

How You Can Protect The Environment By Testing Water

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Water Testing for Everyone

As protecting the environment becomes an increasingly popular topic, more of us are wanting to get involved. When searching for ways to get involved many people think of litter clean up, recycling, and conservation efforts, but many may not be aware how they can make a difference by testing local water sources. Key measurements like chlorine concentration, pH, alkalinity, hardness, total dissolved solids, and dissolved oxygen can indicate the health of a body of water. By collecting these measurements and providing them to an open data platform more people can be aware of the water quality around them. Water Rangers freshwater test kits offer testing products that are packed in a convenient carrying bag so you can start testing your local waters today. Here's how you can help protect the environment and aid your local scientific community, all while taking on a fun and educational activity.



Figure 1: The K-0010 The Freshwater Education Test Kit contains everything you need to inspire the next generation of water testers.

Help Establish Baseline Data

To understand the health of rivers, lakes, ponds and streams, a great deal of data must be gathered over time. Some aspects of water will change naturally, so collection of data over an extended period of time is required to determine the difference between normal fluctuations and those that need to be addressed. Dissolved oxygen levels, pH and temperature will change throughout any given day as well as from season to season. Since so much data is required to understand the health of a body of water, the work of active volunteers and citizen scientists are key to developing reference data.

Water Rangers test kits not only come with testing gear; they also provide access to an open data collection platform that allows results to be tracked, mapped and readily available to scientists, governmental agencies, local environmentalists, and other interested volunteer groups. Your data can aid in critical decision making that affects your entire community.

Build Connections With People and Water

Water Rangers test kits can be used by individuals acting on their own, or they can be used in coordination with water testing groups – maybe by one you start. Start your own water monitoring group by asking your friends, family members, or anyone else who is interested in caring for natural waters. Volunteer citizen science groups are an effective way to test multiple streams, lakes, rivers, or other waterways in your area. Some groups will schedule a day to collect data while others will assign each member a specific location to test and report on. However your group chooses to operate, your community will be better off for having citizens engaged in this important work. Thanks to Water Rangers freshwater test kits, it has never been easier to make new friends and help the environment.



Figure 2: Water testing is simple and provides results in minutes.

Inspire The Next Generation of Water Testers

It can be difficult to find educational projects for children, let alone ones that occur outdoors. Water testing is a great way to inspire students to think about the water around them while they engage in hands-on, scientific work. The tests included in the [Freshwater Education Test Kit](#) are simple enough that anyone can perform them with results delivered in minutes.

Each kit comes with enough materials for 20 students as well as a teacher's guide that includes detailed lesson plans. There's no need to worry if you aren't a water testing expert; this kit will teach you everything you need to help your students learn the fundamentals of water testing.

Conclusion

Water Testing is an often-overlooked aspect of environmental care that any individual or group can take on. By testing the lakes, rivers, ponds, or any other body of freshwater around you, you can help provide critical data on water quality while you also build a community and educate your neighbors on the importance of caring for natural water. The Water Rangers test kits available on [CHEMetrics.com](#) are a great way for anyone to start their water testing journey.

-Zachary Waszczak



Figure 3: CHEMetrics is proud to partner with Water Rangers!