Re-engaging Your Volunteer Monitoring Organization

Webcast sponsored by EPA's Watershed Academy

Tuesday, November 19, 2013
1:00pm – 3:00pm Eastern

Instructors:

Julie Vastine, Director, Alliance for Aquatic Resource Monitoring (ALLARM)

Dr. Bill Deutsch, Director, Alabama Water Watch

Kris Stepenuck, Coordinator, Wisconsin Water Action Volunteers Stream Monitoring Program

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Webcast Logistics

- **To Ask a Question** – Type your question in the "Questions" tool box on the right side of your screen and click "Send."
- **To report any technical issues** (such as audio problems) – Type your issue in the "Questions" tool box on the right side of your screen and click "Send" and we will respond by posting an answer in the "Questions" box.

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Overview of Today's Webcast

- Go-to online volunteer monitoring resources
- Volunteer recruitment and retention
- Alabama Water Watch 20-year Assessment
- National trends, successes, and outcomes of volunteer monitoring activities

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Taking the pulse and re-engaging your volunteer water monitoring organization!

Julie Vastine, Alliance for Aquatic Resource Monitoring
Bill Deutsch, Alabama Water Watch
Kristine Stepenuck, Wisconsin Water Action

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Presentation Gameplan

- VolMon resources
- Volunteer engagement
  - Local
  - Statewide
  - National
- National success stories

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VolMon Resources

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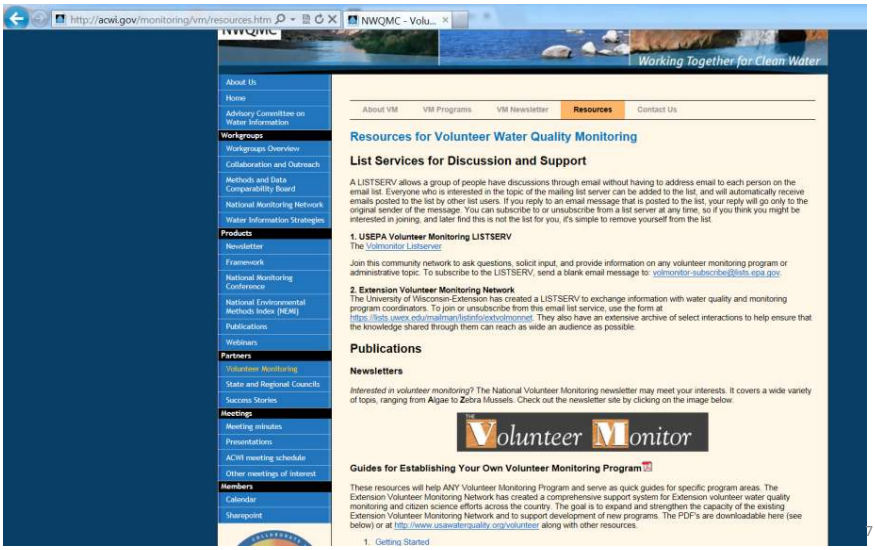
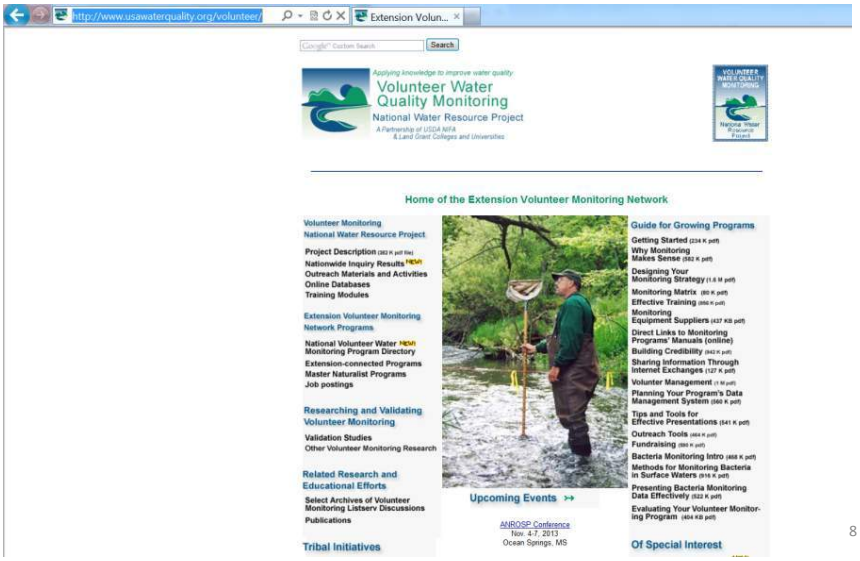
http://acwi.gov/monitoring/vm/



www.usawaterquality.org/volunteer/



ALLARM Background

Empower communities with scientific tools to monitor, protect, and restore PA streams.

Educate. Engage. Empower.

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Who we are

- Project of the environmental studies department (1986)
- 3 full time directors
- 1 science director/Dickinson faculty
- 10 – 14 students

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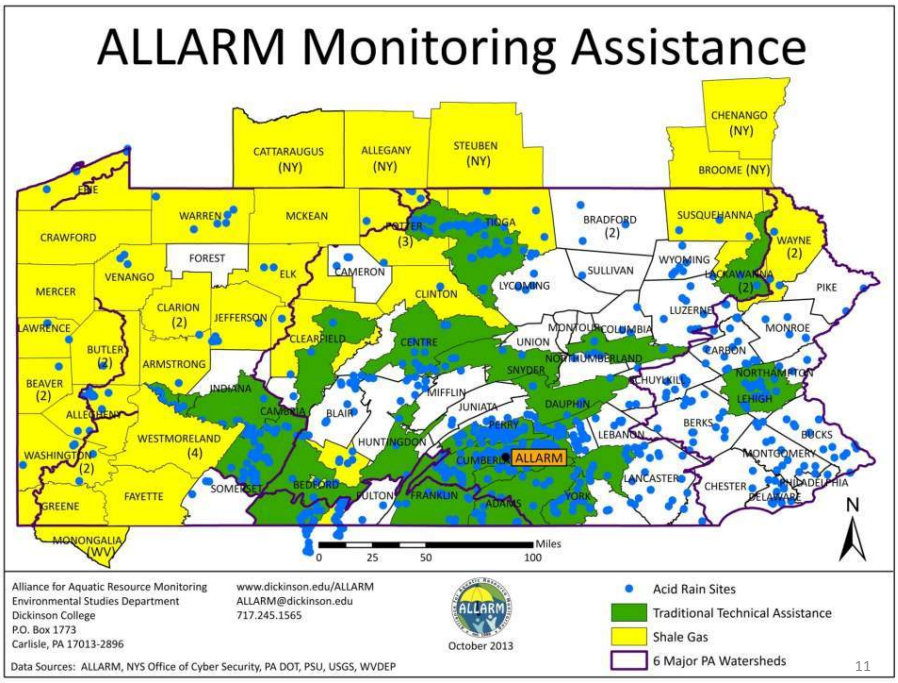

PA Watershed Organization Trends

- 1999-2005
- 2005-2009
- 2010-today

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Important to go back to the basics

- Strategic planning
- Volunteer recruitment/retention

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Strategic Planning

- Where is your organization going?
- How is it going to get there?
- Who is going to do the work?
- How will you know if you have achieved your goals?

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Strategic Planning Outcomes

- 3-5 year plan
- Manageable projects
  - Resources
- Approachable projects
  - New volunteers
  - Outreach

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Reasons why people volunteer

- Benefit family or self
- Help a cause you believe in
- Do something you like to do
- Feel sense of accomplishment
- Meet people and find new friends
- Find challenge in new skills and experiences
- Gain work experience

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Volunteer Recruitment

1. Know your organization
2. Know what you want
   a) Skills
   b) Time frames
3. Develop recruitment resources
4. Design a recruitment strategy
   a) Advertising – print, online, media
   b) Reach out to partners
5. Manage your volunteers

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Recruitment

- Newspapers/newsletter
- Social media
- Community organizations
- Community centers
- Public fairs/events

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Get to know your volunteers!

- Organization orientation
- Ask about their motivation
- Survey skill sets
- Ask what they would like to get out of volunteering
- Open two-way communication

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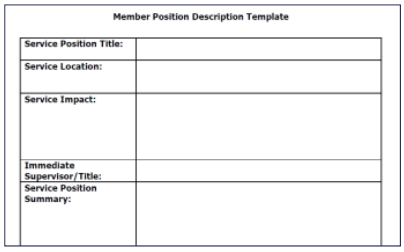
Managing volunteers

- Volunteer coordinator
- Job descriptions
- Clear start and end points
- Care and feeding
- Opportunities for feedback



Member Position Description Template

Service Position Title:	
Service Location:	
Service Impact:	
Immediate Supervisor/Title:	
Service Position Summary:	

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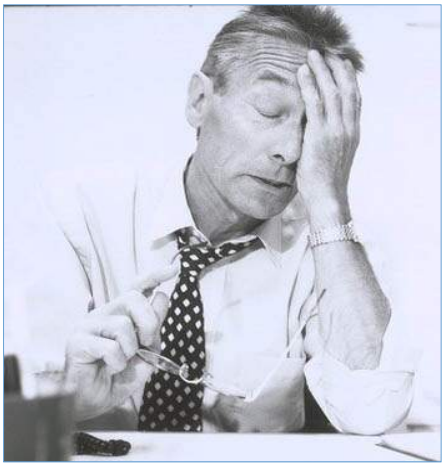
Reasons for burnout

- Voice and role ambiguity
  - Make sure volunteers play a role in decisions that affect them
  - Make sure volunteers have a clear sense of what they are signing up to do – job description



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Retention

- Change it up
- Provide leadership opportunities
- Effective feedback
- Recognition

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Tips for acknowledging volunteers

- 6 month check in
- Celebrate anniversaries
- Annual volunteer celebration
- Coordinator check-ins
  - Re-evaluate commitment
  - Identify new interests and goals

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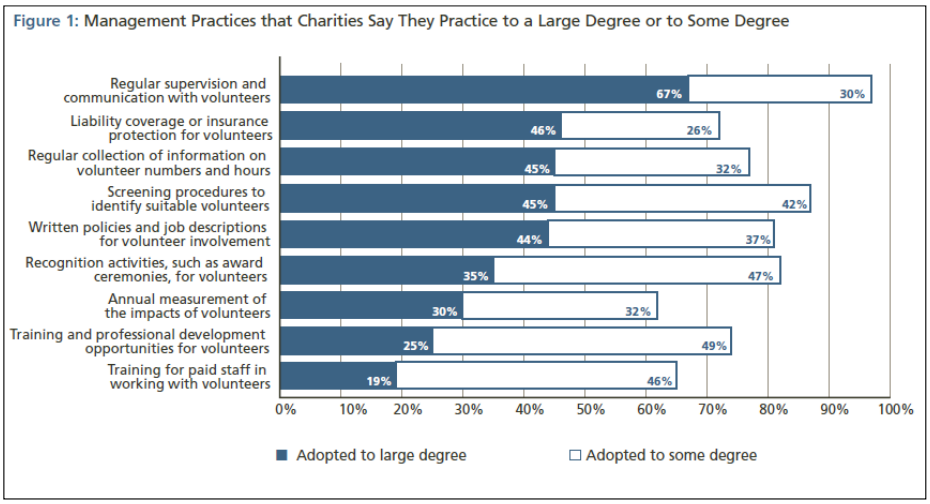
Study by The Urban Institute www.urban.org



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Case Study: Lower Penns Creek

- Process
  - Strategic Planning (5 mtgs)
  - Volunteer Recruitment planning (3 mtgs)
- Outcomes
  - 3 year plan/schedule
  - Volunteer roles (short-term & long term)
  - Outreach and follow up strategy
  - Dedicated volunteer coordinator

Lower Penns Creek Watershed Association: Volunteer Recruitment Strategy

Task	Task Description	Time Commitment	Key Organizers
Environmental Education	• Public outreach • Identify audience, develop curriculum look at state standards • Build relationship of program • Implement program New Berlin Charter School & Pennview Christian Academy	Long term: Curriculum, outreach, relationship building Short term: Implement program	
Rain Garden	• Mulch, weed, turnover • Replanting • Maintenance	Long term: Planning, volunteer recruitment Short term: implementation	
Clean Ups	• Site location • Connect with townships, partners orgs • Get supplies • Logistics and trash removal • Publicity • Clean Up	Long term: Advertising, recruitment, networking, logistics Short term: implementation	
Rain Barrels	• Get barrels & parts (Jason has 200 $20/barrel) • Assemble barrels • Determine location and organize presenters • Advertise workshops/recruit participants • Collaborate with other orgs • Follow up with participants, schedule a LPCWA speaker on a related topic	Long term: Advertising, assemble, recruitment, networking, logistics, follow up Short term: implementation	
Community Outreach	• Choose topic • Find a speaker • Advertise meeting/speaker • Let other groups know about speaker (NETWORK!) • Update organizational materials (brochure, display, website) • Social media? If or when appropriate	Long term: Advertising, speaker recruitment, networking, outreach materials, volunteer appreciation	
Streambank Preservation	• Create a strategy (rain garden, stormwater BMP?) • Scout out site and work with stakeholders on preservation • Coordinate with Union County on planting and stream structures. • Seek out technical assistance/ collaborators	Long term: Strategic visioning, advertising, recruitment, networking, follow up Short term: implementation	
Volunteer Coordination	• Get contact information, track, and contact volunteers • Annual meeting and implementation	Long term: Everything	

Resources

- *Strategic Planning Workbook for Nonprofit Organizations*, Amherst H. Wilder Foundation, 1997
- www.urban.org "Volunteer Management Practices and Retention of Volunteers"
- www.nps.gov/nero/rtcatoolbox/org_volunteers.htm
- www.usawaterquality.org/volunteer

References:

- Stedman, R., B. Lee, K. Brasier, J. Weigle, and F. Higdon. 2009. "Cleaning Up Water? Or Building Rural Community? Community Watershed Organizations in Pennsylvania." Rural Sociology 74(2):178-200.
- Higdon, F., K. Brasier, R. Stedman, B. Lee, and S. Sherman. 2005. Assessment of Community Watershed Organizations in Rural Pennsylvania. Final report to the Center for Rural Pennsylvania.

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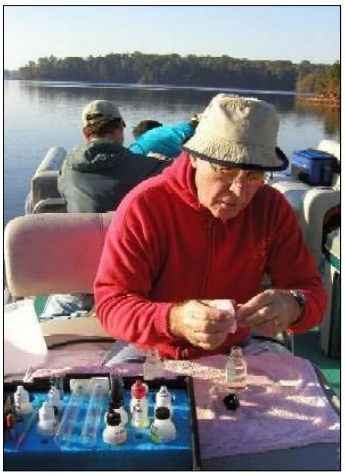
Alabama Water Watch

Alabama Water Watch



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Presentation Overview

- AWW Program Description
- AWW 20-Year Program Study
- Lessons and Applications for Other Programs

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AWW Institutional Support

Auburn University School of Fisheries, Aquaculture and Aquatic Sciences

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Three Components of AWW

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AWW Water Chemistry Monitoring

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AWW Bacteriological Monitoring

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AWW Stream Biomonitoring

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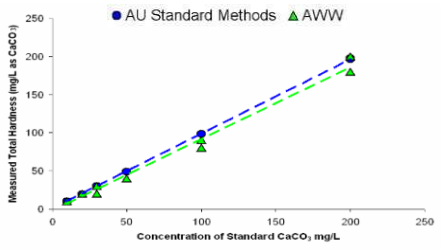
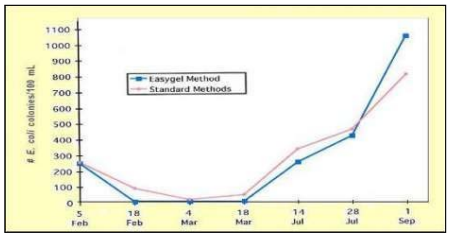
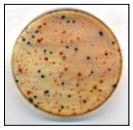
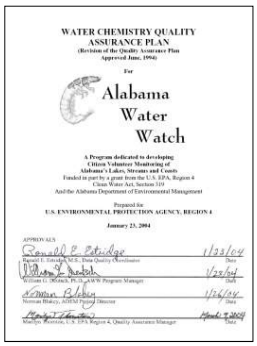
AWW Quality Assurance Plans









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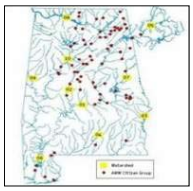
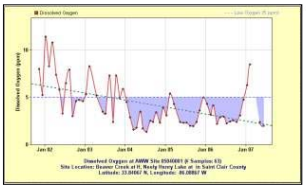
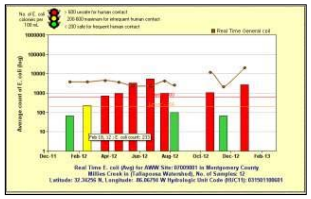
AWW Online Database







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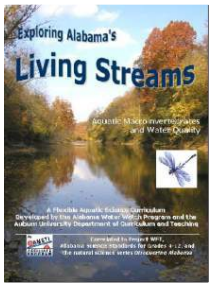
Action: Environmental Education



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Action: Protection and Restoration


The Birmingham News

One church becomes steward to a rare fish

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Action: Advocacy and Policy

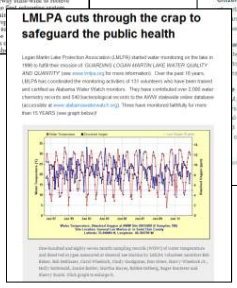

World class water

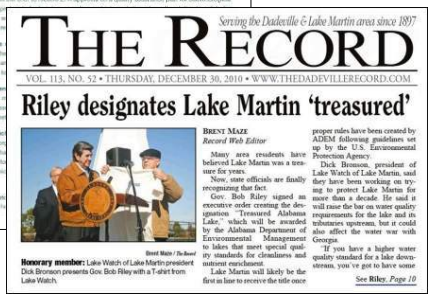
Unanimous ruling designates Wolf Bay as an Outstanding Ala. Water


Alabama Water Watch

A Science-Based, Community-Based Approach to Monitoring and Controlling Pathogens in Alabama Waters

A Position of the Alabama Water Watch Program July 2012


LMLPA cuts through the crap to safeguard the public health


THE RECORD

Serving the Dadeville & Lake Martin area since 1897

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Riley designates Lake Martin 'treasured'

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AWW's International Expansion

Global Water Watch

INTERNATIONAL CENTER FOR AQUACULTURE AND AQUATIC ENVIRONMENTS

Alabama Water Watch

ALABAMA WATER WATCH 20th Anniversary 1992-2012

AWW Milestones, 1993-2012

- **270 monitoring groups**
- **1,670 training sessions**
- **6,400 certified citizen monitors**
- **2,500 sites on 800 waterbodies**
- **72,000 data records**
- **297,000 volunteer hours**
- **30 citizen trainers**

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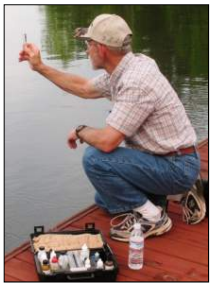
Example Program Indicators

- Data Records Submitted (per year)
- Active Monitors
- Records per Monitor
- Number of Active, New, and Inactive Groups
- Program Funding and Staff Time
- Volunteer Hours

- Workshops conducted
- Number of Volunteers Certified
- % Certified who became Active
- Active Sites



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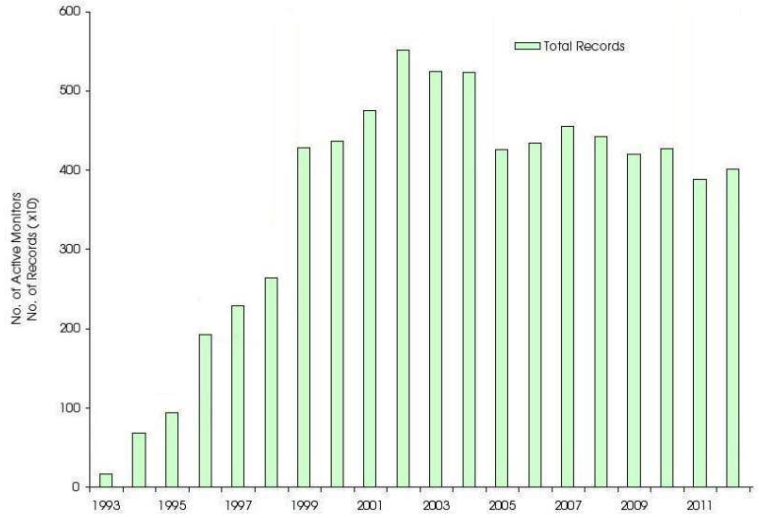
AWW Data Records, 1993-2012



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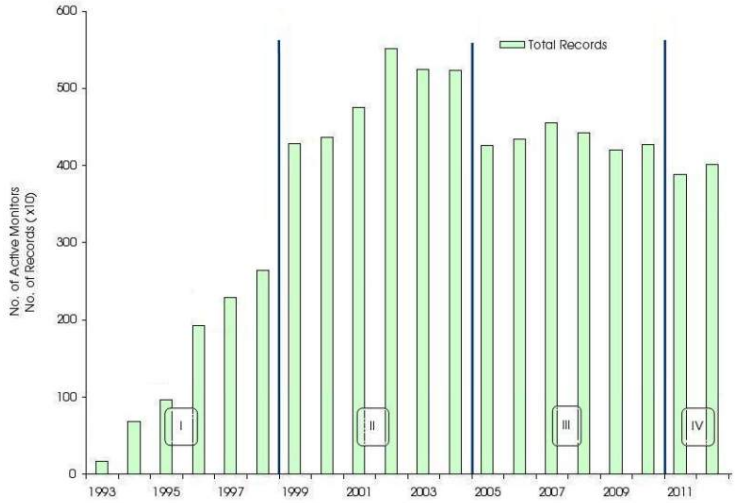
Data Records by Four Phases



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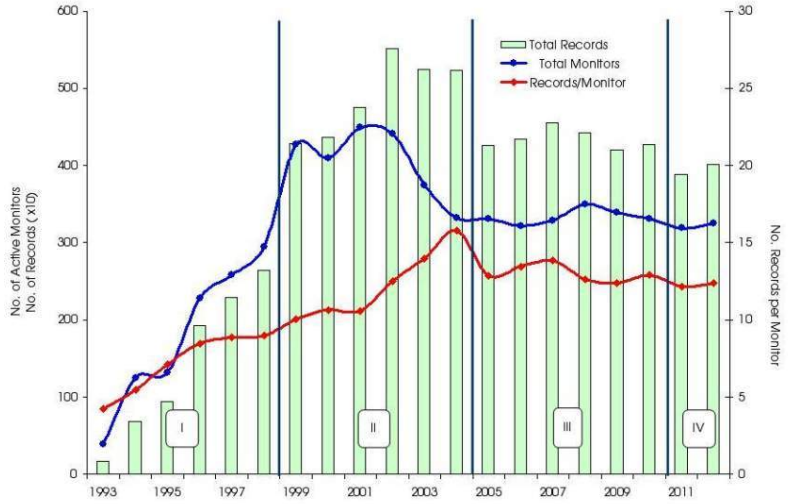
Data Records and Monitors



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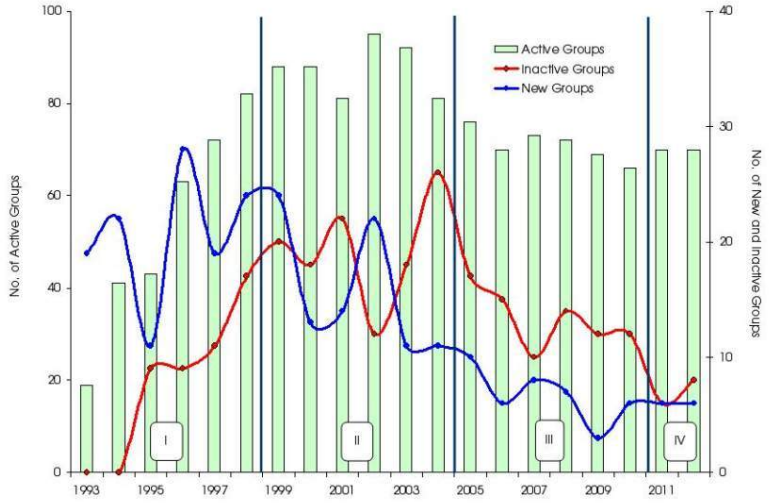
AWW Groups



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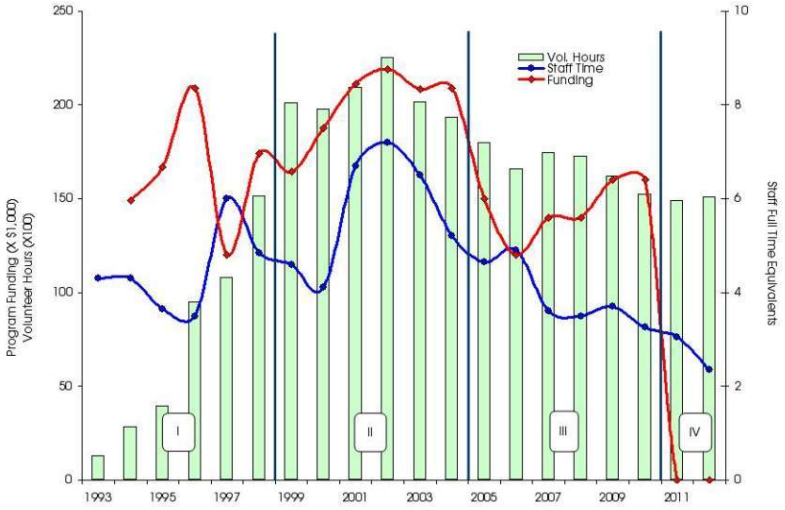
Volunteer Hours, Staff, Funding



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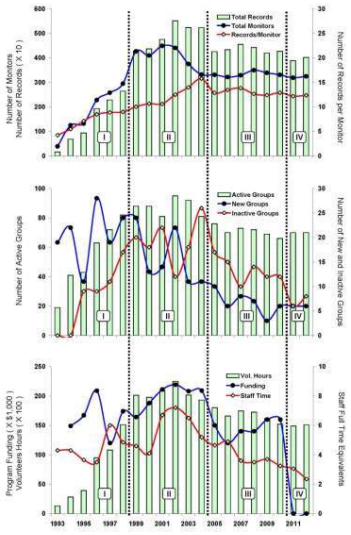
Overall AWW Program Trends

Phase I : 1993-1998
Rapid Expansion

Phase II: 1999-2004
Cresting and Realignment

Phase III: 2005-2010
Precarious Equilibrium

Phase IV: 2011-2012
New Era?



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Factors Affecting Trends

- Saturation of the Market?
- “Graying” of Volunteer Monitors
- Fatigue and Disillusionment
- Societal Change?
- Funding

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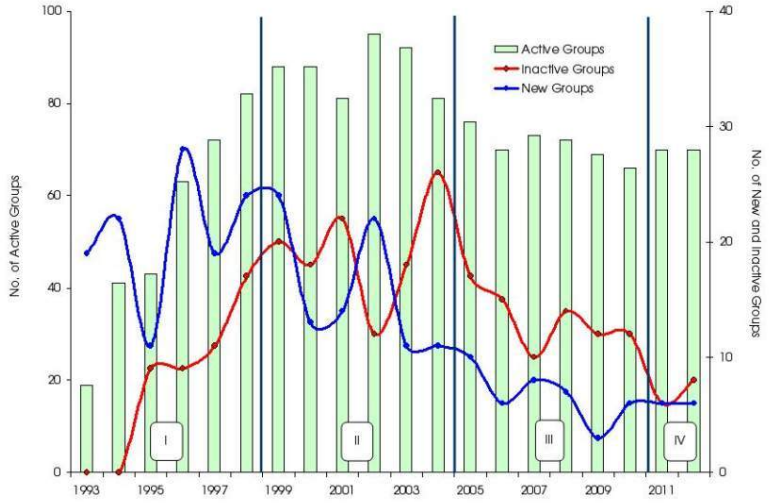
Saturation of the Market



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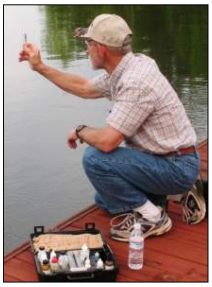
Graying of Volunteer Monitors

"It's so nice to see the young people here tonight!"



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Fatigue and Disillusionment

"What good is my data?"

"I don't see a change in my waterbody."

"The Agencies don't appreciate us!"

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Societal Change

"I prefer the indoors…it's where all the electrical outlets are."

Quote from fourth Grader
Last Child in the Woods
Richard Louv

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Funding

Volunteer Water Monitoring Programs in the Age of Recession

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Next Steps

Trends, Challenges and Responses of a 20-Year, Volunteer Water Monitoring Program in Alabama

Manuscript submitted to the *Journal of Ecology and Society*, currently under review

Follow-up Survey of Active and Inactive AWW Monitors to further explore factors affecting Program Trends

Conducted in 2012 and data are being analyzed

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What About Your Program?

- Mission, Approach, Strategies
- Institutional Support, Strategic Partners
- Identifying and Documenting Key Program Indicators
- Indicator Trends, Program Phases
- Factors "Within" and "Outside of" Your Control
- Organizational Lifespans
- Adaptation to Ever-Changing Conditions

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Further Information

Alabama Water Watch
559 Devall Drive
Auburn University
Alabama, USA 36849
Tel: 1-888-844-4785
email: info@alabamawaterwatch.org

LOVE THY DOWNSTREAM NEIGHBOR
alabamawaterwatch.org

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MOVING TO THE NATIONAL SCALE…

Kris Stepenuck
Coordinator
Wisconsin Water Action Volunteers Stream Monitoring Program

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Our reality

We have:

- Shrinking public natural resource management budgets +
- Continued water quality and quantity challenges +
- Citizens who care a lot and are ready to jump in to help +
- Policies that allow for & encourage citizen participation +
- Volunteer monitoring programs =
- Effective contributions to natural resource management and policy?

$$$$$ +  +  +  +  = ?

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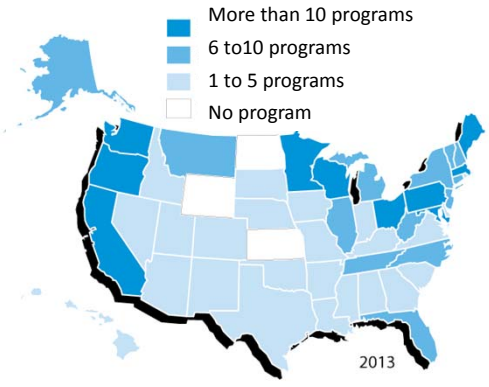
Are we succeeding?

- What outcomes for natural resource & policy have been reached?
- What are program characteristics?
- Survey of 345 volunteer water monitoring program coordinators
- 86% responded





PROGRAM CHARACTERISTICS

Images: Bob Wolfe, Dick and Judi Oehler, Kris Stepenuck

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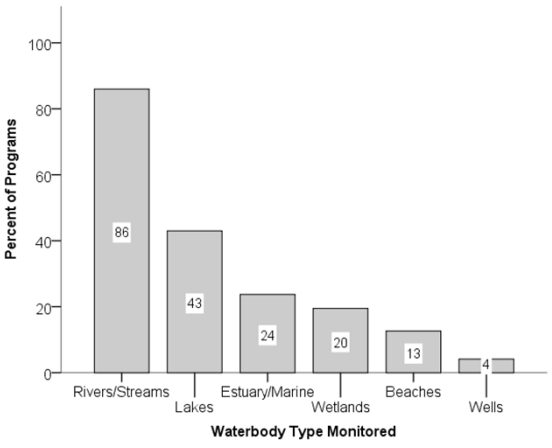
Type of waterbody monitored

Most monitor rivers/streams and lakes.



Images: Kris Stepenuck and Joanna Griffin

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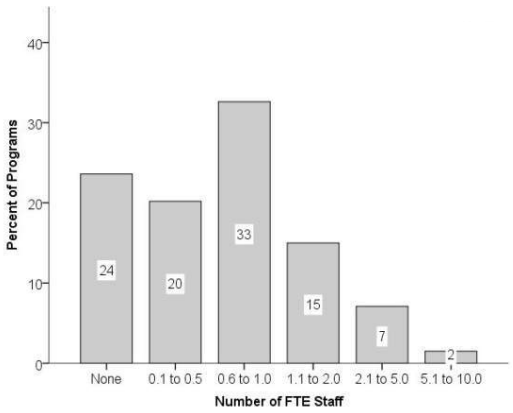
Program size

- Support >1300 sub-programs
- Huge range of sizes
  - 1-5500 sites (114 sites on average)
  - 2-10,000 volunteers/year (377 on average)
  - 1-10 full time staff (1 on average)



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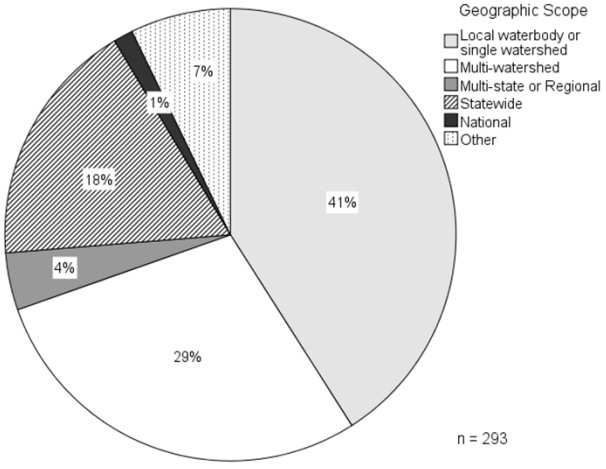
Geographic scope

Most operate in a single watershed



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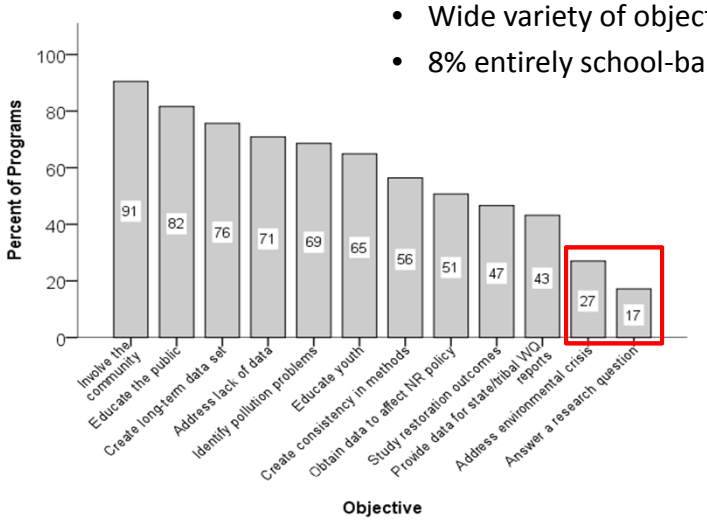
Program objectives

- Wide variety of objectives
- 8% entirely school-based



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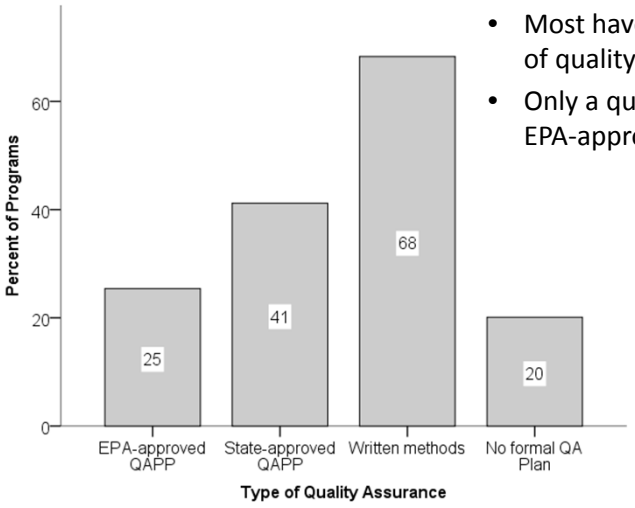
Quality assurance

- Most have some form of quality assurance
- Only a quarter have EPA-approved QAPPs



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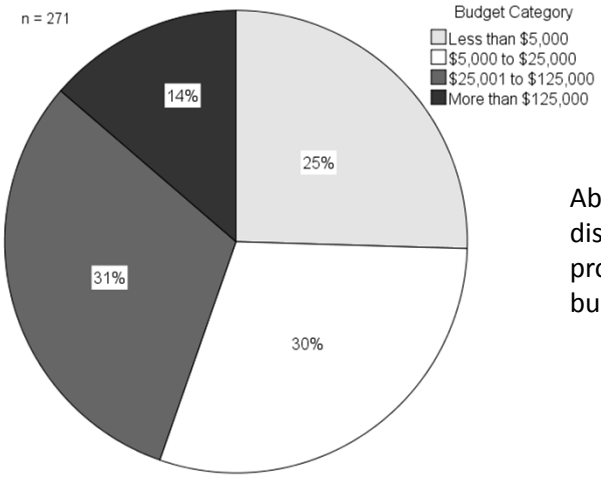
Program budget



About evenly distributed except programs with largest budgets

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IMPACTS ON NATURAL RESOURCE MANAGEMENT AND POLICY

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Impacts on waterbody protection and restoration

- Coordinators reported if volunteer data had been used to
  - Obtain protected status for a waterbody
  - Justify altering land uses
  - Protect land from development
  - Obtain funding for restoration/protection

Image: Terry and Steve Stepenuck

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Waterbody restoration and protection examples

- State protected waters status / US Wild and Scenic River status
- Urban/suburban:
  - Reconfigured parking lot and installed new rain garden
  - Stopped highway construction until silt fences installed
  - Located and eliminated illicit connections
  - Changed ball field land uses to reduce stream turbidity

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Waterbody restoration and protection examples

- Agricultural:
  - BMPs installed (fencing, buffer strips)
  - Changes to industrial farming practices
- Recreational/Commercial:
  - Gear restrictions for fishing
  - Obtained funding for acid mine drainage remediation
  - Established oyster bed sanctuary
  - Removed culvert / installed bridge to increase tidal influence and salmonid spawning

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Impacts on natural resource policy and management decisions

- Reported if data had been used to
  - Identify where a standard was not met
  - Define/modify a standard
  - Close/open a beach or fishing area
  - Develop, change or enforce a regulation
  - Develop a Total Maximum Daily Load (TMDL)
  - Monitor a TMDL
  - List/delist a water body to/from state impaired waters list

Image: http://www.ecy.wa.gov

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Natural resource management examples

- TMDLs and impaired waters listings/de-listings
- Ordinances developed to stop shoreline waterfowl feeding
- Slow or no wake zones developed to minimize spread of invasive species
- Mandatory pet waste clean up areas developed

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Natural resource management examples

- UV disinfection periods expanded at a wastewater treatment plant
- Dam owner permit altered to meet water and temperature requirements of fish
- Developers fined for sediment discharge violations

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Volunteer civic engagement impacts

- Reported if volunteers had
  - Attended a public meeting
  - Served on a board
  - Testified before a legislative body
  - Written letters to support or refute a policy (with/without data)

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Volunteer civic engagement examples

- Have spoken to township, city, & county boards
- Sent data to city engineers and county supervisors for action
- Served on conservation commissions, town board, zoning boards, planning commissions, watershed councils & as county supervisor
- Written to state rep to support a bill
- Testified before Congress

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Organizational impacts

- Reported if organizations had:
  - Changed **how** they assessed water quality
  - Changed **where** they assessed water quality
  - Given citizens staff monitoring responsibilities

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Organizational impact examples

- State agencies:
  - Expanded monitoring to include pharmaceutical, personal care products, surfactants & optical brighteners
  - Switched from using alpha bottle to the integrated water samplers
  - Now determine where biomonitoring should occur based on vol. mon. results

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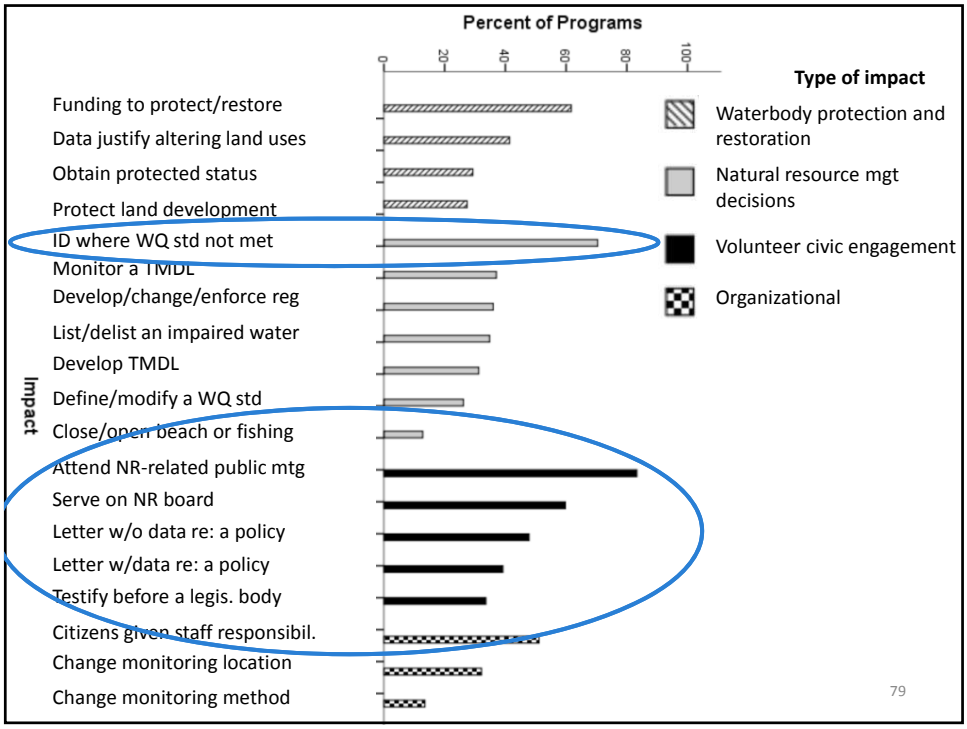
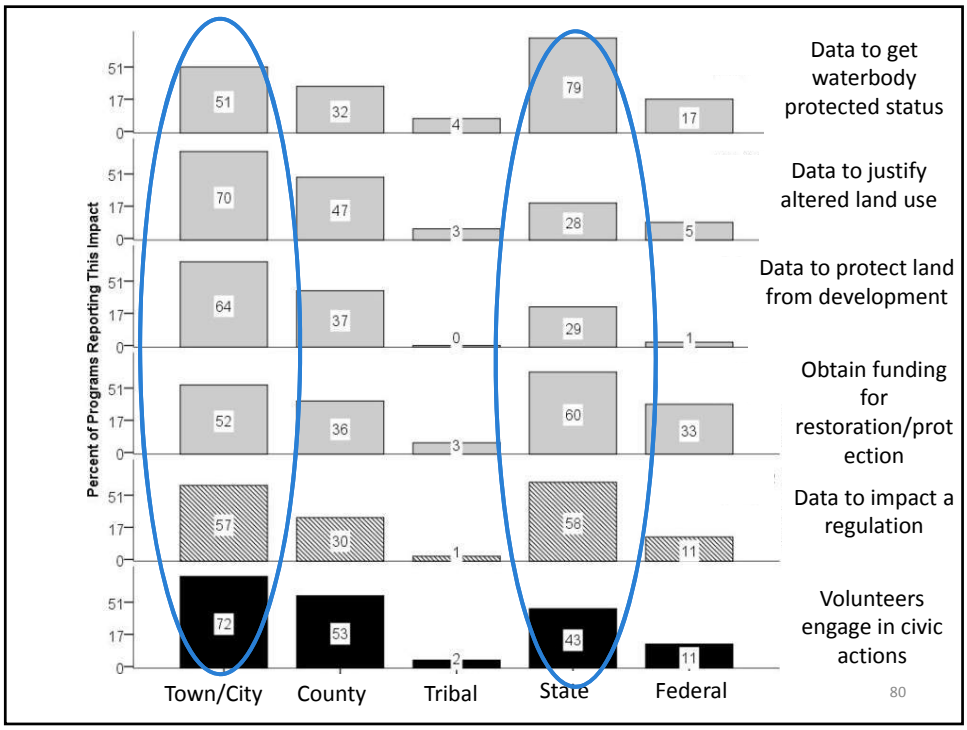

Percent of Programs
0
20
40
60
80
100
Impact
Funding to protect/restore
Data justify altering land uses
Obtain protected status
Protect land development
ID where WQ std not met
Monitor a TMDL
Develop/change/enforce reg
List/delist an impaired water
Develop TMDL
Define/modify a WQ std
Close/open beach or fishing
Attend NR-related public mtg
Serve on NR board
Letter w/o data re: a policy
Letter w/data re: a policy
Testify before a legis. body
Citizens given staff responsibil.
Change monitoring location
Change monitoring method
Type of impact
Waterbody protection and restoration
Natural resource mgt decisions
Volunteer civic engagement
Organizational
79


Percent of Programs Reporting This Impact
51
17
0
51
32
4
79
17
70
47
3
28
5
64
37
0
29
1
52
36
3
60
33
57
30
1
58
11
72
53
2
43
11
Town/City
County
Tribal
State
Federal
Data to get waterbody protected status
Data to justify altered land use
Data to protect land from development
Obtain funding for restoration/protection
Data to impact a regulation
Volunteers engage in civic actions
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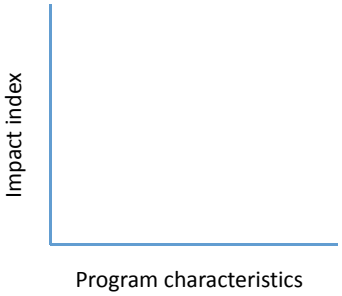
Impact indices and multiple regression

Impact indices

1. Equal Weight Index
   - Each "yes" weighted equally (1)
2. Top Impact Index
   - More credit for a top impact per category (3)
3. Geographic Area Index
   - More credit for impacts at larger geographic scales

Multiple regression

- Impact indices – dependent
- Program characteristics - independent



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What program characteristics were significantly related to outcomes?

1. Objective to address an environmental crisis
2. EPA-approved quality assurance project plan
3. Program size
4. Level of support from external decision makers
5. State-approved quality assurance project plan
6. Entirely school-based (-)
7. Program age (only in Geographic Impact Index model)

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One that was not significantly related to outcomes…

Budget

- Great news for poorly-funded programs!
  - Can and do have an impact on NR policy and management
- Not necessarily bad for wealthy programs
  - Likely due to survey design
  - Measured presence/absence of outcomes, not quantity

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Summary

- Wide variety of natural resource management and policy impacts reported
  - Volunteer civic engagement at the local level
  - ID where standards not met at the state level

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Summary

- Of characteristics significantly related to reported outcomes, the 3 most important:
  - Objective to address environmental crisis
  - Having an EPA-approved QAPP
  - Program size
- Programs with both small and large budgets have positive outcomes

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Image: Lisa and Ted Ludwig

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Next Watershed Academy Webcast

EPA

The Watershed Academy

Identifying and Protecting Green Infrastructure Landscapes in New York State

January 2014

Information will be posted at
www.epa.gov/watershedwebcasts

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Participation Certificate

If you would like to obtain participation certificates **type the link below into your web browser:**

http://water.epa.gov/learn/training/wacademy/upload/2013-11-19-certificate.pdf

You can type each of the attendees names into the PDF and print the certificates.

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