4-H Alabama Water Watch: Increasing Environmental Literacy and Watershed Stewardship through Youth-Focused Citizen Science

Mona Dominguez, 4-H AWW Program Coordinator & Sydney Smith, AWW Volunteer Coordinator

Presented by: Danielle Donkersloot
What is Alabama Water Watch?

A program dedicated to developing Citizen Volunteer Water Monitoring of Alabama’s streams, rivers, and coasts.
Identification of Need for New Youth Program...

AWW has done youth programming since the beginning, but we needed help!

- Need for aquatic science education in AL
- No way to support teachers after workshops or help with in-school programming, about 20%
- No activity reporting system – how many students are we reaching?
- No volunteer training program for working with youth
Reasons to get youth involved with water monitoring...

- Science-based, hands-on, fun experience with natural resources
- Mastering a skill
- Teaching youth that they can make a difference
- Enjoy time outside, and OFFLINE!
- Career exploration
- Getting to know Alabama’s beautiful water resources
Noteworthy Findings... The Greying of AWW

1996: 38% were older than 50; none over 70 (62% Under 50)
2012: 56% were older than 50; 14% over 70 (Only 30% Under 50!)

Need to recruit youth and young adults!

"Old Water Monitor"
"Young Water Monitor"

52% Grey Hair
10% NO (or little) Hair
38% Non-Grey

10% Actually NOT Grey
What is Alabama 4-H?

- Youth development organization of Alabama Cooperative Extension System

- Educators & Volunteers deliver programming
- 4-H Regional Extension Agents deliver programming and coordinate ACES Staff, educators and volunteers
- County Coordinators deliver programming
- AWW Program Coordinators coordinate & deliver programming, curriculum development, data management, program support, professional development

Provide materials, professional development, program support
Alabama Water Watch – Alabama 4-H Partnership

4-H Alabama Water Watch

Aquatic Science Expertise & Curriculum

Youth and Education Expertise

Network of Volunteer Trainers & Monitors

Multiple Delivery Modes

Connections to State, National, & Global Organizations

Volunteer Training Program
First Two Years (2013-2015)

- Building relationships with State Staff, 4-H Regional Extension Agents (Field Staff)
- Traveling to county offices and schools to promote AWW
- Piloting activities with youth and 4-H Agents (as educators) using existing AWW Exploring Our Living Streams (EOLS) Curriculum (stream biomonitoring only)
EPA Environmental Education Grant
2015-2017

- Provided training, materials, & support needed in increase environmental literacy in Alabama youth
- Funded development of EOLS workshops and extension of the curriculum to include water chemistry monitoring
EPA Environmental Education Grant
2015-2017

EPA Grant more than doubled youth participation and reach!
Results & Impacts

- 274 Educators Certified
- 20,000 Students Reached
- 250 Data Records Received
- 43 of 67 AL Counties Involved
Challenges and Keys to Success

• Understanding the 4-H Model & adapting AWW Program to fit
• 4-H Volunteer Training Program
• 4-H Reporting System
• Correlating curricula to Alabama Course of Study
• Building Relationships (4-H State Staff, Field Staff)
• Providing educators/volunteers with hands-on support
• Partnering with other 4-H Natural Resources Programs (i.e. RiverKids, Sportfishing, Junior Naturalist)
• Partnering with other environmental education organizations and projects to reach wider audience and gain recognition as a potential partner
4-H Water Watchers Partner with Watershed Management Plans throughout Alabama:

Moores Creek
Tiawassee Creek
Mill Creek
Pepperell Branch
Parkerson Mill Creek
Future Plans for 4-H AWW

- *Alabama Rivers* Educator Workshops
- Student Project Competition
- Development of Bacteriological EOLS
- Citizen Science Data Simulation Workshops
- Training of Trainers for Educators
- Youth Trainers
4-H Alabama Water Watch
CASIC Building, Office 205
559 Devall Drive
Auburn University, Alabama, 36849
www.alabamawaterwatch.org

Sydney Smith
334-844-4785
srs0029@aces.edu

Mona Dominguez
334-844-9323
srs0013@aces.edu

THANK YOU!