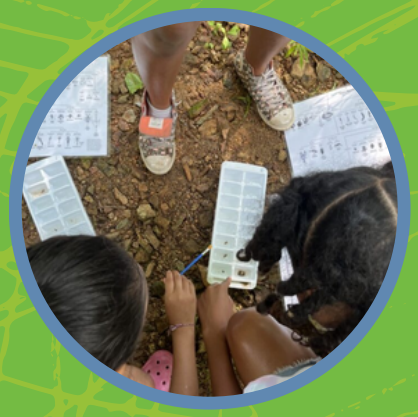


Pre-K-1st Grade

Cardinal Directions

Subject: Geography
Maximum: 30 students
Length: 30-45 minutes
Available as an outreach program

Students learn about cardinal directions using the Schuylkill River Watershed Big Map. Students will make connections to the directions of north, south, east, and west and practice using directions to find a location on the map.

Land, Water, and Animals on a Map

Subject: Geography, Biology
Maximum: 30 students
Length: 30 minutes
Available as an outreach program

Maps help children to understand that Earth is made up of both landmasses and bodies of water. Students use the Schuylkill River Watershed Big Map to learn that maps can show many types of information, such as that different animals live on land and water. Distinguishing between land and water on maps is a basic map-reading skill.

SCHUYLKILL RIVER GREENWAYS

1st-3rd Grade

Our Watershed Throughout Time

Subject: Science and PA History
Standards: PA STEELS 3.3, 3.4
Maximum: 25 students
Length: 45-60 minutes

Students will learn about the importance of watershed health and use interactive models to identify major pollutants that threaten water quality to understand how pollution impacts the lives of native flora and fauna. Afterwards, students will explore how the Schuylkill River Watershed has changed over time in the River of Revolutions Interpretive Center.

Creature Features

Subject: Science
Standards: PA STEELS 3.1, 3.4
Maximum: 25 students
Length: 45-60 minutes
Available as an outreach program

Claws, feathers, scales, and shells-- every animal has adaptations that make them unique! Learn about adaptations that allow for animals to survive and thrive through group games and observing animal pelts.

Stream Protection Program

Subject: Science
Standards: PA Steels 3.1, 3.3, 3.4, 3.5
Maximum: 25 students
Length: 45-60 minutes
Available as an outreach program

This activity gives an introduction to pollution and how it enters our waterways, then uses the Schuylkill River Watershed Big map to explore riparian buffers as a solution to pollution entering the Schuylkill River.

Creek Exploration

Subject: Science
Standards: PA STEELS 3.1, 3.3, 3.4
Maximum: 25 students
Length: 90 minutes

Get your hands wet and learn about the importance of keeping our waterways clean. Use tools to safety capture and observe aquatic macroinvertebrates, and learn about their importance in the food chain and as water quality indicators.

ELEMENTARY SCHOOL PROGRAMS

4th-5th Grade

Stream Protection Program

Subject: Science
Standards: PA Steels 3.1, 3.3, 3.4, 3.5
Maximum: 25 students
Length: 45-60 minutes
Available as an outreach program

This activity gives an introduction to pollution and how it enters our waterways, then uses the Schuylkill River Watershed Big map to explore riparian buffers as a solution to pollution entering the Schuylkill River.

Creek Exploration

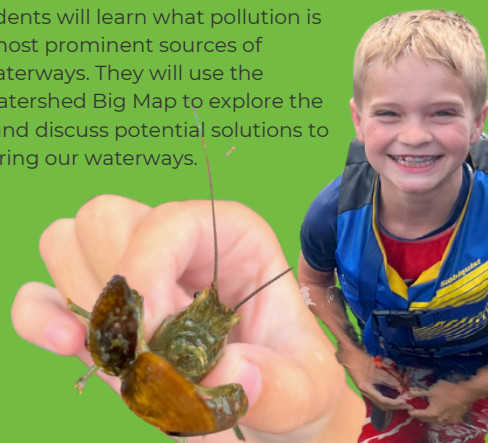
Subject: Science
Standards: PA STEELS 3.1, 3.3, 3.4
Maximum: 25 students
Length: 90 minutes

Get your hands wet and learn about the importance of keeping our waterways clean. Use tools to safety capture and observe aquatic macroinvertebrates, and learn about their importance in the food chain and as water quality indicators.

The Story of Pollution

Subject: Science
Standards: PA Steels 3.1, 3.4, 3.5
Maximum: 25 students
Length: 45-60 minutes
Available as an outreach program

In this activity students will learn what pollution is and some of the most prominent sources of pollution in our waterways. They will use the Schuylkill River Watershed Big Map to explore the path of pollution and discuss potential solutions to the pollution entering our waterways.



Creek Exploration

Subject: Science
Standards: PA STEELS 3.1, 3.3, 3.4
Maximum: 25 students
Length: 90 minutes

Get your hands wet and learn about the importance of keeping our waterways clean. Use tools to safety capture and observe aquatic macroinvertebrates, and learn about their importance in the food chain and as water quality indicators.

The Story of Pollution

Subject: Science
Standards: PA Steels 3.1, 3.4, 3.5
Maximum: 25 students
Length: 45-60 minutes
Available as an outreach program

In this activity students will learn what pollution is and some of the most prominent sources of pollution in our waterways. They will use the Schuylkill River Watershed Big Map to explore the path of pollution and discuss potential solutions to the pollution entering our waterways.

SCHUYLKILL RIVER GREENWAYS

Water Chemistry

Subject: Science
Standards: PA STEELS 3.2, 3.3, 3.4
Maximum: 25 students
Length: 90 minutes

Ever wondered what exactly is in our water? Find out by doing hands on water quality testing at the Manatawny Creek. Students will learn why monitoring the chemical quality of the river is important, what each test means, and how to conduct each test. Students will test for pH, Dissolved Oxygen, Nitrates, and Phosphates, then make a conclusion about the health of the stream. This program focuses heavily on scientific process and collecting data to judge the health of our waterways.

MIDDLE SCHOOL PROGRAMS

Stream Protection Program

Subject: Science
Standards: PA Steels 3.1, 3.3, 3.4, 3.5
Maximum: 25 students
Length: 45-60 minutes
Available as an outreach program

This activity gives an introduction to pollution and how it enters our waterways, then uses the Schuylkill River Watershed Big map to explore riparian buffers as a solution to pollution entering the Schuylkill River.

Plants vs... Plants

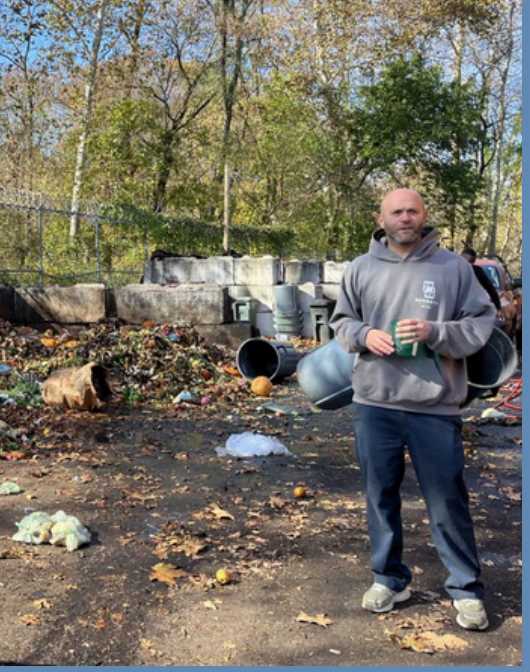
Subject: Science
Standards: PA STEELS 3.1
Maximum: 25 students
Length: 45-60 minutes
Available as an outreach program

Students will learn about the benefits of having native plants and how invasive plants harm the Schuylkill River Watershed through a competitive card game on the Schuylkill River Watershed Big Map.

Invasive Species

Subject: Science
Standards: PA STEELS 3.1, 3.4
Maximum: 25 students
Length: 60-90 minutes

This program includes a short walk on the Schuylkill River Trail and discussion about native vs invasive species. Then, students will use dip nets to safely capture invasive Rusty Crayfish in the Manatawny Creek.



Water Chemistry

Subject: Science
Standards: PA STEELS 3.2
Maximum: 25 students
Length: 90 minutes

Ever wondered what exactly is in our water? Find out by doing hands on water quality testing at the Manatawny Creek. Students will learn why monitoring the chemical quality of the river is important, what each test means, and how to conduct each test. Students will test for pH, Dissolved Oxygen, Nitrates, and Phosphates, then make a conclusion about the health of the stream. This program focuses heavily on scientific process and collecting data to judge the health of our waterways.

SCHUYLKILL RIVER GREENWAYS

Schuylkill Environmental Career Opportunities (SECO)

Subject: Career Readiness/Development
Maximum: 30 students
Length: Full day field trip once a week for 5-6 weeks

This career development program orients students to not only the Schuylkill River Watershed, but also the different environmental partners working together within it. Students visit a variety of locations close to their school including State, Federal, Local, and Non-profit organizations as well as privately owned sustainable businesses to learn about different careers and career paths available to them in their area. This is a career-oriented program that fosters interest in environmental and sustainability fields, and helps students network with field professionals. SECO is available to high school classrooms within the Schuylkill River Heritage Area/Watershed.

HIGH SCHOOL PROGRAMS

Mapping Combined Sewer Outfalls

Subject: Science
Standards: PA STEELS 3.4, 3.5
Maximum: 25 students
Length: 60 minutes
Available as an outreach program

Use the Schuylkill River Watershed Big Map to learn about our historic combined sewer system and what it means for the Schuylkill River. Students will use data points to plot active and inactive CSOs and come up with stormwater infrastructure projects to reduce overflows.

Creek Exploration

Subject: Science
Standards: PA STEELS 3.1, 3.3, 3.4
Maximum: 25 students
Length: 90 minutes

Get your hands wet and learn about the importance of keeping our waterways clean. Use tools to safety capture and observe aquatic macroinvertebrates, and learn about their importance in the food chain and as water quality indicators.