



4-H Soil and Water Science Project



Step It Up!

Pass it on! Now that you know how, share it with others. Here are ideas to get you started:

Citizenship/ Leadership

- Organize a clean-up team for a local water clean-up day
- Volunteer with the Natural Resource Conservation Service
- Speak to local officials about water concerns in your neighborhood

Communication

- Create a visual demonstration to illustrate potential impacts of common household products on soil and water quality
- Teach others about promoting soil sustainability
- Write an article for a local newsletter/newspaper

Healthy Living

- Explore local conservation areas by hiking, boating and staying active
- Visit a local farmer to learn how they maintain healthy soils for growing crops

Science

- Learn the tools used by soil scientists and visit a soil science laboratory
- Present local water issues as a speech topic at various venues
- Visit a local IFAS agricultural research center

Are You Into It?

Do you want to know more about soils and water quality?

The Soil and Water Project teaches young people about the relationship between human activities and soil and water quality

- Youth make connections between human activities and environmental impacts
- Investigate the relationships between soil quality and household products
- Demonstrate living systems in soils
- Learn the importance of soils in agricultural productivity
- Investigate the earth and space around us.

Here's what you can do all year!

Starting Out Basic	Learning More Intermediate	Expanding Horizons Advanced
<ul style="list-style-type: none"> • Begin a journal to keep track of the soils in your area • Learn about soil classes unique to Florida, including Myakka fine sand • Interview a hydrologist at a local water management district • Visit a water treatment facility in your area • Participate in the Forest Ecology, Marine Ecology or Land Judging programs • Explore a local lake, pond or river 	<ul style="list-style-type: none"> • Collect water samples and learn the tests to measure water quality • Collect soil samples around your neighborhood and separate by fractions • Identify living organisms in soil samples collected under leaf litter and compare to those collected in a non-vegetated area • Practice and teach about conservation practices • Explore salt water vs. fresh water quality 	<ul style="list-style-type: none"> • Organize and lead a community service project to improve soil quality in a park or community area and plant the area with Florida Friendly plants • Work with local soil and water professionals to identify areas that critical to natural ecosystems in your county • Become a citizen water scientist by collecting water and soil samples and then send the samples for analysis and report the results

Learn more at florida4h.org

or contact your local UF/IFAS Extension County Office

Expand Your Experiences in Soil and Water Science

- Participate in 4-H Land Judging <http://landjudging.org>
- Invite local community planners to come and talk with your club about the impacts of development on water and soils in your area
- Become a citizen scientist and explore opportunities with LAKEWATCH <http://sfrc.ufl.edu/fish/outreach/>
- Explore the characteristics of soil layers by making edible dirt with your group <http://faitc.org/edible-dirt/>
- Contact your local 4-H office for “There’s No New Water” curriculum
- Explore opportunities as a Junior Master Gardener <http://imgkids.us/>
- Interested in a college education focused on soil and water science? Schedule a visit to the University of Florida and learn more: <http://soils.ifas.ufl.edu>



Project Sharing Ideas

- Give an Illustrated Talk, Speech or Demonstration at County Events or to a local organization –
- Talk to soil and water scientists to explore careers in agriculture, engineering, government agencies and schools
- Create a landscape diorama to illustrate the flow of water across land and the impact of development on water quality

Resources

4-H Project Resources

Project materials to assist youth in learning may be available through your county 4-H office:

- Earth Connections
 - Soil, Water and Land Use
- or you can order the following directly from National 4-H www.4-hmall.org:
- There’s No New Water!
 - Gardening
 - Forest Ecology
 - Outdoor Adventures
 - GPS and GIS
 - Exploring Your Environment
 - Backyards and Beyond

Connections and Events

Display what you have learned at a group event, e.g. soil appearance

Attend local 4-H opportunities, e.g. water body clean-up days, etc.

Check out activities at your local, regional or state fair

Attend other statewide events. Check them all out at www.florida4h.org.

Record Keeping

Journals are tools to record your observations and over time they can be used to document gradual changes

A journal may contain measured data or a photographic history

Project Report Forms can be found at <http://florida4h.org>

- Junior (ages 8-10)
- Intermediate (ages 11-13)
- Senior (ages 14-18)
- Financial Summary
- Building My 4-H Portfolio (ages 8-13)

Awards and Recognition

The 4-H Recognition program provides positive feedback through:

- Participation
- Setting Goals
- Meeting Standards
- Peer Competition
- Cooperation

To learn more about current recognition opportunities visit the Florida 4-H website at <http://florida4h.org> or contact your County 4-H Extension Agent.