



STOCKHOLM

JUNIOR WATER PRIZE

USA

**United States 2026  
Stockholm Junior Water Prize  
State Winners**



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The following state winners have advanced to the U.S. Stockholm Junior Water Prize national competition, to be awarded June 8-10, 2026, at the Industrial Water Solutions Conference in Chicago, Illinois

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**Alabama**

**Saisha Sahoo**

Evaluating the Phytoremediation Potential of *Pontederia Cordata* for Cobalt, Lithium, and Lead

Alabama School Of Fine Arts

Science Teacher: Hungsin Chin

Sponsored by Alabama's Water Environment Association

**Alaska**

**Kevin Zhang**

Effect of Melting Arctic Sea Ice on Polar Bear Encounter Risk at the Industrial Footprint in Prudhoe Bay, Alaska

West Anchorage High School

Science Teacher: Shannon Donley

Sponsored by the Alaska Water Wastewater Management Association

**Arizona**

**Elise McHallam**

Interfacial engineering of poly(styrene)-block-poly(acrylic acid) as smart receptor for rapid detection of Aflatoxin b1: Insights into supramolecular interactions

Basis Oro Valley

Science Teacher: Michael Gray

Sponsored by the Arizona Water Association

**Arkansas**

**Stevie Watkins and Anderson Goldthorpe**

Battling Algal Blooms: How Rotifers Keep Microcystis in Check

Arkansas School for Mathematics, Sciences, and the Arts  
Science Teacher: Patrycja Krakowiak  
Sponsored by the Arkansas Water Environment Association

**California**

**Sathvika Siva and Diya Narayanan**

Rhizosphere-Activated Fertilization: Dual-Trigger pH & Enzyme-Sensitive Fertilizer  
Pellets to Prevent Aquatic Dead Zones  
Lynbrook High School  
Science Teacher: Nicole Dellasantina  
Sponsored by the California Water Environment Association

**Colorado**

**Natalie Muro**

A Novel Field-Based Approach to Reducing Harmful Algal Blooms in Freshwater  
Ecosystems  
Palmer High School  
Science Teacher: Nathaniel Lohmann  
Sponsored by the Rocky Mountain Water Environment Association

**Connecticut**

**Ellie Mao**

Field and Lawn Runoff Removal of Nitrates and Phosphates via Fabrication of an Iron  
and Calcium Fortified Biochar Filtration Material and Pouch  
Greenwich High School  
Science Teacher: Andrew Bramante  
Sponsored by the New England Water Environment Association

**Delaware**

No qualifying entries.

**Florida**

**Anagha Iyer**

A Novel Approach to Wastewater Spill Remediation: Isolation, Identification, and Encapsulation of Bacteriophages for Pathogen Mitigation

American Heritage School

Science Teacher: Juliana Caulkins

Sponsored by the Florida Water Environment Association

**Georgia**

**Alex Han and Eric Shu**

Hydrochar as an Alternative to Powdered Activated Carbon as an Adsorbent

Peachtree Ridge High School

Science Teacher: Corey Wellmaker

Sponsored by the Georgia Association of Water Professionals

**Hawaii**

**Charlotte Bronstein**

The Use of Native Hawaiian Plants in Constructed Wetlands to Filter Synthetic

Greywater

Seabury Hall

Science Teacher: Kassia Gann

Sponsored by the Hawaii Water Environment Association

**Idaho**

**Samuel Smith and Ethan Linford**

Efficacy of Granular Activated Carbon and Biochar Incorporation Within Stormwater

Swales to Reduce Heavy Metal and

Nutrient Runoff

Lake City High School

Science Teacher: Jamie Esler

Sponsored by the Pacific Northwest Clean Water Association

**Illinois**

**Muhammed Mubarak Ali**

Comparative Analysis of Field Methods for Detecting Cyanobacteria in Freshwater

Dunlap High School

Science Teacher: Emily Dawson

Sponsored by the Illinois Water Environment Association

**Indiana**

**Leila Dahlstrom and Lilian Dahlstrom**

The Double Salt Effect: Modeling Salinity Impact from Immediate Roadside Runoff  
versus Delayed Sediment Desorption in Aquatic Systems

Brebeuf Jesuit Preparatory School

Science Teacher: Jonas Dahlstrom

Sponsored by the Indiana Water Environment Association

**Iowa**

**Gracie Liu**

Evaluation of Carbon-Amended Biosand Filters on Nitrate Removal

West High School

Science Teacher: Megan Bildner

Sponsored by the Iowa Water Environment Association

**Kansas**

**Anya Reddy**

The Use of Natural Biocoagulants to Treat Excess Algal Growth and the Recycling of  
Subsequent Residue as a Soil Fertilizer

Blue Valley North High School

Science Teacher: Shelly Weir

Sponsored by the Kansas Water Environment Association

**Kentucky**

**Samyukta Garapati**

Transforming Agricultural Waste into Sustainable Filtration Systems: Chemically  
Activated Rice Husk–Derived Biogenic Silica for Phosphate  
Removal

DuPont Manual High School

Science Teacher: Keri Polevchak

Sponsored by the Clean Water Professionals of Kentucky & Tennessee

**Louisiana**

**Sahil Thorat**

Extensively Monitoring Soil Moisture Using Automated System

Caddo Parish Magnet High

Science Teacher: Cameron Hall

Sponsored by the Louisiana Water Environment Association

**Maine**

**Victoria Wahlig**

Quantifying Ship Noise Pollution in Casco Bay and Its Potential Impact on Maine's  
Blue Economy

Falmouth High School

Science Teacher: Cary James

Sponsored by the New England Water Environment Association

**Maryland**

*No state winner named for 2026 competition*

Sponsored by the Chesapeake Water Environment Association

**Massachusetts**

**Ronita Skukla**

Enzymes to the Rescue! Novel Enzymatic Processes for Treating microplastics and  
nanoplastics in aqUatic ENvironments (NEPTUNE)

Acton Boxborough Regional High School

Science Teacher: Brian Dempsey

Sponsored by the New England Water Environment Association

**Michigan**

**Jerry Zuo**

Ride the Waves, Drink the Water: A Portable Floating Desalination System Enabled by  
Wave-Driven Pumping

Skyline High School

Science Teacher: Casey Warner

Sponsored by the Michigan Water Environment Association

**Minnesota**

**Parth Rana**

ChemPrint: Machine Learning-Based Source Attribution of PFAS Contamination Using  
Multi-Compound Chemical Fingerprint Analysis in Minnesota  
Groundwater

Wayzata High School

Science Teacher: Joel Ellingson

Sponsored by the Central States Water Environment Association

**Mississippi**

**Katie Chung**

Waste Heat Recovery from Data Centers via Thermoelectric Generation

Mississippi School for Mathematics and Science

Science Teacher: William Funderburk

Sponsored by the Mississippi Water Environment Association

**Missouri**

**Ananya Goli**

A Waste-to-Hydrochar Lead-Filtering System for Advancing Safer and Low-Cost  
Water Solutions in Underserved Communities

Ladue Horton Watkins High School

Science Teacher: Allen Weltig

Sponsored by the Missouri Water Environment Association

**Montana**

**Colter Sandon**

Collection of Water Vapor Using Biomimicry

North Toole County High School

Science Teacher: Amanda Nix

Sponsored by the Montana Water Environment Association

**Nebraska**

**Caroline Timm**

Mucket Bucket System: Enough Algae for Juvenile Mussels?

Lyons Decatur Northeast

Science Teacher: Paul Timm

Sponsored by the Nebraska Water Environment Association

**Nevada**

**Sarah Chen**

Desert Dust as a Phosphorus Trigger for Eutrophication in Effluent-Influenced  
Freshwaters

Ed W. Clark High School

Science Teacher: Tracy Lombardi

Sponsored by the Nebraska Water Environment Association

**New Hampshire**

**Tina Jin**

Sustainable Animal Bone-Based Filtration for Achieving Potable Water Standards in  
Under-Resourced Regions

Phillips Academy Andover

Science Teacher: Clyfe Beckwith

Sponsored by the New England Water Environment Association

**New Jersey**

**Siddhanth Ganesh**

The Effect of Biochar Coupled with Intermittent Aeration for the Mitigation of N<sub>2</sub>O  
Fluxes in Vertical Subsurface Flow Wetlands

Livingston High School  
Science Teacher: Michael Coleman  
Sponsored by the New Jersey Water Environment Association

**New Mexico**  
**Trinity Peterson**

Evaluation of Efficiency of Thermal Desalination at Different Pressures  
Rio Rancho High School  
Science Teacher: Jennifer Miyashiro  
Sponsored by the Rocky Mountain Water Environment Association

**New York**  
**Bryan Cheng and Austin Jin**

SENTINEL: Scalable Environmental Network for Temporal Intelligence and Ecological  
Learning, Multimodal Artificial Intelligence for Early Water  
Pollution Detection  
Great Neck South High School  
Science Teacher: James Truglio  
Sponsored by the New York Water Environment Association

**North Carolina**  
**Aarush Jain and Soham Kela**

GRIME (Garbage River Interception and Modeling Engine)  
North Carolina School of Science and Mathematics  
Science Teacher: Ryan Sakaguchi  
Sponsored by NC One Water

**North Dakota**  
No qualifying entries.

**Ohio**

**Tharun Nambi and Shubh Kshirsagar**

WWTP Compliance Failure Prediction

Olentangy Orange High School

Science Teacher: James Savinell

Sponsored by the Ohio Water Environment Association

**Oklahoma**

**Sophia Zhao**

Chitosan-Modified Loofah Scaffold for Sustainable Microplastic Removal from Water

Norman North High School

Science Teacher: Laura Sabatelli

Oklahoma Water Environment Association

**Oregon**

**Frieda Eraut**

Testing How "Tumbleweed" Bundles Pick Up Microplastics

West Linn High School

Science Teacher: Danielle Schroeder

Sponsored by the Pacific Northwest Clean Water Association

**Pennsylvania**

**Gavin Zhao**

Removal of Dissolved Copper and Zinc from Schuylkill River Sediment Leachate Using

Commercially Available Wood-Based Biochar: A Bench-Scale

2x2 Factorial Study

Conestoga High School

Science Teacher: Robert Desipio

Sponsored by the Pennsylvania Water Environment Association

**Puerto Rico**

**Mara Villefuerte**

FlowSafe: Cost Effective Eco-Friendly Household Waterflow Monitoring System

Academia Maria Reina

Science Teacher: Yiria Muñiz  
Sponsored by the Puerto Rico Water Environment Association

**Rhode Island**  
**Jinseo Kim**

A Comparative Study of Microplastic Abundance in Coastal Sediments and Surface  
Water In Third Beach and Narragansett Bay  
Portsmouth Abbey School  
Science Teacher: Shane McCarthy  
Sponsored by the New England Water Environment Association

**South Carolina**

*No state winner named for 2026 competition*  
Sponsored by the Water Environment Association of South Carolina

**South Dakota**  
**Magnus Olson**

Optimizing the Design of Samplers for Early Detection of *Dreissena polymorpha* in  
South Dakota  
Olson Academy  
Science Teacher: Byron Olson  
Sponsored by the South Dakota Water Environment Association

**Tennessee**

**Dinh Phan and Rickie Wu**

Efficient PFAS Removal Via Microbially Enhanced Biochar  
Farragut High School  
Science Teacher: Matthew Milligan  
Sponsored by the Clean Water Professionals of Kentucky & Tennessee

**Texas**

**Rishabh Yadav and Karishma Parghi**

Triple Threat: Leveraging Functionalized Hydrogels, Magnetic Amplification, and  
Electrostatic Filtration in a Multimodal System for Optimized Water  
Purification

The Academy of Science and Technology

Science Teacher: Debra Creel

Sponsored by the Water Environment Association of Texas

**Utah**

**Aiden Karnam**

Foaming Out Forever Chemicals: Air-Water Partitioning of PFAS in Wastewater  
Treatment and Implications for Human Exposure

The Waterford School

Science Teacher: James Harris

Sponsored by the Water Environment Association of Utah

**Vermont**

**Cindy Do and Gavin Blackburn**

Phylax

South Burlington High School

Science Teacher: Nathaniel Moore

Sponsored by the New England Water Environment Association

**Virginia**

**Jayden Nam**

Using NASA Satellite Gravity Measurements to Detect Critical Groundwater Depletion  
Two Months Before Physical Well Networks

Chantilly High School

Science Teacher: Ian Goozh

Sponsored by the Virginia Water Environment Association

**Washington**

**Sanjay Srinivasan**

Polydimethylsiloxane-Coated Polysaccharide Hydrogels for Sustainable Oil Spill  
Remediation

Eastlake High School

Science Teacher: Lara Dean

Sponsored by the Pacific Northwest Clean Water Association

**West Virginia**

*No state winner named for 2026 competition*

Sponsored by the West Virginia Water Environment Association

**Wisconsin**

**Anvi Mathur and Neev Pratap**

Real-Time Attribution of Agricultural Nitrate Sources with Low-Cost Potentiometric ISE  
Sensing and Advection-Dispersion-Reaction Inversion

Brookfield Central High School

Science Teacher: John Wilkinson

Sponsored by Central States Water Environment Association

**Wyoming**

**Caden Thacker**

Determining the Potential Toxicity of Fracking Surfactants: An Assessment of Product  
Viability to Reduce Environmental Water Contamination

Greybull High School

Science Teacher: Joel Kuper

Sponsored by the Rocky Mountain Water Environment Association