



# Evaluating Volunteer Monitoring Program Success: Data Use AWW Data Management

Sergio S. Ruiz-Córdova  
Global Water Watch



*Water: One Resource – Shared Effort – Common Future*

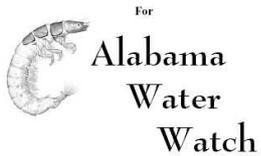
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**Eighth National Monitoring Conference**  
April 30 – May 4, 2012 • Portland, Oregon

The NWQMC logo consists of a stylized blue and white wave pattern above the letters "NWQMC" in a bold, black, sans-serif font.

# AWW Data Credibility

## WATER CHEMISTRY QUALITY ASSURANCE PLAN (Revision of the Quality Assurance Plan Approved June, 1994)



A Program dedicated to developing Citizen Volunteer Monitoring of Alabama's Lakes, Streams and Coasts  
Funded in part by a grant from the U.S. EPA, Region 4  
Clean Water Act, Section 319  
And the Alabama Department of Environmental Management

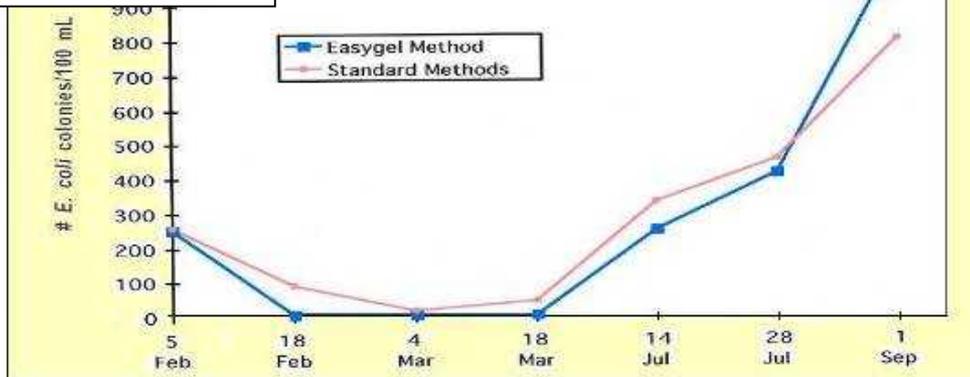
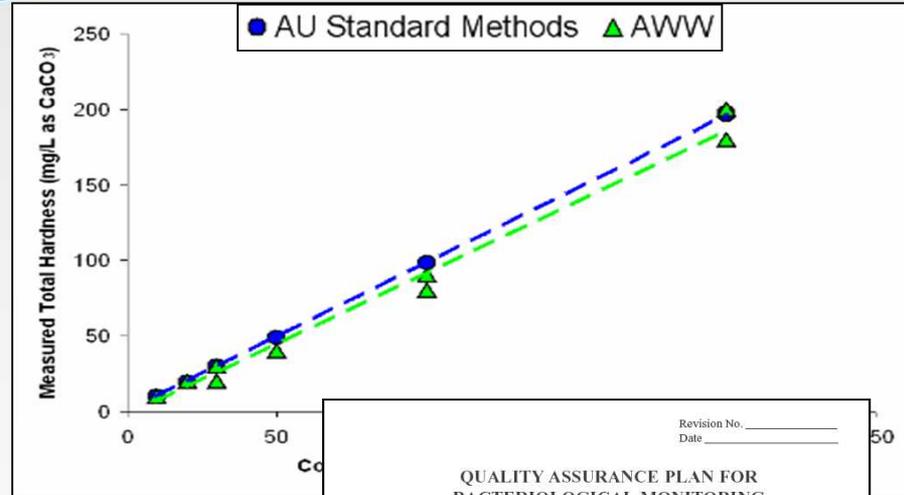
Prepared for  
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 4

January 23, 2004

### APPROVALS

<i>Ronald E. Estridge</i>	1/23/04
<small>Ronald E. Estridge, M.S., Data Quality Coordinator</small>	Date
<i>William G. Deutsch</i>	1/23/04
<small>William G. Deutsch, Ph.D., AWW Program Manager</small>	Date
<i>Norman Blakey</i>	1/26/04
<small>Norman Blakey, ADEM Project Director</small>	Date
<i>Marlynn Peckham</i>	March 9, 2004
<small>Marlynn Peckham, U.S. EPA Region 4, Quality Assurance Manager</small>	Date

# Alabama Water Watch

## QUALITY ASSURANCE PLAN FOR BACTERIOLOGICAL MONITORING (Addendum to the Quality Assurance Plan approved on March, 1995)



A Program dedicated to developing Citizen Volunteer Monitoring of Alabama's Lakes, Streams and Wetlands  
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and the Alabama Department of Environmental Management

prepared for

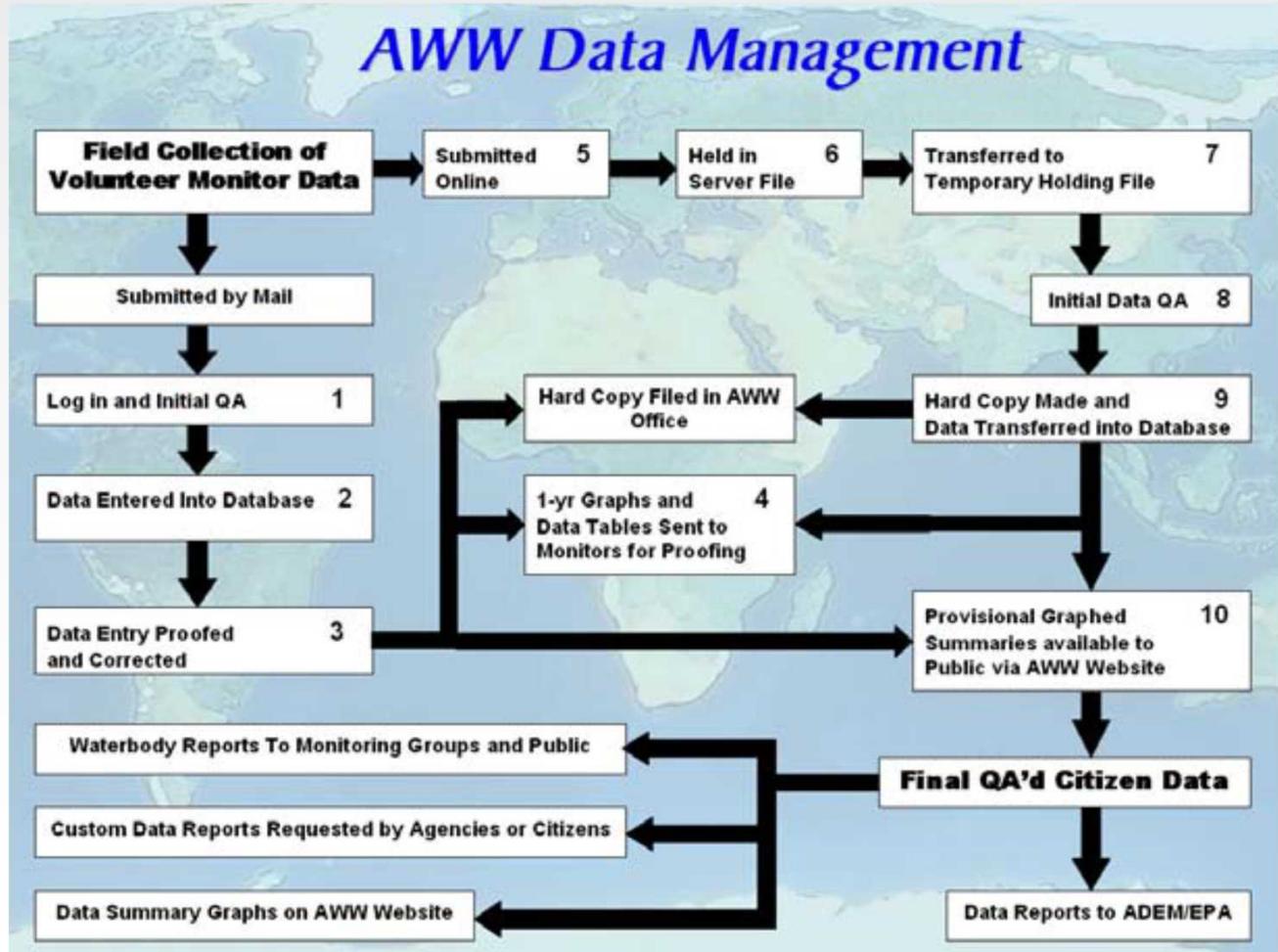
U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 4, Section 319

November 10, 1999

### APPROVALS:

<i>Allison L. Dusby</i>	11/16/99
<small>Allison L. Dusby, M.S., AWW QA/QC Officer</small>	Date
<i>William G. Deutsch</i>	11/16/99
<small>William G. Deutsch, Ph.D., AWW Program Manager</small>	Date
<i>Norman Blakey</i>	10/3/99
<small>Norman Blakey, ADEM Project Director</small>	Date
<i>Gary Bennett</i>	12-20-99
<small>Gary Bennett, U.S. EPA Region 4, Quality Assurance Officer</small>	Date

# AWW Data Management



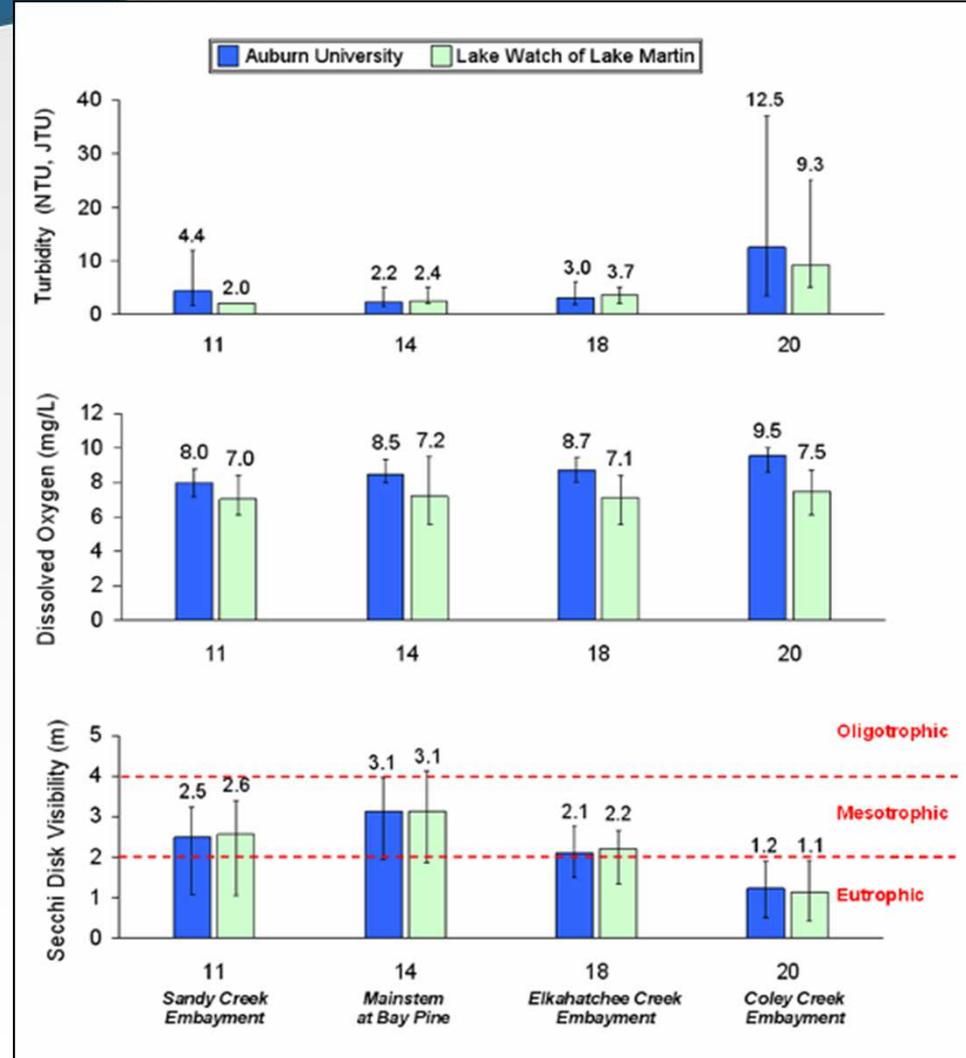
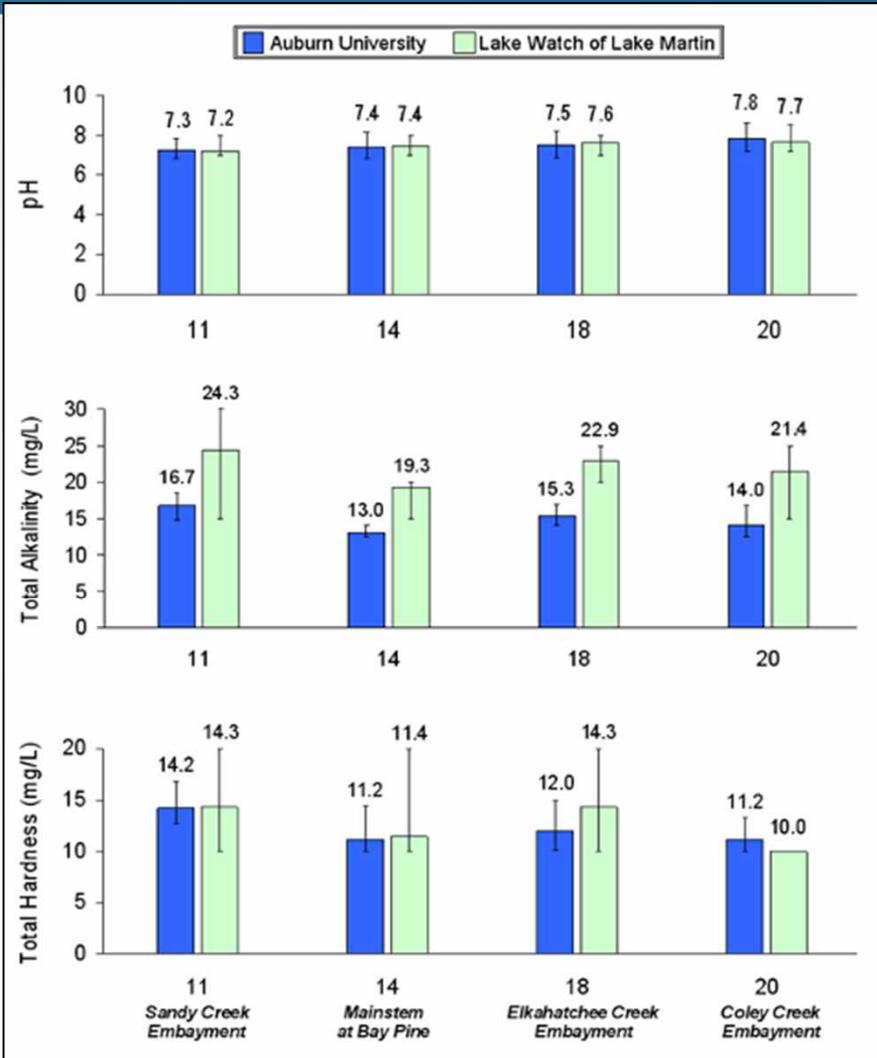
# AWW Numbers



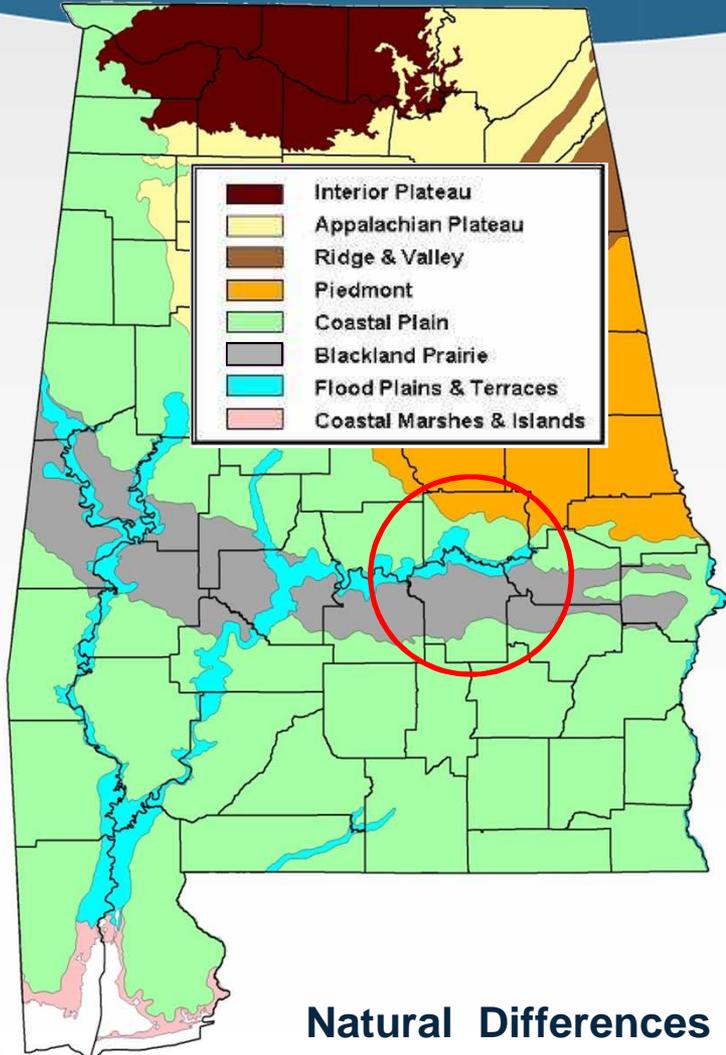
Indicator	Cummulative Numbers
Total Water Quality Records	69131
Total Water Chemistry Records	55946
Total Bacteriological Records	12908
Total Bioassessment Records	277
Total Monitors Certified	5745
Total Sampling Sites	2132
Total Training Sessions	1620
Total Waterbodies Monitored	792
Total Citizen Groups	265

Here are some of the more current statistics about the Alabama Water Watch Program. For specific information regarding data, please visit the AWW website at [alabamawaterwatch.org](http://alabamawaterwatch.org), where maps, graphs and summary data is available. You may also call the AWW office at (334) 844-4785.

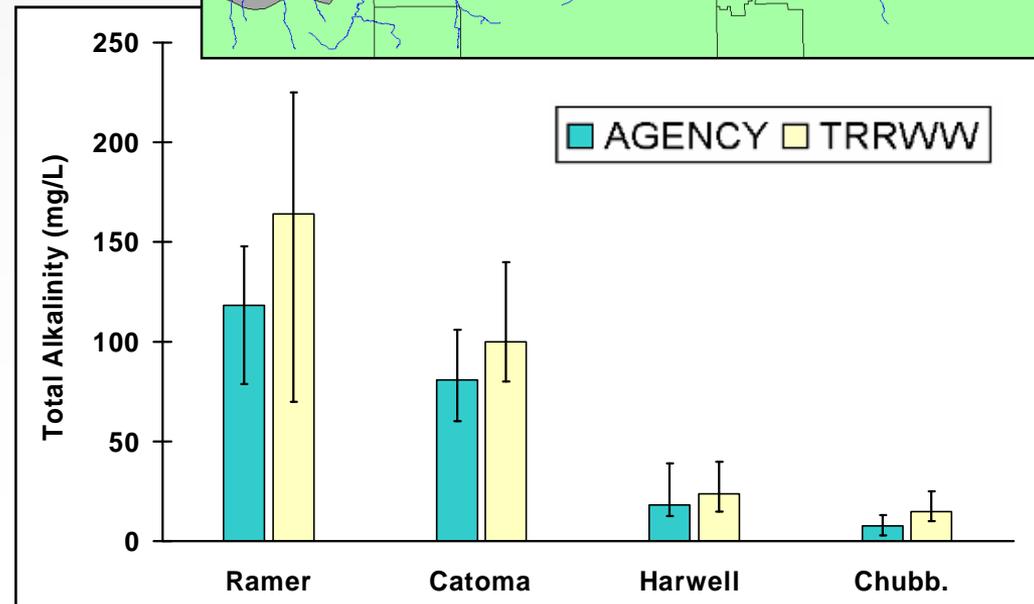
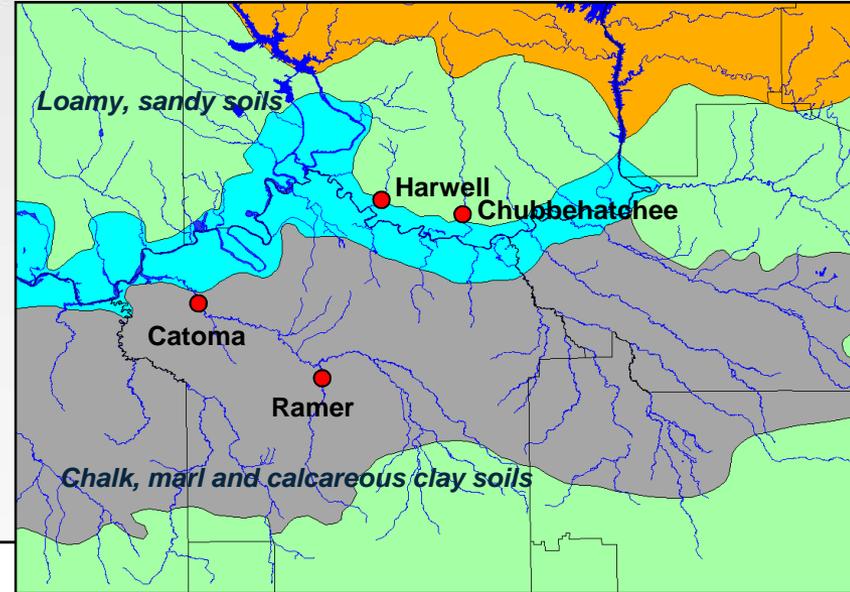
# AWW Side-by-Side Data Comparison



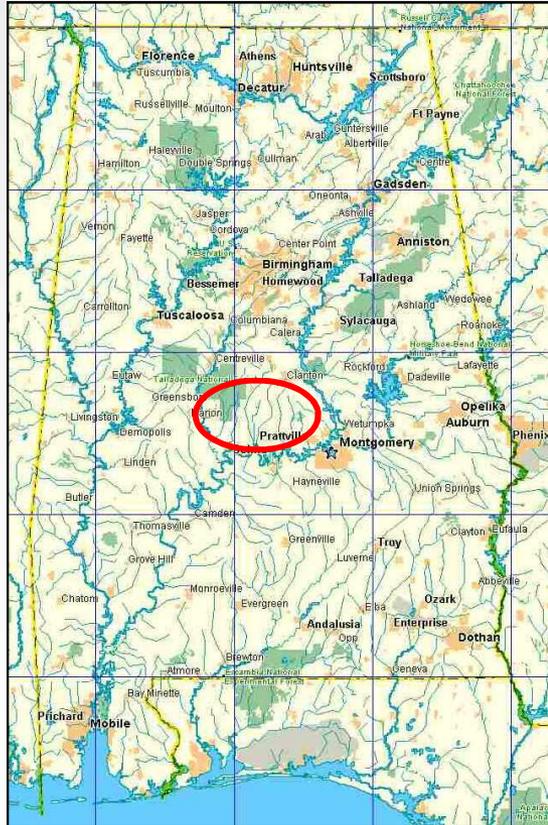
# Citizen Data Detect Natural Differences in Water Chemistry



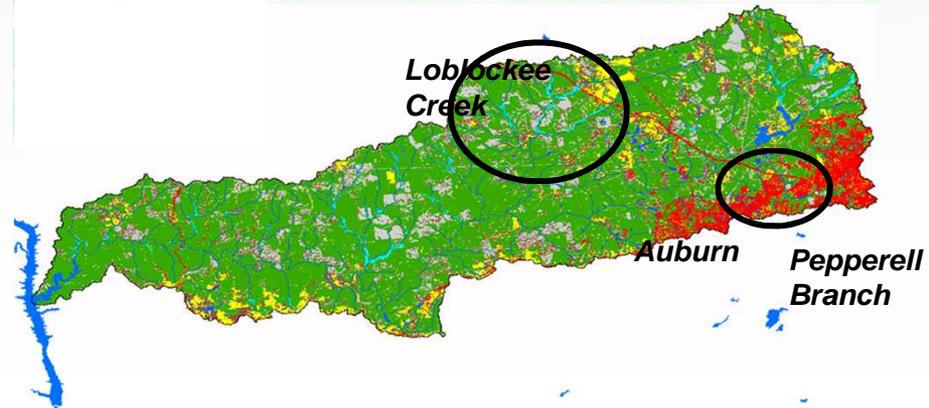
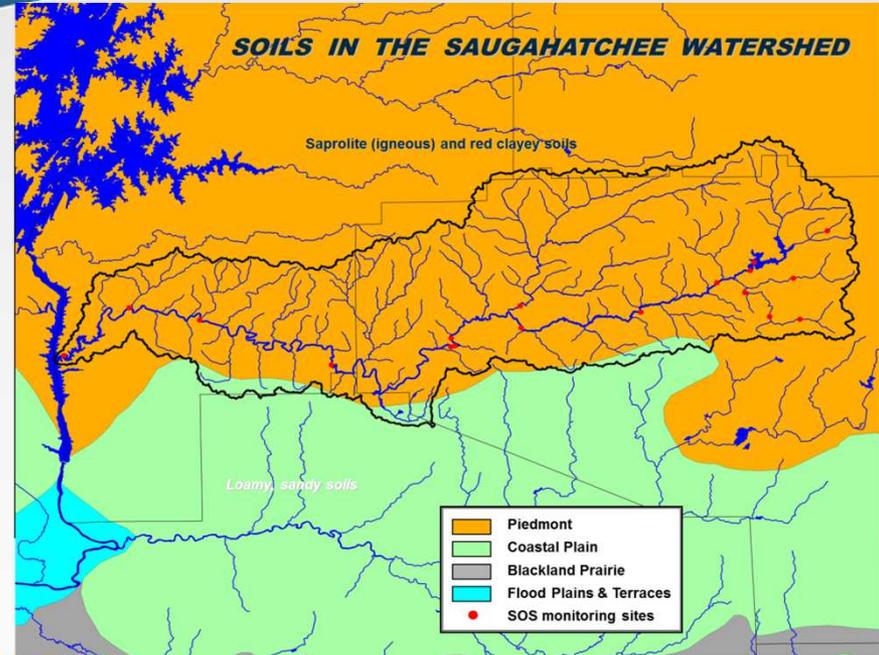
**Natural Differences  
In Water Chemistry**



# Citizen Data Detect Human-Induced Differences in Water Chemistry



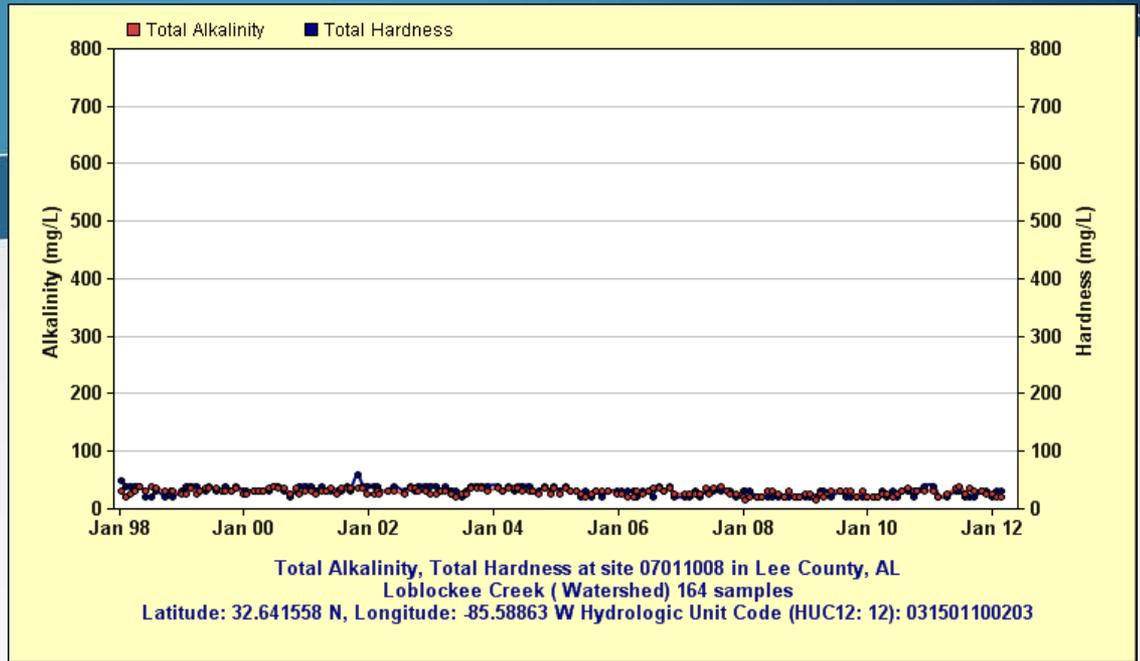
## SAUGAHATCHEE CREEK



**Polluted  
vs  
Unpolluted**

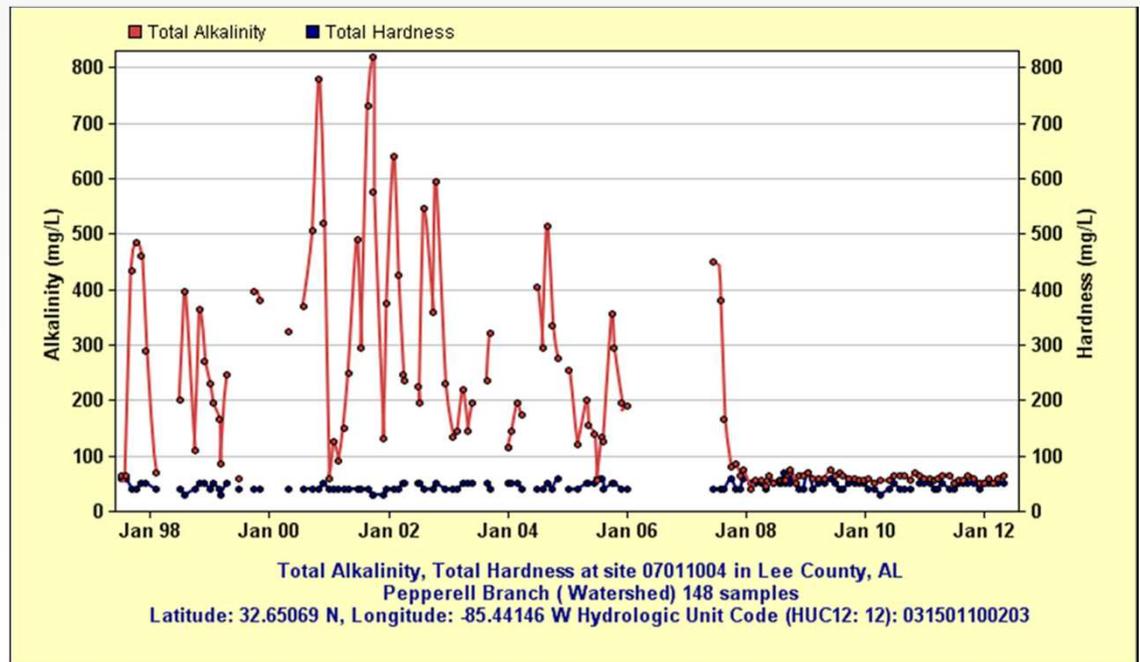
*Loblockee  
Creek*

**NATURAL**

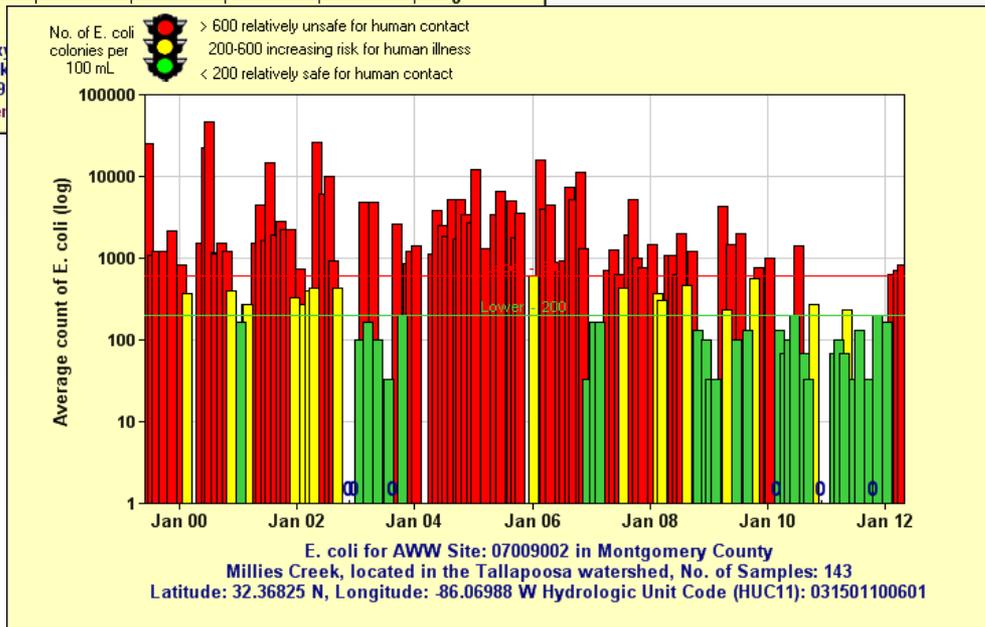
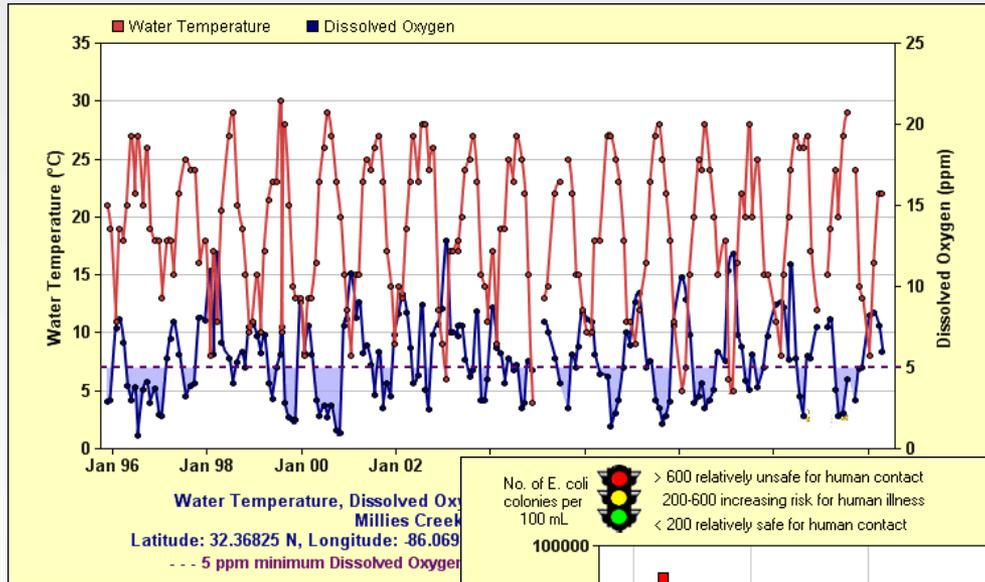


*Pepperell  
Branch*

**NOT  
NATURAL**



# Is my water getting better or worse?



# Citizen Data Impact on Water Policy



Steve McConnell/Staff Photo

With a unanimous ruling, the Alabama Environmental Management Commission granted Wolf Bay the highest state classification for water quality – Outstanding Alabama Water. (Pictured) - Al. Dept. of Environmental Management officials Lynn Sisk and Trey Glenn; Al. Environmental Management Commissioners Kathleen J. Felker, Anita L. Archie and Laurel G. Gardner; Wanda Ramos, president of the Wolf Bay Watershed Watch; Cindy Lowry and Adam Snyder of the Alabama Rivers Alliance

## World class water

Unanimous ruling designates Wolf Bay as an Outstanding Ala. Water

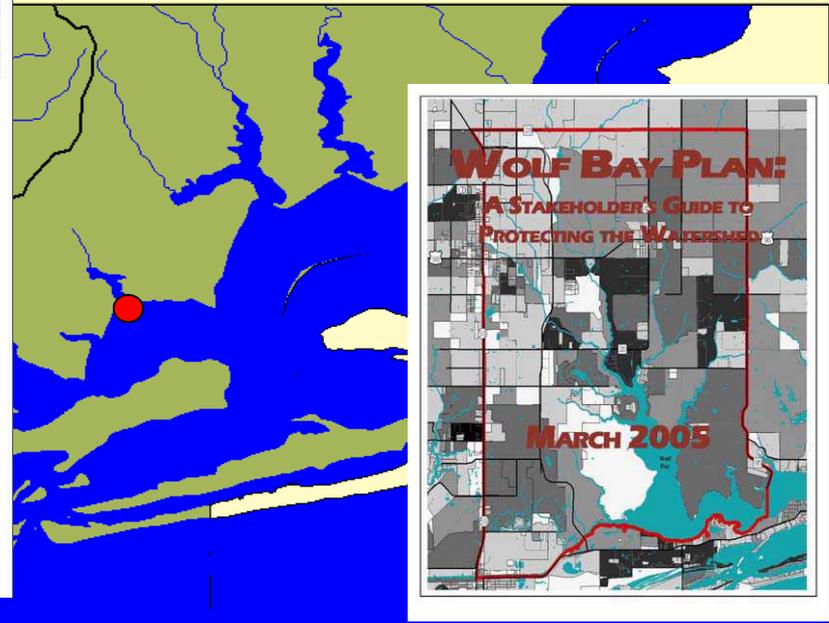
Steve McConnell  
Staff Writer

fourth waterway state-wide to receive OAW and the first estuarine system.

"We certainly thought (the designation) was an appropriate step to take with Wolf Bay, it's not something we take lightly," said McIndoe

Segments of the Cahaba River, Hatchet Creek, and the Tensaw River are also

**Wolf Bay Watershed Watch**  
WOLF was estab. on 12/8/1996 Chem Recs: 4030, Bac Recs: 3443  
Currently there are 20 active sites and 37 inactive sites

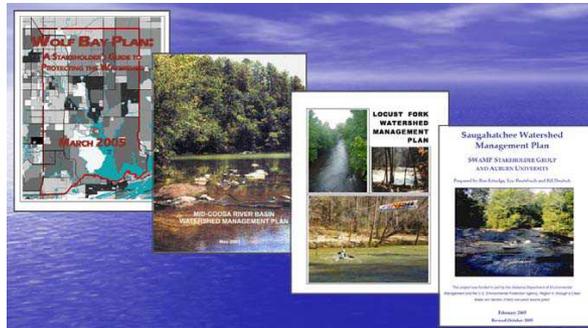


# AWW Citizen Data Use

- 1) Data interpretations, conferences and waterbody publications
- 2) Mapping and sourcing of bacterial contamination (solving local problems)
- 3) Determining if the water quality of a waterbody is getting better or worse
- 4) Determining the relative health of a watershed
- 5) Monitoring drinking water supplies for bacterial contamination
- 6) Environmental education in collaboration with schools.

More formal uses have included

- 1) Influencing water policy (waterbody designation)
- 2) Upgrading of waterbody use classification
- 3) Development of watershed management plans
- 4) ADEM Water Quality 305(b) Report to Congress
- 5) Development of TMDLs
- 6) Delisting of 303(d)-listed streams



# The Power of the Plates



E. coli plated on 2/19/2008 from the AU Memory Garden stream, that flows into the AU Arboretum. Plated sample was ¼ mL water sample. Collector: Jayme Oates



**Contact us:**



# Alabama Water Watch

**250 Upchurch Hall, 361 Mell Street  
Auburn University, Alabama, USA 36849**

**[www.globalwaterwatch.org](http://www.globalwaterwatch.org)**

**Toll Free in U.S.: 1-888-844-4785**

**Fax: 334-844-3666**

**email: [gww@auburn.edu](mailto:gww@auburn.edu)**