

4DE-04po



Unit 4: Improving My Watershed

The Southern Region 4-H₂O Ambassador Program



Educating a new generation of water resource protectors and conservators





Southern Region 4-H₂O Ambassador

Introduction

The Southern Region 4-H₂O Ambassador Program addresses key concepts related to watershed education. The program is part of an ongoing effort within the Southern Region to educate and empower youth to conserve and protect our water resources.

A Southern Region 4-H₂O Ambassador is a 4-Her, 8 to 14 years of age, who has successfully completed units 1 through 3 and has been acknowledged by the Southern Region Water Program as having the skills and knowledge to successfully complete a community-based service project. At the completion of the community-based service project, each 4-H₂O Ambassador will be recognized on a local, state-wide, and multi-state (regional) basis.

Each unit includes:

Skimming the Surface Background information to help instructors prepare for activities

Wading In Hands-on activities

4-H₂O Opportunities Extensions to particular activities (not required to become an ambassador)

Diving Deeper Additional activities (not required to become an ambassador)

Sink or Swim Evaluation options



UNIT 4

Improving My Watershed

Overview

In this unit, 4-Hers will develop and implement a service project in their community.

4-H₂Objectives

Upon completion of this unit youth will be able to:

- Identify current issues/problems in their watershed.
- List community groups, organizations, and individuals within their watershed that are able and willing to help with community issues related to water.

Instructor Preparation

1. Read **4-H₂O Community-Based Service Project** below.
2. Have examples of current issues in your watershed(s).
3. Have a list of community groups and organizations that would be willing to help youth with community-based service projects. Please check with groups and organizations to see if they are able and willing to interact and help youth.

4-H Life Skills

- **Head:** Learning to Learn, Decision Making, Critical Thinking, Service Learning, Goal Setting, and Planning/Organizing; Hands: Self-Motivation, Responsible Citizenship, Leadership, Volunteering, and Community Service Volunteering
- **Heart:** Communication
- **Hands:** Community Service Volunteering, Leadership, Responsible Citizenship, Self-Motivation
- **Health:** Self-Responsibility

4-H₂O Community-Based Service Project

As a 4-H₂O Ambassador, youth are required to develop and implement a community-based service project. The Community-Based Service Proposal Form and Final Report Form are at the end of this unit and also can be downloaded at <http://www.ca.uky.edu/enri/4H2O.htm>. The Southern Region 4-H₂O Ambassador Coordinator's contact information can also be found at <http://www.ca.uky.edu/enri/4H2O.htm>.

Guidelines

The 4-H₂O Ambassador must:

- Complete 25 service hours during the development and implementation of their service project.
- Submit a **Community-Based Service Proposal Form** to the 4-H Youth Development Agent or designated instructor prior to beginning the project. The 4-H Youth Development Agent or designated instructor must sign and date the form and send a copy of the form to the Southern Region 4-H₂O Ambassador Coordinator.
- Submit a **Final Report Form** to the 4-H Youth Development Agent or designated instructor at the completion of the project. The 4-H Youth Development Agent or designated instructor must sign and date the form and send a copy of the form to the Southern Region 4-H₂O Ambassador Coordinator.
- **Optional:** Mentor one up-and-coming 4-H₂O Ambassador. This person can be anywhere in the Southern Region.

The service project must:

- Be completed within the designated time specified on the **Community-Based Service Proposal Form**.
- Address a local watershed issue(s).
- Educate community members on the identified watershed issue(s).
- Involve one or more community groups or organizations.

The 4-H Youth Development Agent or designated instructor must:

- Submit one signed and dated **Community-Based Service Proposal Form** and one signed and dated **Final Report Form** for each 4-H₂O Ambassador to the Southern Region
- Recognize each 4-H₂O Ambassador and their community-based service project locally and statewide (examples: locally—county or city newspaper, county fair; statewide—state fair, state 4-H conference/event).

The Southern Region 4-H₂O Ambassador Coordinator must:

- Recognize each 4-H₂O Ambassador and their community-based service on the Southern Region Water Program 4-H₂O website.



Instructions for Instructor

1. Ask 4-H₂O Ambassadors to list various issues currently impacting their watershed.
2. Ask ambassadors to discuss various issues. Can these issues be resolved? If so, how? What can be done in the community to lessen each issue? Who in the community could help? Have a list of community groups and organizations that are willing to work with ambassador on watershed-type issues. Discuss the various groups/organizations and their role in the community.
3. Let ambassadors investigate various issues by searching the Internet, talking with local citizens, etc.
4. Provide a time frame at which ambassador must decide upon a community-based service project and submit their completed **Community-Based Service Proposal Form**.
5. Review each form. Provide comments to the ambassador. Make sure each project is doable.
6. Make a copy of the **Community-Based Service Proposal Form** and send to the Southern Region 4-H₂O Coordinator.
7. Contact ambassador throughout the project timeline to ensure they remain on task, and see if they need help.
8. At the completion of the project, have ambassador complete the **Final Report Form**. Make a copy of the form and send to the Southern Region 4-H₂O Coordinator.
9. Download and customize the certificates and news releases at <http://www.ca.uky.edu/enri/4H2O.htm> to recognize ambassador locally and statewide.

National Education Standards

1. The Nature of Science

B. Scientific Inquiry

Scientists differ greatly in what phenomena they study and how they go about their work. Although there is no fixed set of steps that all scientists follow, scientific investigations usually involve the collection of relevant evidence, the use of logical reasoning and the application of imagination in devising hypotheses and explanations to make sense of the collected evidence (Grades 6-8).

C. The Scientific Enterprise

Science is an adventure that people everywhere take part in, as they have for many centuries (Grades 3-5).

Clear communication is an essential part of doing science. It enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world (Grades 3-5).

3. The Nature of Technology

A. Technology and Science

Technology extends the ability of people to change the world: to cut, shape, or put together materials; to move things from one place to another; and to reach farther with their hands, voices, senses, and minds. The changes may be for survival needs such as food, shelter and defense, for communication and transportation, or to gain knowledge and express ideas (Grades 3-5).

In earlier times, the accumulated information and techniques of each generation of workers were taught on the job directly to the next generation of workers. Today, the knowledge base for technology can be found as well in libraries of print and electronic resources and is often taught in the classroom (Grades 6-8).

B. Design and Systems

There is no perfect design. Designs that are best in one respect (safety or ease of use, for example) may be inferior in other ways (cost or appearance). Usually some features must be sacrificed to get others. How such trade-offs are received depends upon which features are emphasized and which are down-played (Grades 3-5).

Even a good design may fail. Sometimes steps can be taken ahead of time to reduce the likelihood of failure, but it cannot be entirely eliminated (Grades 3-5).

The solution to one problem may create other problems (Grades 3-5).

Design usually requires taking constraints into account. Some constraints, such as gravity or the properties of the materials to be used, are unavoidable. Other constraints, including economic, political, social, ethical, and aesthetic ones, limit choices (Grades 6-8).



6. The Human Organism

D. Learning

Human beings can use the memory of their past experiences to make judgments about new situations (Grades 3-5).

Learning means using what one already knows to make sense out of new experiences or information, not just storing the new information in one's head (Grades 3-5).

Language and tools enable human beings to learn complicated and varied things from others (Grades 6-8).

8. The Designed World

D. Communication

Communication technologies make it possible to send and receive information more and more reliably, quickly, and cheaply over long distances (Grades 3-5).

9. The Mathematical World

E. Reasoning

One way to make sense of something is to think how it is like something more familiar (Grades 3-5).

Reasoning can be distorted by strong feelings (Grades 3-5).

12. Habits of Mind

A. Values and Attitudes

Keep records of their investigations and observations and not change the records later (Grades 3-5).

Offer reasons for their findings and consider reasons suggested by others (Grades 3-5).

D. Communication Skills

Write instructions that others can follow in carrying out a procedure (Grades 3-5).

Acknowledgments

Southern Region 4-H₂O Ambassadors Committee

Ashley Osborne, Jann Burks, Carol Hanley, Amanda Gumbert, Stephanie Jenkins, and Blake Newton, Brian Radcliffe (University of Kentucky); Melanie Biersmith (University of Georgia); Lena Beth Carmichael (University of Tennessee); Frank Henning (Region IV EPA - Land Grant Universities Liaison); Rick Wiley (Clemson University); Lenny Rogers (North Carolina State University)

Reviewers

Elizabeth Conway, Kandi Edwards, Brenda Jackson, Octavia Jackson, Terri Kimble, Julie Lawrence, and Dinah Rowe (University of Georgia); Jan Gibson, Rebecca Konopka (University of Kentucky); Julie Jones (Fayette County Public Schools)

This publication was adapted from on *4-H₂O Pontoon Classroom*, a curriculum developed by Clemson University Cooperative Extension. Permission granted for use and modification.

The development of the Southern Region 4-H₂O Ambassador curriculum was funded by the USDA-NIFA Southern Region Water Program.



Southern Region 4-H₂O Ambassador Program Community-Based Service Proposal Form

Your Name: [Type text]

Contact Information (address, phone, email): [Type text]

Agent/Instructor's Name: [Type text]

Date: [Type text]

County/State: [Type text]

Community-Based Service Project Title: [Type text]

Watershed(s) Name (watershed(s) in which project will be taking place in): [Type text]

Community Partners: [Type text]

Summary of Project (including goals and purpose): [Type text]

Timeline: [Type text]

The 4-H₂O Ambassador's agent or designated instructor must sign and date the form and mail or fax a copy to the Southern Region 4-H₂O Coordinator.

Signature of 4-H Youth Development Agent

Date



Southern Region 4-H₂O Ambassador Program Final Report Form

Your Name: [Type text]

Contact Information (address, phone, email): [Type text]

Agent/Instructor's Name: [Type text]

Date: [Type text]

County/State: [Type text]

Community-Based Service Project Title: [Type text]

Watershed(s) Name (watershed(s) in which project will be taking place in): [Type text]

Community Partners: [Type text]

Summary of Project (including goals, purpose, and accomplishments): [Type text]

Timeline: [Type text]

The 4-H₂O Ambassador's agent or designated instructor must sign and date the form and mail or fax a copy to the Southern Region 4-H₂O Coordinator.

Signature of 4-H Youth Development Agent

Date

UNIT 4: IMPROVING MY WATERSHED



Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, M. Scott Smith, Director, Land Grant Programs, University of Kentucky College of Agriculture, Lexington, and Kentucky State University, Frankfort. Copyright © 2011 for materials developed by University of Kentucky Cooperative Extension. This publication may be reproduced in portions or its entirety for educational or nonprofit purposes only. Permitted users shall give credit to the author(s) and include this copyright notice. Publications are also available on the World Wide Web at www.ca.uky.edu.

Issued 2-2011