



**WATERSHED ACADEMY
FOR HIGH SCHOOL STUDENTS**



The Watershed Institute has been protecting the vital water resources of central New Jersey's watersheds for over 70 years. A key part of our mission has always been connecting people to their water sources and environment. For over 35 years, Education Director Jeff Hoagland has led us in this work through engaging with students, community groups, scouts, and the public. One of the highlights of our work is the highly successful Watershed Nature Camp, which naturally promotes an enduring sense of curiosity and a deeper understanding of the natural world. The Watershed Academy for High School Students captures the same spirit of wonder and inquiry as our camp, and is a natural complement to our array of programming. As we enter the sixth year of this extraordinary program, Science & Stewardship Director Steve Tuorto is pleased to offer an expanded selection of sessions to engage and tempt high school-aged scientists.

The Watershed Academy for High School Students is an immersive experience of weeklong environmental investigations on the Watershed Reserve, including in our upgraded lab, and in our communities around the state. Each session engages students in a world of science, where they ask questions and identify problems, gain skills and knowledge, propose solutions, and gain firsthand experience of different career opportunities. A new exciting session will focus on student advocacy and environmental law. Some students will get hands-on experience as responsible stewards of the resources in their community through participation in ongoing Watershed scientific studies that will eventually help guide local, state, and federal agencies in environmental policy-making decisions.

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. We hope you will join us!



Steve J. Tuorto

Steve Tuorto, Ph.D.
Director of Science & Stewardship



Jeff Hoagland

Jeff Hoagland
Education Director

Registration:

1. Become a member or renew your membership before January 1, 2020 to receive members-only early access to registration on Monday, January 6.
2. Register for open sessions or waitlists by going to: thewatershed.org/academy
3. Discounts:
 - a. **Membership:** A 5% discount will apply automatically if you are a member
 - b. **Multiple Discount:** When you register for 3 or more weeks use code MULTI2020 to receive 5% off

Cancellation and Refund Policy:

- To be eligible for refund, cancellations must be submitted by March 31.
- After March 31, a refund will be issued only if we are able to fill the vacancy.
- All refunds will be charged a \$50 processing fee per student after March 31.
- Watershed Institute memberships are not refundable.

Financial Aid:

- Available based on financial need
- Will be granted on a first-come, first-served basis until funding is dispersed.
- Will include limited bus transportation as follows:
 - July 13-August 21: Trenton/Ewing route:** Dunn Middle School (401 Dayton St., Trenton), Trenton Central High School (1001 W. State St., Trenton), Armstrong Memorial Park (323 Ewingville Rd., Ewing Township)
 - August 10-21: Princeton route:** Princeton Community Village (Karl Light Blvd. at Butternut Row, Princeton) and other stops based on need

Application for Financial Aid:

1. Click register now from our camp page: www.thewatershed.org/academy
2. Complete documentation and send to tlove@thewatershed.org:
 - Financial Aid Application, one per family
 - EITHER: Approved 2019-2020 Application for Free and Reduced Price School Meals OR: 1040 tax form
3. We will review your application and inform you of your eligibility.
4. If you receive partial financial aid, recipients must pay the balance by May 1, 2020.

Environmental Advocacy \$365

July 13-17



Young people are making a difference in environmental causes. Learn how to influence policy at the local, state and federal level. Meet with legislators, activists and influencers and start your own campaign on an issue you care about.

- **WORK** with The Watershed Institute's Policy Director, attorney Michael Pisaro, Esq., who is leading a fight against a fossil fuel pipeline.
- **MEET** policy makers and learn about how environmental laws are made.
- **FIND** out how activists are fighting for the cause of environmental justice.

Environmental Field Science \$565

July 20-24

Are you curious about what scientists and environmental groups are doing to study and develop new conservation initiatives? Explore New Jersey through daily investigative trips with The Watershed Institute's Science Director, Steve Tuorto, PhD, to learn about ongoing conservation studies, techniques, and restoration work in local rivers and coastal areas. Gain hands-on experience through work with environmental groups and academic professionals.

- **PARTICIPATE** in fish population surveys on the Raritan River with fisheries biologists from Rutgers University.
- **EXPLORE** the work that academics and non-profit organizations are doing to monitor and restore vital coastal habitats for plant and animal health and shoreline stabilization.
- **ASSIST** with forest restoration projects on the 950-acre Watershed Reserve.



Stream Science \$365

July 27-31

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 in depth, learn how freshwater scientists determine watershed

health, identify potential sources of pollution, and propose potential solutions to water quality problems.

- **LEARN** and 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.

Green Architecture \$365

August 3-7

The key to creating a sustainable future lies in constructing and renovating buildings in a way that minimizes and strives to reverse our negative impact on the environment. Work one-on-one with award-winning green architects Michael Farewell and Jason Kliwinski to design your own environmentally friendly structures.

- **LEARN** the basic principles, challenges and technologies associated with green and regenerative architecture and building with renewable energy.
- **ANALYZE** existing structures on the Watershed Reserve to determine how they could be made more sustainable.
- **LEARN** and use relevant architectural software and physical modeling to design a sustainable structure for a hypothetical client, and then present your project to professionals and municipal leaders.



Climate Change \$365

August 10-14

Discover the factors that drive climate change and the impact of human activities on the environment with the help of State Climatologist and Rutgers University professor David Robinson, PhD, and

Emmy-Award-winning meteorologist Bernadette Woods Placky from the non-profit group Climate Central.

- **LEARN** about the natural global cycles and processes that control earth's climate and how it changes over time.
- **PERFORM** experiments and analyze the data to infer how human activities impact climate
- **VISIT** a lab at Princeton University that is studying strategies to address climate change and meet an entrepreneur who is designing renewable energy & energy-efficient solutions.

Clean Water \$365

August 17-21

People pollution from urban stormwater runoff is a serious threat to clean drinking water and healthy stream ecosystems. Join our science team, led by Science & Stewardship Director Steve Tuorto, PhD, to learn how we are using civil engineering, landscape architecture, and plant science to keep our watersheds healthy.

- **CONDUCT** stream assessments to measure the impacts of urbanization and stormwater management on water quality.



- **EXPLORE** how we and our local communities have worked to reduce pollution and flooding through nature-inspired rainwater management.
- **ASSESS** stormwater management in Hopewell Borough and design rainwater solutions as part of an ongoing Watershed Institute research and restoration project funded by the NJ Department of Environmental Protection.





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