



# Supporting Volunteer Monitoring Efforts Across the Country



## CSREES Volunteer Water Quality Monitoring National Facilitation Project

2008 USDA-CSREES National Water Conference  
Sparks, Nevada

Linda Green<sup>1</sup> ([Lgreen@uri.edu](mailto:Lgreen@uri.edu), 401-874-2905)  
Elizabeth Herron<sup>1</sup>, Kristine Stepenuck<sup>2</sup>,  
Art Gold<sup>1</sup> and Robin Shepard<sup>2</sup>



<sup>1</sup> University of Rhode Island  
<sup>2</sup> University of Wisconsin





# Goals

Build a comprehensive support system for CSREES volunteer water quality monitoring efforts.



Enhance integration of volunteer monitoring into research, education, and extension activities.



# Objectives

- 💧 Identify current Extension programs
- 💧 Link Extension programs to each other
- 💧 Develop training materials
- 💧 Offer training programs
- 💧 Develop Internet and Web-based tools
- 💧 Increase collaboration and cooperation



# Objectives

- Enhance networking, communication and assessment
- Enhance knowledge-base by involving research community in factsheets, trainings
- Enhance stakeholder involvement
  - Volunteer monitoring workshop at these conferences
  - Coordinating national level volunteer monitoring conference
- Strengthen regional programs capacity to incorporate vol mon to address their priorities

# **Identify & Connect Extension Volunteer Monitoring Programs**

**visibility,**

**viability,**

**vitality**



*Land Grant Colleges' and Universities'*

## **Volunteer Water Quality Monitoring National Facilitation Project**

*A Partnership of USDA CSREES  
& the Land Grant System*



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**This Volunteer Water Quality Monitoring National Facilitation Project is designed to build a comprehensive support system for Extension volunteer water quality monitoring efforts across the country. The goal is to expand and strengthen the capacity of existing Extension volunteer monitoring programs and support development of new groups.**

**[www.usawaterquality.org/volunteer](http://www.usawaterquality.org/volunteer)**



# Volunteer Water Quality Monitoring National Facilitation Project

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## **Volunteer Monitoring National Facilitation Project**

**Project Description** (392 K pdf file)

**Nationwide Inquiry**

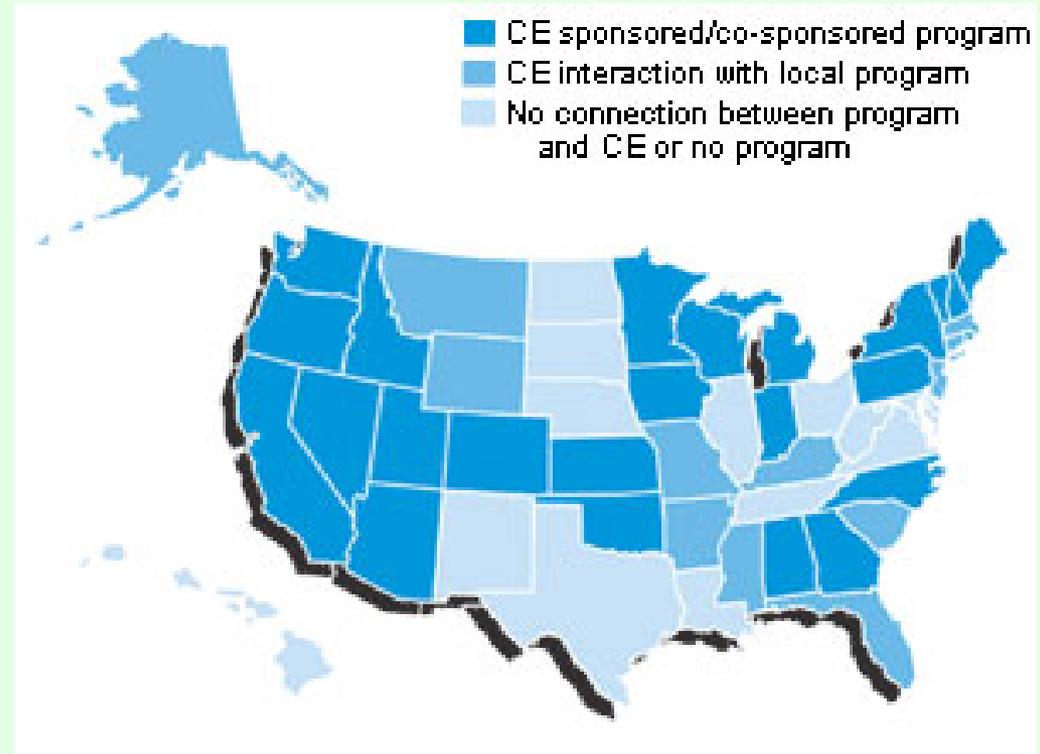
## **Extension Volunteer Monitoring Programs**

**Program Listings**



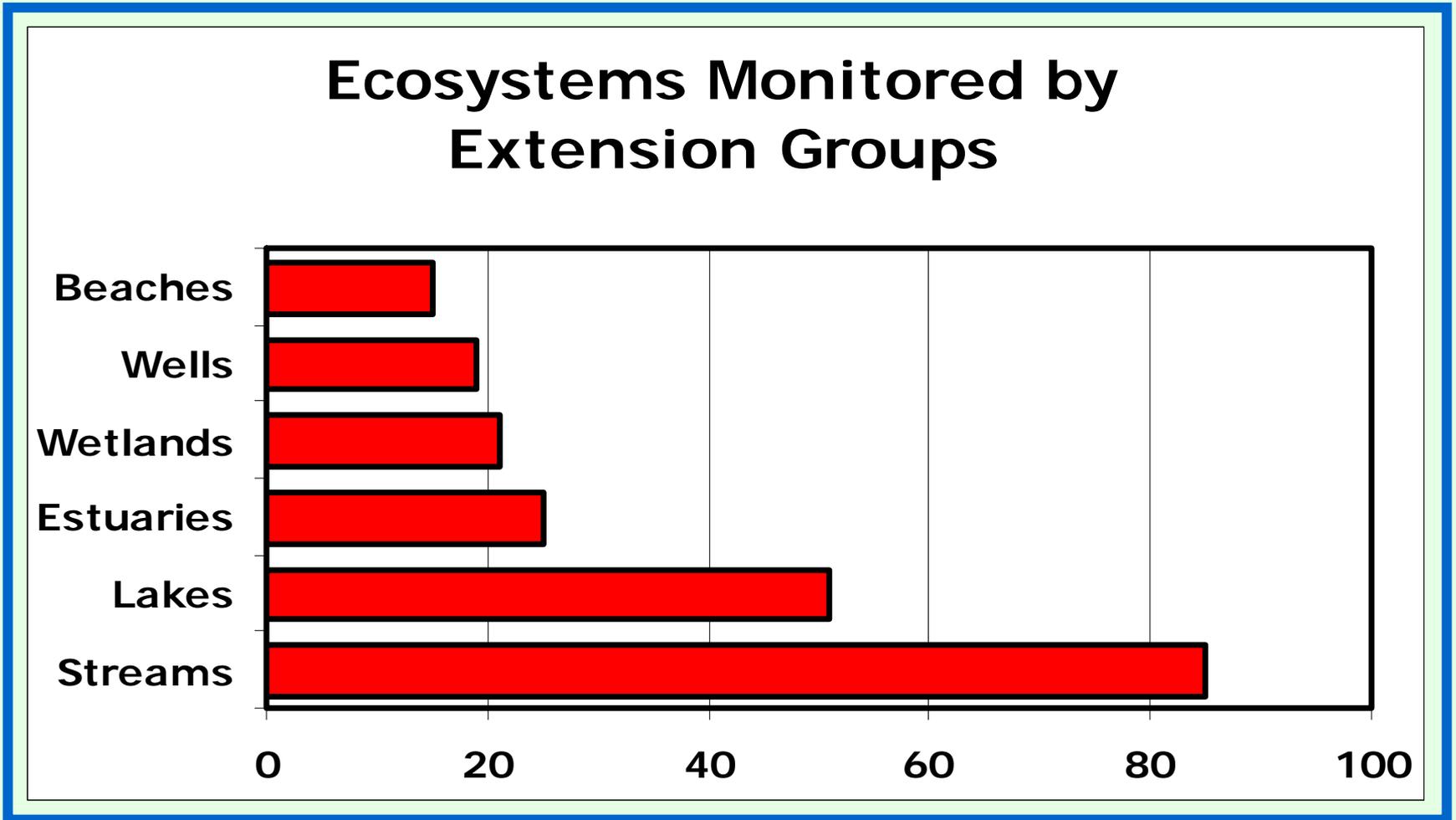
# Who's Out There?

- 💧 ~ 50 programs associated with Extension
- 💧 Began as early as 1978 and as recently as 2006

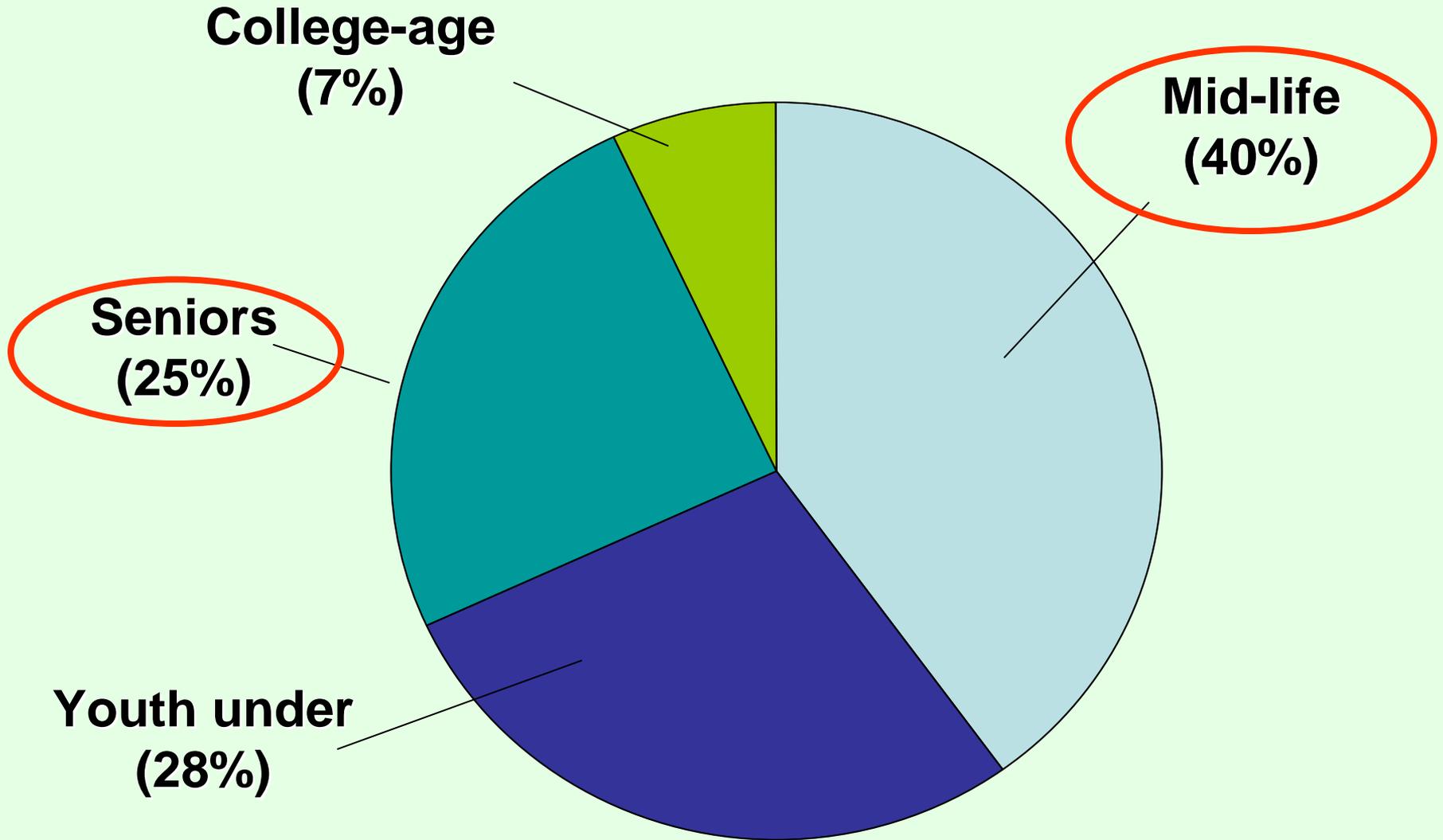




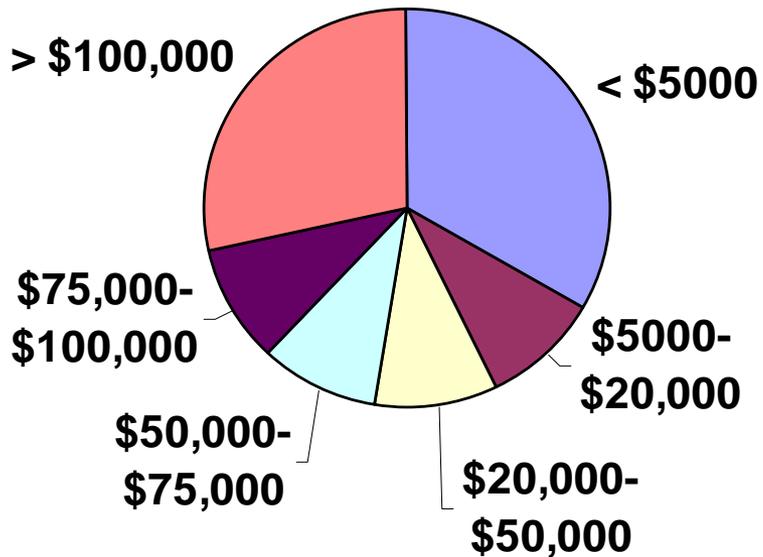
# Where Do They Monitor?



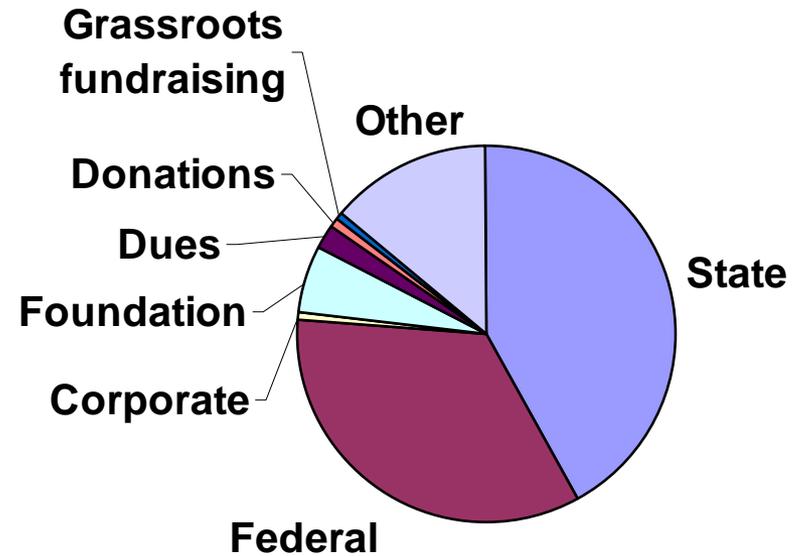
# Who Are These Volunteers?



# Select Inquiry Results - Funding



Extension program  
annual budgets in 2001



Extension program  
Funding sources in 2001

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### Volunteer Monitoring National Facilitation Project

**Project Description** (382 K pdf file)

**Outreach Materials and Activities**  
**Nationwide Inquiry**

### Extension Volunteer Monitoring Programs

**Program Listings**

**Programs' Achievements**

**Current Highlight: Great Bay** **NEW!**  
**Coast Watch**



### Guide for Growing Programs

**Getting Started** (914 K pdf)

**Why Monitoring  
Makes Sense** (582 K pdf)

**Designing Your  
Monitoring Strategy** (1.6 M pdf)

**Monitoring Matrix** (80 K pdf)

**Effective Training** (986 K pdf)

**Monitoring  
Equipment Suppliers** (437 KB pdf)

**Direct Links to Monitoring  
Programs' Manuals (online)**

**Building Credibility** (1.5 M pdf)

**Sharing Information Through  
Internet Exchanges** (1 M pdf)

**Volunteer Management** (7 M pdf)

**Planning Your Program's Data  
Management System** (6 M pdf)

**Outreach Tools**

**Locating Support and Funding**

# Considerations for Planning Your Program's Data Management System

University of Rhode Island

University of Wisconsin

*Kris Stepenuck, Elizabeth Herron and Linda Green*



## Managing Your Data Effectively

Having a data storage, management, and retrieval system is essential for every monitoring program. Without such a system (called a data management system), information that is collected cannot be tracked in an organized fashion. There are multiple data management system options that you can choose from when planning a monitoring program. Deciding which is best for your program's needs is the first step. To help you in the planning process, we surveyed a number of volunteer monitoring programs that have developed online databases as their data management system so that we could incorporate their experiences - both good and bad - into this fact sheet. Our goal is to provide guidance to help you develop your own data management system.

We will provide answers to common questions, tips, anecdotes, and resources to give you a knowledge base about data management, and database planning and development. The questions you ask when developing a data management system will ultimately lead to other questions. The goal is to ask enough questions about what you want to do with the data for the system to be a success. Keep in mind that available resources may require you to make compromises in your planning and that developing technology may open new opportunities for your system. Although the process may be challenging, it will ultimately provide your program with a solid foundation for organizing, analyzing, and sharing information in an effective and efficient manner.

## Data Management System Options

Each data management system has its own strengths and weaknesses (Table 1) for you to reflect upon as you choose and develop one for your program. Storing paper data sheets is the simplest form of data management. However, data aren't organized for easy analysis with a paper system, and if multiple users are interested in obtaining the data, sharing data with them might be problematic. Computerizing data allows them to be stored logically, and shared and analyzed easily. There are a variety of computerized

14 pages, > 25 links



# Training Workshops

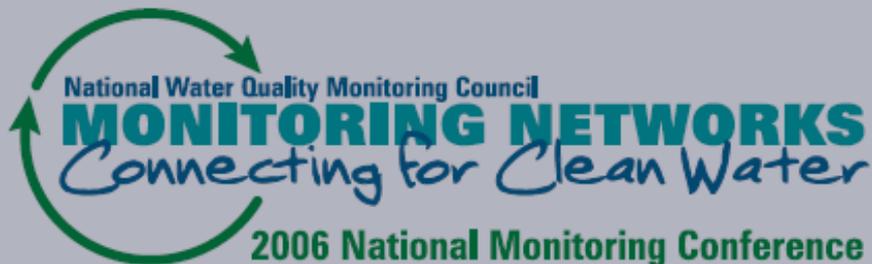
thru CSREES regional/state and  
other venues

💧 Based on "*The Guide for Growing*"

💧 Recently:

- Michigan Extension / DEQ - Jan. '06
- 3 at NWQMC conference – May '06
- EPA Watershed Academy Webcast – Oct. '06
- '07 USDA-CSREES Savannah conference
- '07 FALCON Conf
- This morning- '08 CSREES Water Conf





# 5<sup>th</sup> National Monitoring Conference

## Monitoring Networks: Connecting for Clean Water

San José, California • May 7–11, 2006



### **30% of Workshops**

**11% of concurrent sessions devoted to volunteer monitoring**

**30% of concurrent sessions integrated vm presentations**

**Elizabeth J. Fellows Award to Eleanor Ely**

**Travel support for 20 vm attendees**

**Booth & Side meeting for volunteer monitoring coordinators**

**Needs Assessment**





# Getting Started in Volunteer Water Quality Monitoring

Webcast October 11, 2006

**Sold out (>220 attendees)!**

**36 states, 2 foreign countries**

<http://www.epa.gov/owow/watershed/wacademy/webcasts/archives.html>

Linda Green

University of RI Cooperative Extension

CSREES Volunteer Water Quality National Facilitation Project

Danielle Donkersloot

New Jersey Watershed Watch

New Jersey Department of Environmental Protection





## Selected Archives of Volunteer Monitoring Listserv Discussions

### Initiatives

**Project Description** (382 K pdf file)  
**Outreach Materials and Activities**  
**Nationwide Inquiry**  
**Online Databases**  
**Training Modules**

A tremendous amount of valuable information is shared through EPA and CSREES sponsored volunteer monitoring listservs (as well as others). We created this archive of select interactions from these listservs to help ensure that the knowledge shared through them can reach as wide an audience as possible. Use the topic list below to access these exchanges.

[Age of Volunteer Lake Monitoring Programs](#)

[Ammonia Monitoring](#)

### Extension Volunteer

Monitoring Programs

Relief and Recovery  
Education

Researching Volunteer Monitoring  
Using Volunteer Monitoring Data  
Research

Select Archives of Volunteer  
Monitoring Listserv Discussions

Guides for Growing  
Programs

Getting Started (914 K pdf file)

Why Monitoring  
Makes Sense (26 K pdf file)

Designing Your  
Monitoring Strategy (1.6 M pdf file)

Monitoring Matrix (80 K pdf file)

Effective Training (400 K pdf file)

Monitoring  
Equipment Suppliers (437KB pdf file)

Direct Links to Monitoring  
Programs' Manuals (online)

Building Credibility (1.5 M pdf file)

Volunteer Management

Outreach Tools

Locating Support and Funding

[Aquatic Plant Identification Guides](#)

[California Watershed Assessment Manual](#)

[Chemical Safety and Procedures](#)

[Creating a Volunteer Monitoring Program](#)

[Credible Data Laws](#)

[Guiding Costs to Services: Watershed Resource Support](#)

[Guiding Costs to Services: Watershed Resource Support](#)

[Photographing Data](#)

[Data Storage and Retrieval / Management](#)

[Data Storage and Retrieval / Management](#)

[Documenting Site Location](#)

[DPI and Digital Photos](#)

**Listserv CSREESvolmon@lists.uwex.edu**

**Currently has >70 topics**

**Preserves the spontaneity of exchanges,  
provides information for factsheets,**

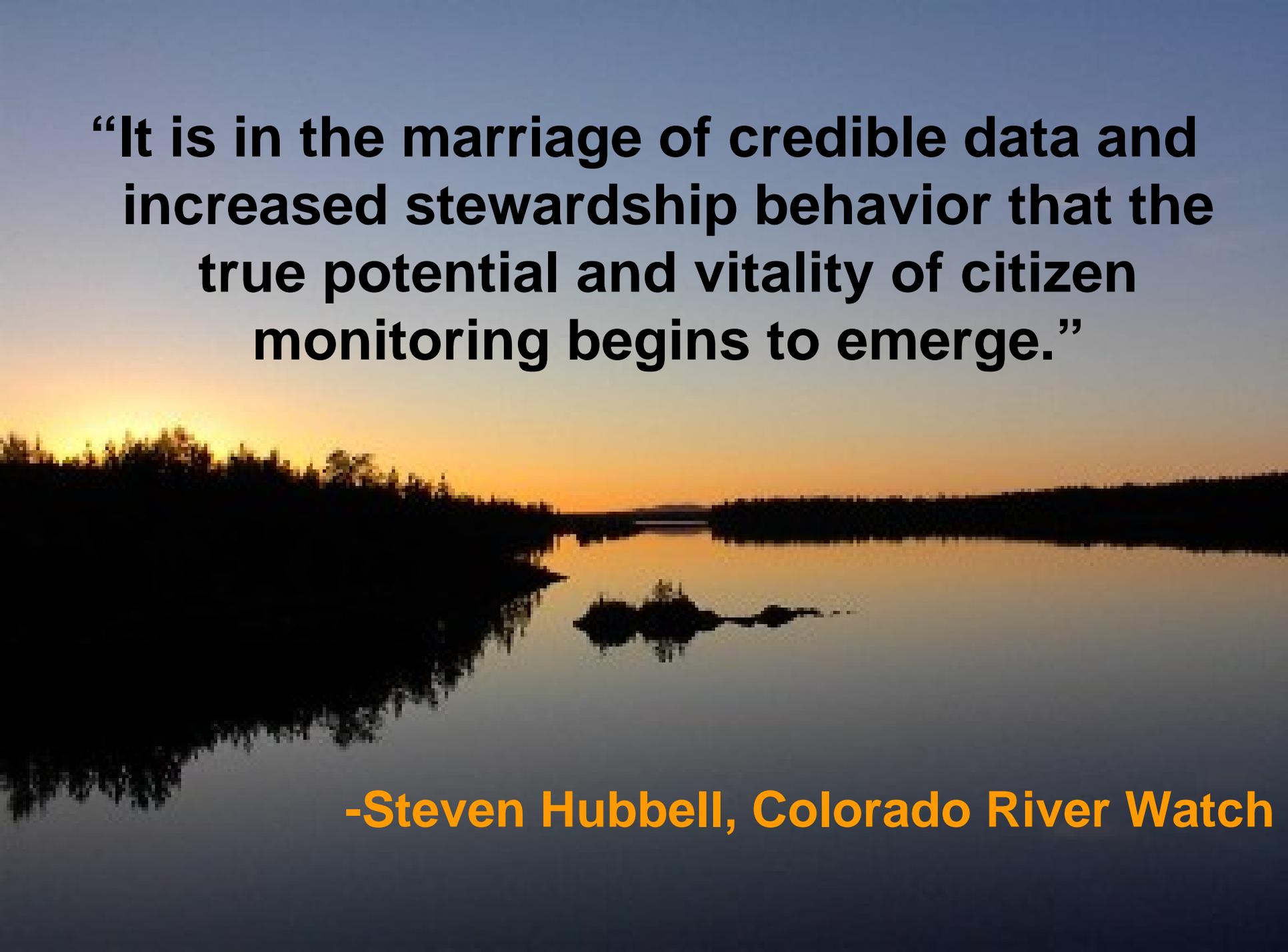
***Cleans out your email box!!!***

# What's Next?

- 💧 Native Americans
- 💧 Climate change
- 💧 Private well monitoring
- 💧 Quantity/Low flow issues
- 💧 Specific monitoring techniques

# **By linking with Extension, Volunteer Water Quality Monitoring Programs:**

- 💧 **Educate the public on water quality or watershed issues, and how to protect and restore resources,**
- 💧 **Encourage citizens to adopt “watershed-friendly” behaviors and policies,**
- 💧 **Bring university science to the community and the community to the university,**
- 💧 **Gain valuable water quality data & information that is distributed to community decision makers in a usable format.**

A serene landscape photograph of a river at sunset. The sky transitions from a deep blue at the top to a bright orange and yellow near the horizon. The sun is partially obscured by a dark silhouette of trees on the left bank. The water is calm, reflecting the colors of the sky and the dark shapes of the trees. A small boat is visible in the middle distance on the water.

**“It is in the marriage of credible data and increased stewardship behavior that the true potential and vitality of citizen monitoring begins to emerge.”**

**-Steven Hubbell, Colorado River Watch**