

River Watch at Leshar

Who can join?: All Leshar students interested in science (being a part of a real science experiment and learning new science techniques), making a positive impact, or students interested in helping protect the environment.

What is it?: Help keep an eye on our rivers by collecting water, analyzing water, and uploading data to the Colorado River Watch program. This data is then used to help set water quality standards across the state of Colorado! See the back of this page for more information or the River Watch website:

www.coloradoriverwatch.org

When?: The first Tuesday of each month throughout the school year. Time: TBD.

Where?: During ELO, we will walk to Spring Creek to collect water. After school, we will analyze water in Mr. Mayer's room, room 12.

What do you need?: To join us on Tuesday's, you need a signed permission slip and clothes to walk to Spring Creek (even in the winter when it is cold and snowy). We provide hip waders and water boots for students who would like to get in the creek. After school, all you need is a desire to learn new science techniques, patience, and attention to detail.

Colorado River Watch

Real people doing real science for a real purpose

Our mission is to work with voluntary stewards to monitor water quality and other indicators of watershed health and utilize this high-quality data to educate citizens and inform decision makers about the condition of Colorado's waters. This data is also used in the Clean Water Act decision-making process.

- River Watch volunteers consist primarily of Middle and High School students, but also include citizen groups, individuals, colleges, and local governments. Since 1989, we have involved over 70,000 individuals in Colorado and provided data on 3,000 stations covering over 300 rivers.
- Each volunteer group receives the training, support, and supplies needed to monitor their respective rivers and provide consistent and accurate data. Volunteers analyze samples for hardness, alkalinity, dissolved oxygen, pH, and temperature. Additional samples are analyzed by a professional lab for metals, nutrients, and macroinvertebrates. Quality assurance is essential in the program operation and data and quality control checks are performed regularly through the year.
- River Watch data is stored on an Internet server and can be accessed by anyone on the Colorado Watershed Assembly website. All the data is reviewed and validated by Colorado Parks and Wildlife employees before it is made public. The high-quality River Watch data is currently utilized by the Water Quality Control Commission, Colorado Parks and Wildlife, and many grassroots level watershed groups in the state for the management of Colorado's waters.



Macroinvertebrate sampling last week on Cross Creek, local 6th graders found a stonefly, mayflies and more!



Lesher students collect data to impact clean water standards



Colorado congressmen and carp both have students at Lesher Middle School to thank for keeping an eye on the health of Fort Collins rivers.

Each month the International Baccalaureate students trek down to Spring Creek to collect water, then run a series of experiments to test for alkalinity, hardness and oxygen levels. The data, which is collected by volunteers all over the state through River Watch, a program of the Colorado Watershed Assembly, is used by the Water Quality Control Commission, Colorado Parks and Wildlife.

"This is the most real science I've ever done," seventh grader Shane Ball said. "It's neat to think that the data we collect is going to the state, and they're setting environmental standards by it. We're making an impact on the world."

He worked with partner Evan Geary to slowly drip water into a beaker, waiting for it change from blue to peach during the titration process.

"You don't know what the result will be, unlike class where there's always an expected result," Evan said as he stared down the beaker.

Testing the water lets kids try out chemistry experiments they usually wouldn't get until high school, and gives them a sense of ownership over the river. During the spring semester, River Watch is incorporated into an extended learning opportunity built around sustainability and environmental leadership called "IMPACTS."

"So often we're inundated with environmental problems, but I wanted to focus on solutions to those problems," science teacher Ben Mayer, who teaches the class, said. "Students see the impact that their data has on clean water standards -- it empowers them to take ownership of the river."

Plus, there's the fun of splashing around in the river wearing knee-high waders without getting yelled at.

"You could ask why we're doing this instead of everything else that we could be doing, but this is everything else," student Geneva Hein stressed. "You need water to grow crops, to cook, to wrestle -- you need it for everything."

Visit the link and see the video at:

<https://tinyurl.com/lesherriverwatchvideo>



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