United States 2013 Stockholm Junior Water Prize
State Winners

Alabama
Yasminye Pettway
The Effects of Green Roofs on Stormwater Runoff Quality
Alabama School of Fine Arts
Teacher – Shawn Wade
Sponsored by the Alabama Water Environment Association

Alaska
Chelsea Parrocha and Taylor Seitz
Potential Lateral Flow Test Design for the Detection of Paralytic Shellfish Poisoning
Polaris K-12
Science Teacher – Aaron Kallas
Sponsored by the Alaska Water Wastewater Management Association

Arizona
Katelyn Boisvert
Using Environmental Waste as Adsorbents to Remove Contaminants from Water
Chandler Preparatory Academy
Science Teacher – Sarah Thompson
Sponsored by the AZ Water

Arkansas
Roshaneh Ali
Cleaning the Oil Spill: Part II
Little Rock Central High School
Science Teacher – Patrick Foley
Sponsored by the Arkansas Water Environment Association

California
Emily Bettencourt and Vernon Wetzell
Water Desalinization using Capacitive Deionization with Graphene Electrodes
De La Salle High School
Science Teacher – Victoria Acquistapace
Sponsored by the California Water Environment Association

Colorado
Hope Weinstein
Zero Valent Iron Nanoparticle Embedded Polyethersulfone Membranes for Water Filtration:
Isolating Casting Parameters to Optimize Performance
Fairview High School
Science Teacher – Paul Strode
Sponsored by the Rocky Mountain Water Environment Association

Connecticut
Gabrielle Liflander
Novel Creation of a Hydrocarbon-Soaking Paper for Remediation and Reuse of Soluble Light
Hydrocarbon Contaminants in Water
Greenwich High School
Science Teacher – Andrew Bramante
Sponsored by the New England Water Environment Association

Florida
Zachary Loeb
Preventing the Reproductive Failure of Aquatic Life from the Global Threat of Endocrine
Disrupting Compounds through Catalytic Waste Water Treatment (Year 4)
Viera High School
Science Teacher – Elizabeth Youngs
Sponsored by the Florida Water Environment Association

Georgia
Malcolm Barnard
Utilizing an Algal Filter to Improve Water Quality
Johns Creek High School
Science Teacher – Tim Maley
Sponsored by the Georgia Association of Water Professionals

Hawaii
Summer Mundon
The Vapor Precipitator
St. Andrews Priory
Science Teacher – Crystal Stafford
Sponsored by the Hawaii Water Environment Association

Illinois
Anna Gupta and David Lisk
An Egg-Based Water Filter
IMSA
Science Teacher – Mark Carlson
Sponsored by the Illinois Water Environment Association

Indiana
Claire Rice
"Possible Effects of Graphene Oxide Ingestion on Behavior and Physiological Processes in
Daphnia magna and the Developmental Effects of Graphene Oxide on Triop Eggs"
John Adams High School
Science Teacher – Nevin Longenecker
Sponsored by the Indiana Water Environment Association

Iowa
Kelsey Bryant
The Effectiveness of Moringa oleifera in Purification of Turbid Water
Central Lee High School
Science Teacher – Alicia Schiller
Sponsored by the Iowa Water Pollution Control Association

Kansas
Kristen Spies
Desalination of Seawater for Irrigation of Greenhouse Food Crops
in Isolated Coastal Deserts
Blue Valley North High School
Science Teacher – Janet Cyr
Sponsored by the Kansas Water Environment Association

Kentucky
Monica McFadden
Biobarrier Filtration of Water Contaminants
Notre Dame Academy
Science Teacher – Sr. Mary Ethel Parrott
Sponsored by the Kentucky-Tennessee Water Environment Association

Louisiana
Laurie Lyon
The Effect of the Closure of the Mississippi River Gulf Outlet (MRGO) on the Distribution of
Salinity in Lake Pontchartrain
St. Joseph's Academy
Science Teacher – Linda Messina
Sponsored by the Louisiana Water Environment Association

Maine
Nathan Dee
Spectrofluorometric Study on the Interaction between Pharmaceuticals
and Dissolved Organic Carbon (DOC) in Water
Bangor High School
Science Teacher - Cary James
Sponsored by the New England Water Environment Association

Maryland
Madelyn Golding and Bianca Ruspi
Clearly Cloudy
Sherwood High School
Science Teacher – James Douglas
Sponsored by the Chesapeake Water Environment Association

Massachusetts
Amy Kopec
Fleece in the Sea
Wachusett Regional High School
Science Teacher – Nicholas Guerin
Sponsored by the New England Water Environment Association

Michigan
Michael Yu
Adsorption of Natural Organic Matter from Water Using Iron Oxide Columns
Athens High School
Science Teacher – Susan Masten
Sponsored by the Michigan Water Environment Association

Minnesota
Samantha Woog
Designing a Novel Microbial Nanochemical Pathway for
Aerobic Water Bioremediation
John Marshall High School
Science Teacher – Eric Stanslaski
Sponsored by the Central States Water Environment Association

Mississippi
Elizabeth Moore
Biomonitoring of Weeks' Bayou Subwatershed -- Chemical and
macroinvertebrate analyses show resilience to major stressors.
Ocean Springs High School
Science Teacher – Bryan Butler
Sponsored by the Mississippi Water Environment Association

Missouri
Sara Abbett
Black is the New Green: Developing a Feasible Biochar Production System
Tuscumbia High School
Science Teacher – Constance Wyrick
Sponsored by the Missouri Water Environment Association

Montana
Triston Isakson
Cutthroat Trout Re-Introduction Phase III- Modeling
Fairfield Public School
Science Teacher – Raimund Hahn
Sponsored by the Montana Water Environment Association

Nebraska
Brooke Pieke
The Effect of Lemnaceae on the Reduction of Nitrates in the Shell Creek
Newman Grove High School
Science Teacher – Karen Malmkar
Sponsored by the Nebraska Water Environment Association

Nevada
No winner
Entries did not meet competition qualifications
Sponsored by the Nevada Water Environment Association

New Hampshire
Deepika Kurup
UV-Vis Photocatalytic System that Purifies Water Even in Dark
Nashua High School South
Teacher – Linda Polewarczyk
Sponsored by the New England Water Environment Association

New Jersey
Michelle Moffa
A Point-of-Use Water Filter for Developing Countries – Year III: Improving
Effectiveness, Practicality, and Sustainability of Arsenic-Removing Biosand Filters
Holy Spirit High School
Science Teacher – Donna Ljoka
Sponsored by the New Jersey Water Environment Association

New Mexico
Jessica Cleal
The Growing Capabilities of Grey Water
V.Sue Cleveland High School
Science Teacher – Angelica Lopez
Sponsored by the Rocky Mountain Water Environment Association

New York
Matthew Caito, Harrison Kyle, and Alexandra Yourdon
Cascading Pre-filters for Bio-Sand Filters
Clinton-Essex County 4H STEM
Science Teacher – Matt Cauthorn
Sponsored by the New York Water Environment Association

North Carolina
Christie Jiang
Chitosan-modified Cellulose as Adsorbent to Collect and Reuse
Nitrate from Groundwater
North Carolina School of Science and Mathematics
Science Teacher – Myra Halpin
Sponsored by the North Carolina Water Environment Association

North Dakota
Gage Metzen
Aquatic Plants: Today's Solution to River Pollution
Hankinson Public School
Science Teacher – Wendy Friskop
Sponsored by the North Dakota Water Environment Association

Ohio
Alyssa Armstrong
The Effect of Sewage Sludge on Lettuce Growth and Earthworm Toxicity
Canfield High School
Science Teacher – Erin Angelo
Sponsored by the Ohio Water Environment Association

Oklahoma
Leah Huling
Titanium Dioxide Nano- and Microparticles: Transport
and Fate in Wastewater Treatment Systems
Ada High School
Science Teacher – Scott Huling
Sponsored by the Oklahoma Water Environment Association

Oregon
Anirudh Jain
Sulfidation as a novel method to reduce toxicity of silver nanoparticle pollution
Catlin Gabel School
Science Teacher – Veronica Ledoux
Sponsored by the Pacific Northwest Clean Water Association

Pennsylvania
Maya Rao
A Microbial Approach to Quantification of Endocrine Disrupting Compounds
Hempfield High School
Science Teacher – Neal Kuhn
Sponsored by the Pennsylvania Water Environment Association

Puerto Rico
Mario Font-Martin, Kiara Camareno-Vargas, and Viviana Gratacos- Blanco
Use of Rhizophora Mangle Propagules as Bioremediators of Soils and Water Bodies Infected by
Staphylococcus Aereus: Sustainable Approach to Reduce Human Exposure to the Bacteria
Robinson School
Science Teacher –Dorimar Torres
Sponsored by the Puerto Rico Water & Environment Association

Rhode Island
No winner
Entries did not meet competition qualifications
Sponsored by the New England Water Environment Association

South Carolina
Matthew Hunter
Anaerobic Biodegradation of 1, 2 Propanediol: A Preliminary Microcosm Study
Academic Magnet High School
Science Teacher – Katharine Roop
Sponsored by the Water Environment Association of South Carolina

South Dakota
Jenna Duncan and Alyssa Steward
Micro and Macro Survey Analysis of Various Bodies of Water
Northwestern Area
Science Teacher – Denise Clemens
Sponsored by the South Dakota Water Environment Association

Tennessee
Vijaya Dasari
Purifying Bath Water for Iterative Use
White Station High School
Science Teacher – Crystal Davis
Sponsored by the Kentucky-Tennessee Water Environment Association

Texas
Kushal Kadakia
Heavy Metal Removal Using Fe_3O_4 Nanoparticles II
Clear Lake High School
Science Teacher – Brenda Pinchbeck
Sponsored by the Water Environment Association of Texas

Utah
Taylor Murdock
Fingerprinting Oil Wells
Wasatch High School
Science Teacher – Kimberly Conlin
Sponsored by the Water Environment Association of Utah

Vermont
Basundhara Murkherjee
The Effects of Aluminum Sulfate on Ceriodaphnia Dubia
South Burlington High School
Science Teacher - Curtis Belton
Sponsored by the New England Water Environment Association

Virgin Islands
Selesha Subniak
Salty Water to Tasty Water!
The Good Hope School
Science Teacher – Jane Coles
Sponsored by the Virgin Island Water and Power Authority

Virginia
Valentina Lohr
Greening Greywater: Testing Filtration Systems to Protect Earthworm Food Supply H-B Thomas
Jefferson High School for Science and Technology
Science Teacher – Barbara Wood
Sponsored by the Virginia Water Environment Association

Washington
Anjani Patel
Cleaning Up Various Oil Spills Using Bioremediation
Cedarcrest High School
Science Teacher – Jeff Wehr
Sponsored by the Pacific Northwest Clean Water Association

West Virginia
Peter Welker
Oxidative Attack and Elimination of Bisphenol A by Manganese Dioxide
Parkersburg South HS
Science Teacher – Michael Lutz
Sponsored by the West Virginia Water Environment Association

Wisconsin
Sarah Organ and Isabella Cafaro
Reducing Escherichia coli and Fecal Coliform Contamination at South Shore Beach
Divine Savior Holy Angels High School
Science Teacher – Betty Jo Azpell
Sponsored by the Central States Water Environment Association

Wyoming
Alex Henkle and Anna Henkle
The Effect of Bioremediation on Heavy Metals
NHS
Science Teacher – James Stith
Sponsored by the Rocky Mountain Water Environment Association