

TESTS

Water Tests

- ♦ Turbidity
- ♦ Nitrate, nitrite, ammonia
- ♦ Ortho-phosphate
- ♦ Total coliform and *E. coli* bacteria
- ♦ Triazine (atrazine) pesticide
- ♦ Color, odor, pH, and temperature

Sample cost

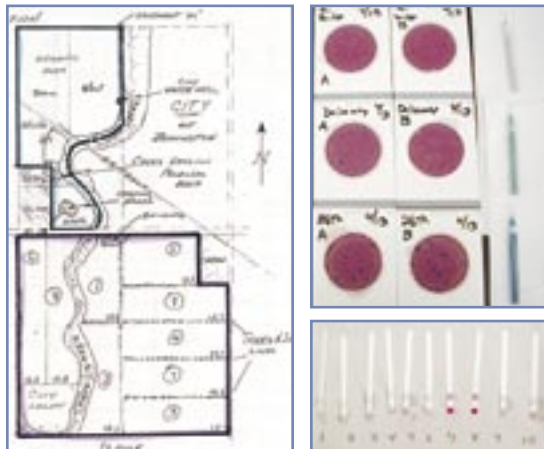
Tests cost less than \$1 per sample on average. Recommended test kits are commercially available.

Soil Tests

- ♦ Texture
- ♦ Organic matter
- ♦ Water infiltration rate
- ♦ pH
- ♦ Nitrogen
- ♦ Phosphorus
- ♦ Potassium

For more information

See our Web site at: www.oznet.ksu.edu/kswater



Farm map with example stream transect, *E. coli* test plates, ortho-phosphate tests (blue), and nitrate/nitrite test strips.

INFORMATION

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These soil and water sampling methods are designed to be used along with the Kansas River Friendly Farm Plan. Information about this whole-farm planning tool, cost-share funds, and technical assistance can be found at www.oznet.ksu.edu/rff.



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Citizen SCIENCE



Agriculture provides a productive livelihood and meaningful lifestyle for more than 64,000 Kansas families. As stewards of Kansas' valuable soil and scarce water resources, we can act responsibly by regularly testing soil and water.



Soil and water test kits have been selected for accuracy and ease of use. Citizen Science offers information on where to order test kits, how to use them and how to interpret results.



SOIL AND WATER TESTING FOR ENHANCED NATURAL RESOURCE STEWARDSHIP

PRODUCERS

For landowners, agricultural producers and ranchers ...

Water quality test kits provide inexpensive, confidential answers to questions about resource quality. Sampling several times a year at low and high rainfall periods gives a snapshot of land use and cultural practices that benefit water quality and those that should be changed.

When land use or cultural practices change, water quality tests can help document improvements.

Soil test kits are also available to supplement tests available through K-State and other laboratories. Spring nitrogen tests can determine credits from sustainable agriculture practices like cover crops and manure applications and can help cut back on fertilization costs. Adjusting soil pH can help make some nutrients more available.



Sample throughout the year for an overview of environmental quality on your farm.

SCHOOLS

For high school agriculture classes, FFA chapters and science clubs ...

Soil and water testing gives students a chance to interact with their community in a positive way. Student teams use test kits to explore water quality issues in the local environment. Sampling sites may include city water supplies, streams and tributaries, local fishing spots, swimming areas, or farm ponds.

Teachers find that soil and water testing helps fulfill state learning objectives in science, math, and other subjects. Using real-life examples in the classroom motivates learning and prepares students for future careers in biology, science, engineering, and agriculture.



Hands-on activities make Citizen Science a valuable teaching tool.

CITIZENS

For citizens, grandparents, homeschoolers and 4-H leaders ...

Homeowners and others may want to test water supplies for their homes, livestock, and gardens. When testing water for human consumption, use the test kits for gathering preliminary information, and follow up with a test from a certified laboratory.

For information on labs, see *Testing to Help Ensure Safe Drinking Water*, MF-951. This is available on the Web at www.oznet.ksu.edu.

Citizens may want to use soil and water testing to determine water quality problems and solutions for their communities.

Homeschoolers and 4-H leaders can use the curriculum guides provided with the fact sheets to teach science and life skills to youth. People of any age may want to form a lake- or stream- sampling



Grandparents can use Citizen Science to teach grandchildren to be good stewards of the land.

program and provide stewardship sampling for a local water resource. For more information on how to start a team see our Web site: www.oznet.ksu.edu/kswater, and click on "Volunteer Network."