
- We use the SEARCH protocol for macroinvertebrate collection. We do our own protocol for vernal pool monitoring. We do our own DO<sub>2</sub>, pH, and temperature testing. The chemical testing is sent to a lab.
- We use the QAPPs and SOPs developed by URI Watershed Watch.
- Yes, on SOP. No on QAPP for duplicate samples

**Q6. If you conduct biological or chemistry data do you conduct your own laboratory analysis?**

Answered: 18 Skipped: 5



Answer Choices	Responses
N/A - Our biological/chemical data does not require laboratory analysis	33.33% 6
Yes - We have and use our own lab	22.22% 4
No - We use the laboratory noted below (please write in the name of the lab you use)	44.44% 8
<b>Total</b>	<b>18</b>

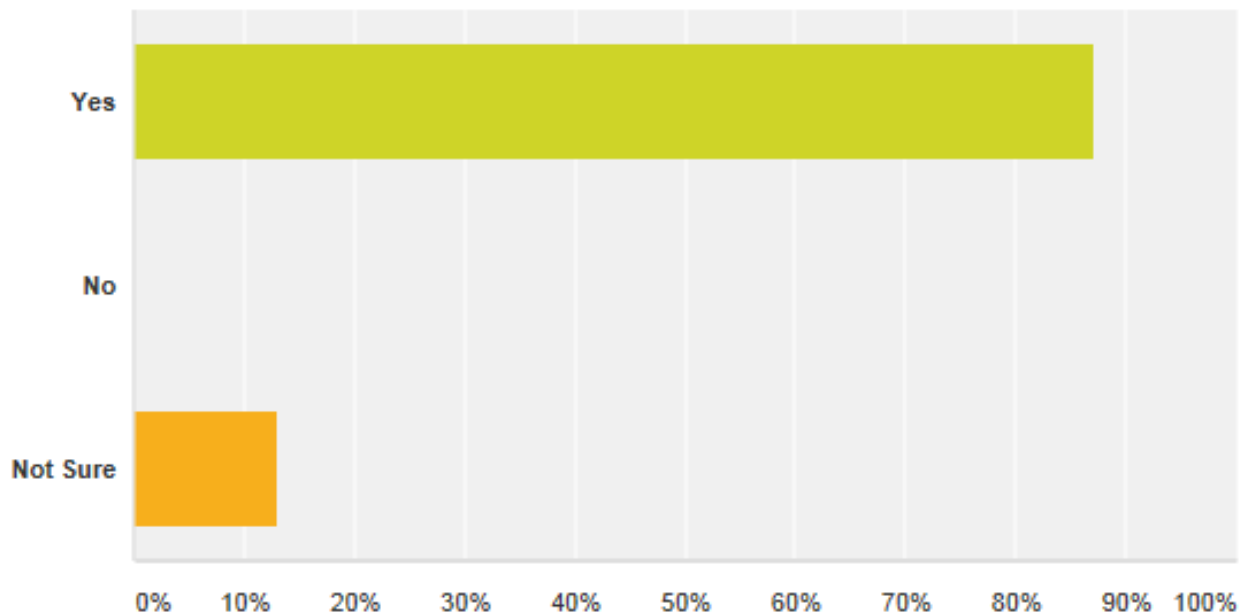
**Comments:**

- State Lab--for RBV
- DEEP for macros, Aqua Environmental for chemistry and microbial
- State lab, and Source Molecular-Florida Lab....
- not yet determined
- State Public Health Laboratory
- And MDC lab
- Did bacteria and nitrate nitrogen 2013 only; own analysis and state DH in RockyHill
- Harborwatch
- Harbor Watch labs, PH0344, PH0262 CT DPH cert
- depends upon the group
- Averill or Columbia for lab work; Hach equipment for DO2 and temperature
- Bacteria, DPH microbiology and Webster Dudley WWTP lab Nutrients UCONN CESE
- Phoenix Environmental Labs and UConn lab of Jamie Vaudrey
- we use several labs, uconn, michigan university, wesconn etc..



**Q7. Would you (or a representative from your organization) be interested in attending a one-day summit or conference for volunteer water quality monitors in Connecticut?**

Answered: 23 Skipped: 0



Answer Choices	Responses
Yes	86.96% 20
No	0.00% 0
Not Sure	13.04% 3
Total	23

**Comments:**

- Why not if timely
- + I would bring along others, school teachers, . .
- Yes!!
- Depends on what specific topics and when& where it is held

**Q8. If you answered yes to the previous question, please provide any comments or suggestions regarding presentation topics that you would like to be covered during the summit/conference.**

*Note: Responses have been grouped by themes; multiple suggestions from a single respondent were broken out into separate bullets.*

**Monitoring Program Development & Logistics:**

- QA/QC
- Equipment availability
- Setting times and locations for most useful results.
- What Chemical Tests Should Always Be Done? (lab costs sometimes limit what can be tested so it would be good to know what to keep and what to drop)
- How Often Should Water Testing Be Done? (weekly, monthly, by season, once a year; Is it dependent on the test being done or need?)
- Standardized programs
- New sampling methods that are dependable but don't require large expense.

**Data Analysis, Interpretation and Use:**

- Putting all the data together, interpreting data
- How data gets used by state
- Using the data for local decision making - planning, zoning, development, etc.
- Suggested response to elevated samples
- Dealing with data
- Discussion of the results and uses of monitoring data
- How to provide user friendly data summaries for the general public.
- evaluating collected data
- Learning about which data are most valuable on a state-wide basis

**Networking & Collaboration:**

- Cooperation with Towns, DEEP, and professional consultants.
- Effectively interfacing w/ DEEP
- Compare notes with other groups.
- Programs that have been effective
- Establishing an online database + water quality monitoring program for the whole state

**Funding:**

- Funding
- Finding funding for coordination of projects and equipment
- Funding sources
- Funding oversight

**Specific Monitoring Interest Areas:**

- Trace metals in sediments
- Nutrient testing
- Whatever happened to DEP Project SEARCH data?