

2023-2024 Service Authority Virtual Curriculum

The Service Authority's Community Outreach Team is offering video presentations on a variety of water and wastewater-related topics. Lesson plans align with the Virginia Standards of Learning and focus on students in grades K-6.



Contact outreach@pwcsa.org for more information or visit our Classroom Outreach page:

The Big Stink

SOL Targets: Resources, Pollution & Conservation

Sail along on this riverboat adventure with our friend Bart the Rat as students watch pollution added to a "river" before their eyes, and learn how they can help protect our water resources.

Appropriate for Grades 1-3



Water Cycle Magic

SOL Targets: Water Cycle, Resources & Conservation

Shake it up with our Water Cycle dance as we create an indoor rainstorm. Students will reveal each essential step of the cycle and discover how the states of matter change the way we see water.

Appropriate for Grades 1-3



Water Wise

SOL Targets: Resources, Conservations & Reuse

Using their water smarts, students will sort out the different kind of resources, count gallons of water along with our interactive story and discover a few ways they can be water wise any day of the week.

Appropriate for Grades 1-3



Erosion Model

SOL Targets: Erosion, Weathering & Protecting our Resources

Get an up-close look at how weathering and erosion can change a landscape and pollute our environment. Students will learn ways they can help protect the earth and the water around them.

Appropriate for Grades 2-4



Build-A-Filter

SOL Targets: Resources, Human Impact & Conservation

Discover everything it takes to clean our drinking water as we create an at-home version of our drinking water plant. Students will get an in-depth look at each step of the process we depend on 24 hours a day.

Appropriate for Grades 3-6



EnviroScape

SOL Targets: Resources, Human Impact & Watersheds

See the journey of water from source to tap and back again with this tabletop tour of drinking and wastewater treatment plants. Students can get an overview of each step in the drinking and wastewater cleaning processes and the return to the environment.

Appropriate for Grades 3-6



3D Watershed

SOL Targets: Watersheds, Protecting our Resources & Pollution

Bring watersheds indoors with this 3D landscape model. As we add elements like rain and pollution, students will see how all water is connected and how pollution can travel from the highest mountain to the lowest valley.

Appropriate for Grades 4-6



Aquifer Model

SOL Targets: Resources, Human Impact & Earth's Composition

Get up close to the water beneath our feet in our groundwater model. Students will see how water moves through different sediments, rises due to pressure and how it can be affected by surface pollution.

Appropriate for Grades 5-6



For special presentation or other outreach requests, email Outreach@pwcsa.org. These materials are neither sponsored nor endorsed by PWCS.