



# **Making Change Flow**

## **2023–2030**

**Stroud Water Research Center's Approach  
to Preserve and Protect Fresh Water**





Fresh water is the lifeblood of our earth and society; without it, we cannot exist. Yet the threats to the future of fresh water have never been greater or more urgent — from changing climate patterns, to pollution, to precipitous rates of natural resource destruction.

The Stroud Center's laser-focused mission, more than 50 years of research and a fierce commitment to understand and protect freshwater ecosystems, positions us to make unique and meaningful contributions in addressing this global challenge.

Healthy freshwater ecosystems and watersheds are our first line of defense in preserving clean fresh water.

As our Making Change Flow commitment shows, we will invest all of our intellectual might into our core expertise: using science and the scientific process to understand and protect fresh water. Together with our watershed restoration experts and educators, we will help individuals, communities, companies, and other stakeholders around the world make informed decisions to steward our world's most precious and finite resource.

A handwritten signature in blue ink, appearing to read "David B. Aron". The signature is stylized with a long horizontal stroke extending to the right.

Executive Director, President,  
and Research Scientist

## **Stroud Water Research Center is the world's leading scientific research institute dedicated exclusively to fresh water.**

With the release of Making Change Flow 2023-2030, an outline of our mission and focus areas, we pledge to intensify our efforts to understand and protect the world's freshwater sources and ecosystems, which underpin all life.

The Stroud Center's ultimate objective is to advance global understanding of freshwater systems and in turn, a world that acts to protect them. Grounded in over half a century of leading freshwater science, our work is threefold: scientific research, education, and watershed restoration.

The future of all people and the planet is inextricably linked to the state of Earth's fresh water. We have before us a most important – and urgent – responsibility and opportunity. The Stroud Center's strategy reaffirms our commitment and focus to use every resource at our disposal to repair and protect our world's most vital resource: fresh water. These efforts will help unleash progress in mitigating climate change impacts, biodiversity loss, and environmental degradation, improving human health and wellness in the process.





# Our Strategy for Making Change Flow



Catalyze  
Science-Based Insights  
to Protect Fresh Water



Prove the Value of Effective,  
Nature-Based  
Watershed Restoration Solutions



Empower People  
With Knowledge, Data, and Technology  
to Value Fresh Water



Cultivate a Diverse  
and Inclusive  
Scientific Community





Left: Entomologists explore a stream's biology. Below: Algae collected by Stroud Center scientists provide insights into stream health.

To achieve this mission, Making Change Flow 2023–2030 centers around four overarching priorities. These commitments are based on how we believe we can best deploy the Stroud Center's expertise and assets to make a meaningful and lasting contribution to protect fresh water and solve these global challenges.

## NUMBER 1: CATALYZE SCIENCE-BASED INSIGHTS TO PROTECT FRESH WATER

Stroud Center scientists will conduct short- and long-term experiments to yield science-based insights that help society to understand, value, and protect freshwater ecosystems. This includes discovering and explaining how freshwater ecosystems maintain biodiversity and provide ecological services, such as

groundwater recharge, flood regulation, microclimate regulation, carbon sequestration, and water quality control to ensure safe drinking water.

## NUMBER 2: PROVE THE VALUE OF EFFECTIVE, NATURE-BASED WATERSHED RESTORATION SOLUTIONS

Stroud Center restoration specialists and scientists will drive understanding of the watershed restoration solutions that lead to safer drinking water and more biodiverse ecosystems. We will also promote wide adoption of these solutions. This includes evaluating how watershed restoration techniques affect the biological, chemical, and physical integrity of stream ecosystems. It also involves promoting soil health practices that improve water quality and build climate resilience.



Tree tubes dotting a streamside landscape are a hallmark of recent reforestation to improve water quality.





Above: Community scientists learn to use an environmental monitoring station during a Stroud Center workshop; *photo: Mitch Evans*. Right: Dr. Ruth Patrick.

### NUMBER 3: EMPOWER PEOPLE WITH KNOWLEDGE, DATA, AND TECHNOLOGY TO VALUE FRESH WATER

Stroud Center educators and community science experts will create a connection between people and their water sources. By developing and delivering inspiring digital and hands-on education programs, we will help people of all ages to better understand fresh water. Our community science and internet of water tools will further democratize access to watershed-related data and information.

To learn more about the Stroud Center's work, view the PBS series [Stories From the Streams](#) and the Visionaries documentary [Flow of Life](#), hosted by actor Sam Waterson of *Law & Order*.



### NUMBER 4: CULTIVATE A DIVERSE AND INCLUSIVE SCIENTIFIC COMMUNITY

Today's environmental science profession is not demographically reflective of our society. Building on the example set by our founding scientist, Ruth Patrick, Ph.D., we will work to change this by offering fellowships, evidence-based mentorships, and youth programming, as well as by bringing together experts from around the world to exchange ideas and advocate for a more inclusive and representative scientific community.





The Streamhouse and Moorhead Environmental Complex at Stroud Water Research Center in Avondale, Pennsylvania. *Photo: © Halkin Mason Photography*

## ABOUT STROUD WATER RESEARCH CENTER

For more than 50 years, Stroud Water Research Center has focused on one thing: fresh water. Through cornerstone scientific research, education, and watershed restoration, we advance knowledge and stewardship of freshwater systems around the world. As the only global nonprofit, nonadvocacy organization devoted entirely to fresh water, the Stroud Center serves as the foremost trusted expert on the natural functioning of streams and rivers. Our combination of interdisciplinary science, education, and watershed restoration make possible an integrated approach and feedback loop that is unique in the nonprofit world. Learn more at [stroudcenter.org](https://stroudcenter.org).





WATER RESEARCH CENTER

970 Spencer Road, Avondale, PA 19311

SCIENCE TODAY FOR WATER TOMORROW.



Learn more and make  
a difference today!



© 2025 Stroud Water Research Center. *Executive director photo: Jana Bannan. Page 2 photo: Jack Dempsey.* Below: The Susquehanna River, one of the Stroud Center's long-term study sites.

