



WATERSHED ACADEMY FOR HIGH SCHOOL STUDENTS 2023

The
Watershed
Institute

The Watershed Academy for High School Students presents five-day immersive environmental investigations at The Watershed Institute. Each session engages students in a world of science, where they ask questions and identify problems, gain skills and knowledge, propose solutions, and learn about career opportunities. Students will get hands-on experience as they participate in ongoing scientific studies at the Watershed and learn how to help influence environmental policy in their own communities.

Watershed Academy students have the opportunity to meet with experts and learn about their work in the field. Each week will conclude with a student project showcasing their findings. Participants collaborate on a poster session, video, letter writing campaign, or traditional presentation.

These experiences engage students in science and stewardship practices to elevate them into awareness, investigation, action, and leadership as they prepare to enter adult roles in their communities.

2023 Sessions:

July 10 - July 14: Stream Science

July 17 - 21: Forests and Water

July 24 - 28: Freshwater Wetlands

July 31 - Aug 4: Climate and Water with Princeton University's High Meadows Environmental Institute



Registration:

1. Become a Member or renew your Membership before February 6, 2023 to receive members-only early access to registration on February 13, 2023. Registration opens to everyone on February 21, 2023.
2. Register by going to:
thewatershed.org/academy
3. Membership Discount: A 5% discount will apply automatically if you are a member
4. A 50% deposit is due upon registration, full payment is due by April 14, 2023. Cancellations will be charged a \$30 processing fee.
5. No refunds will be given after April 14, 2023.

Financial Aid:

The Watershed Institute is pleased to offer a limited number of full scholarships for our 2023 Summer Science Academies for High School students. Scholarships are awarded based on financial need and expressed desire of the student to be part of an academic summer program.

The Watershed Institute does not discriminate against applicants based on race, color, national origin, age, disability, sex, gender identity, or religion.

Complete one application form for each child applying to Academy. Scholarships are awarded on a first-come, first-served basis until all scholarship funds are dispersed.

Families who receive scholarships will be accepted and notified on a rolling basis. Priority will be given to students requesting to attend all four weeks of Watershed Academy.

Application for Financial Aid:

- If you would like to apply for financial aid, please complete the Watershed Academy Financial Aid application found at www.thewatershed.org/academy or email pheaney@thewatershed.org to have it mailed to you. Students who want to attend all four weeks of Academy are given priority.
- We will have bus transportation available from several stops in Trenton.

Stream Science \$500

July 10 - 14

Lead your own investigation to determine the health of our streams! We will study water quality indicators and perform tests in this hands-on session. Explore the nearby Beden Brook, learn how freshwater scientists determine watershed health, identify potential sources of pollution, and propose potential solutions to water quality problems.

- Learn from Steve Tuorto, PhD, Director of Science at the Watershed Institute and discover how his team works.

- Practice the scientific methods of assessing water quality.

- Identify and understand potential threats to the health of the stream.

- Develop solutions to water quality problems.



Forests and Water \$500

July 17 - 21

Forests are vital for clean water. Spend a week studying trees and the products and ecosystem services they provide. We will explore the health of local woodlands and discover how climate change, development, and invasive species are changing the face of our forests. Each day we will take time to reflect on the beauty and majesty of trees while working toward preserving these critical resources in the face of challenges.

- Learn from tropical forest ecologist Patricia Shanley, PhD, about how forests are crucial to watershed health and clean water.

- Visit preserved woodlands and see what foresters are doing to ensure their health.

- Explore the process of succession and how forests change over time



Freshwater Wetlands \$500

July 24 - 28

Wetlands serve to clean, store and protect water. Learn what factors make a wetland and how NJ wetlands are protected. Conduct field research to delineate a wetland area and study the structure and function of these vital natural features.

- Learn from experts in the field of wetland science.
- Focus on hydrophytic or water loving plants that have adapted to growing in wetland areas.
- Study wetland soils and how to determine if they have hydric /anaerobic qualities
- Look at the hydrologic features of freshwater wetlands and how we can help protect these unique habitats

Water and Climate \$500

July 31 - Aug 4

Climate change is the biggest challenge of our time. Explore how human activity is changing the climate and join with researchers from Princeton University's Civil and Environmental Engineering Department (CEE), High Meadows Environmental Institute (HMEI), and the University of Maryland Eastern Shore (an HBCU institution), to discover the work they are doing to rebalance the water and carbon cycles.

- Meet experts in the field and learn about their cutting-edge research.
- Visit the laboratories at Princeton University where scientists are conducting climate and water research.
- Meet with researchers from an Historically Black University.



Frequently Asked Questions

What are the hours of the Academy?

Academy hours are from 9:00 a.m. to 4:00 p.m. Monday through Friday

What if my student is sick?

If your student or someone in the household is sick, please refer to our COVID-19 policies on the website regarding symptoms and attendance. If your student becomes unwell at camp you will be contacted to pick them up immediately.

What about the weather? Thunderstorms?

Our goal is to remain outdoors, or under a tent whenever possible. During thunderstorms or other unsafe weather, we will take shelter indoors in our lab and library.

What is the dress code?

- Dress for active outdoor activities – shorts, t-shirt, and closed-toe, hard-sole shoes
- Open-toe or soft-sole shoes (flip flops, crocs, and open-toed sandals are not allowed).
- Student will receive an Academy t-shirt on their first day. Students are required to wear the Academy t-shirt on field trips.

Do you serve meals?

- Students may pre-order boxed lunches. These include a sandwich or wrap, chips, soda and fruit. The meal order form will be available in the spring.
- Students not ordering lunch must bring lunch daily. Bring a refillable water bottle. There is no place on site to purchase food or snacks.
- Please inform us of all food allergies when you complete the health profile. We do not exclude foods from the Academy. Students are instructed to clean their hands after eating to avoid contamination.

What do students need to bring?

- Lunch, snacks and a refillable water bottle.
- Students may bring their own laptop, but it is not required.
- For Stream Science and Wetland Academies, students will be standing in or near water. Please bring waterproof boots if you have them. We have some boots to lend. You might also want a change of clothing and a small towel in case you get wet.