

## **WEF Member Associations Send Aspiring Water Scientists to National Stockholm Junior Water Prize Competition**

Alexandria, Va. - The Water Environment Federation (WEF) proudly announces the 2009 state winners of the U.S. Stockholm Junior Water Prize (SJWP) - the most prestigious youth award for a water-related science project. WEF Member Associations selected and will sponsor state winners and their science teachers to attend the national competition, hosted by the Alaska Water Wastewater Management Association, from June 25-27, 2009 at the University of Alaska in Anchorage.

The purpose of the SJWP program is to increase students' interest in water-related issues and research and to raise awareness about global water challenges. The competition is open to projects aimed at enhancing the quality of life through improvement of water quality, water resources management, water protection, and water and wastewater treatment.

"Leadership is what separates communities that are successfully addressing water and sanitation needs from those that are not," said WEF Executive Director Bill Bertera. "The Stockholm Junior Water Prize continues to be an excellent program for helping today's youth become the global leaders we'll need to protect our water resources for future generations."

The U.S. winner will receive \$3,000 (USD) and an all-expense-paid trip to Stockholm, Sweden for the international competition as well as the opportunity to present their research to water quality experts at WEFTEC®.09, the Federation's 82<sup>nd</sup> annual technical exhibition and conference, this October in Orlando, Fla. In addition, the U.S. winner's school will receive \$1,000 toward enhancing science education and up to three finalists will receive \$1,000 each.

In the United States, WEF and its Member Associations organize the national, state, and regional SJWP competitions with support from ITT Corporation (also the international sponsor), The Coca-Cola Company, and Delta Air Lines.

The national winner will represent the United States at the international competition in Stockholm, Sweden during World Water Week, August 16-22, 2009. The international winner will receive \$5,000 (USD) presented during a royal ceremony by the prize's Patron HRH Crown Princess Victoria of Sweden. For more information about SJWP, visit [www.wef.org](http://www.wef.org).

### **About WEF**

Formed in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization with 35,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. WEF and its Member Associations proudly work to achieve our mission of preserving and enhancing the global water environment.

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## **2009 State Stockholm Junior Water Prize Winners**

### **Alabama**

Rebecca Daniels  
"Phase II: Phytoremediation of Heavy Metals  
in Coal Ash Leachate"  
Brooks High School  
Science Teacher - Jeanene Daniels  
Sponsored by the Alabama Water Environment Association

**Alaska**

To Be Announced May 8  
Sponsored by the Alaska Water Wastewater Management Association

**Arizona**

Scott Boisvert  
"Growth of the Amphibian Pathogen Batrachochytrium dendrobatidis  
in Response to the Chemical Properties of Aquatic Environments"  
Basha High School  
Science Teacher - Christina Jahr  
Sponsored by the Arizona Water and Pollution Control Association

**Arkansas**

Alison Thoma and Stephen Thoma  
"Spatial Patterns of Antibiotic Resistance  
Near Wastewater Treatment Plant Outfalls"  
Fayetteville High School  
Science Teacher - William Rosser  
Sponsored by the Arkansas Water Environment Association

**California**

To Be Announced June 1  
Sponsored by the California Water Environment Association

**Colorado**

Erik Schnaderbeck  
"The Effect of Reservoirs on the Biodiversity of Aquatic Invertebrates  
in Cold Water Fisheries"  
Sargent High School  
Science Teacher - Ronna Cochran  
Sponsored by the Rocky Mountain Water Environment Association

**Connecticut**

Morgan Bartz  
"The Role of Natural Flocculants in the Purification  
and Clarification of Contaminated Water"  
Bethel High School  
Science Teacher - Sharon Bly  
Sponsored by the New England Water Environment Association

**Delaware**

No Nominations  
Sponsored by the Chesapeake Water Environment Association

**Florida**

Collin McAliley

“Florida Harmful Algal Bloom Mitigation Year 5:  
Neutralizing Brevetoxin Using the Amino Acid Derivative, Cysteine Methyl Ester”

Cocoa Beach Jr./Sr. High School

Science Teacher - Scott McCord

Sponsored by the Florida Water Environment Association

**Georgia**

Elizabeth Kornegay

“Georgia's Footprint on the Ochlocknee River: A Water Quality and Benthic Analysis of  
the Ochlocknee River As It Flows from Its Origin to the State Line, Phase II”

Thomasville High Scholars Academy

Science Teacher - Laura Kornegay

Sponsored by the Georgia Association of Water Professionals

**Hawaii**

Tyler Yamada and Jared Shimada

“Water Desalination: Got Fresh Water?”

Seabury Hall

Science Teacher - Daryl Yamada

Sponsored by the Hawaii Water Environment Association

**Idaho**

No Nominations

Sponsored by the Pacific Northwest Clean Water Association

**Illinois**

To Be Announced May 11

Sponsored by the Illinois Water Environment Association

**Indiana**

Marijke Wijnen

“Improving the Efficiency of the Bioremediation Process  
in Xylene Contaminated Groundwater”

John Adams High School

Science Teacher - Nevin Longenecker

Sponsored by the Indiana Water Environment Association

**Iowa**

Olivia Rairden

“How Dangerous Are Our Waters?”

Central Lee High School

Science Teacher - Alicia Schiller

Sponsored by the Iowa Water Pollution Control Association

**Kansas**

Lauren Severance and Baylee Birkmeyer

“The Effects of Precipitation on the Water Quality of Little Mill Creek”

Shawnee Mission Northwest

Science Teacher - Debra Brewer

Sponsored by the Kansas Water Environment Association

**Kentucky**

Kim Mai Le

“Evaluating Estrogen and Estrogen Mimics in Public Water Sources  
Using a Yeast Cell-Based Bioassay”  
duPont Manual High School

Science Teacher - Glenn Zwanzig

Sponsored by the Kentucky-Tennessee Water Environment Association

**Louisiana**

Alaina Leggette

“The Effects of Hurricanes Lili, Katrina, and Gustav on the Salinity  
and Turbidity of Lake Pontchartrain”

St. Joseph's Academy

Science Teacher - Linda Messina

Sponsored by the Louisiana Water Environment Association

**Maine**

Anne Marie Lausier

“Detection of Pharmaceutical and Personal Care Products (PPCPs)  
in 3 Maine Lakes by Synchronous-Scan Fluorescence Spectroscopy (SFS)”

Bangor High School

Science Teacher - Cary James

Sponsored by the New England Water Environment Association

**Maryland**

To Be Announced Soon

Sponsored by the Chesapeake Water Environment Association

**Massachusetts**

Nadya Shlykova

“Clean Energy: Osmosis at Work”

Westfield High School

Science Teacher - Ranee Sweeney

Sponsored by the New England Water Environment Association

**Michigan**

No Winner Sponsored

Sponsored by the Michigan Water Environment Association

**Minnesota**

Megan Miller

“The Influence of Fish Communities on the Diurnal Horizontal Migration  
of Daphnia Species in Deep Prairie Wetlands”

Lincoln High School

Science Teacher - Cheryl Winkler-Miller

Sponsored by the Central States Water Environment Association

**Mississippi**

Courtney Ramsey

“Microbial Conversion of Glucose into Lipids  
Using Activated Sludge Microflora”

Mississippi School for Mathematics and Science

Science Teacher - Mary Davidson

Sponsored by the Mississippi Water Environment Association

**Missouri**

Jessica Baber

“A Pilot Study of the Effects of the Type of Water Filtration Material  
(Activated Carbon, Vermiculite, and Corn Cob)  
on the Amount of Progesterone and Testosterone Removed from the Water”

West Platte R-II

Science Teacher - Brad Lynch

Sponsored by the Missouri Water Environment Association

**Montana**

Allison Stringer

“Effect of Constructed Wetlands on Water Temperature in  
Lower Burnt Fork Creek: Implications for Native Trout Populations  
and Possible Stream Restoration”

Sentinel High School

Science Teacher - Jonell Prather

Sponsored by the Montana Water Environment Association

**Nebraska**

Nicholas Kinzer

“A Prototype Sewage Treatment Plant”

Lakeview High School

Science Teacher - Edward Kinzer

Sponsored by the Nebraska Water Environment Association

**Nevada**

Kirsten Perry

“pH and Salt Content of Soils and Irrigation Water  
of the Lower Humboldt River”

Elko High School

Science Teacher - Paul Hughes

Sponsored by the Nevada Water Environment Association

**New Hampshire**

No Nominations

Sponsored by the New England Water Environment Association

**New Jersey**

Elaine Gomez

“Metal Concentrations of Plants in an Engineered Wetland;  
Establishing Protocols and Base-line Conditions”

Union City High School Campus North

Science Teacher - Nadia Makar

Sponsored by the New Jersey Water Environment Association

**New Mexico**

Terryl Bell

“An Analysis of Microbial Diversity and Water Chemistry in Karst Springs:  
Eddy County, New Mexico and Culberson County, Texas”

Carlsbad High School

Science Teacher - Dara Bell

Sponsored by the Rocky Mountain Water Environment Association

**New York**

Benjamin Valentino

“Magnetic Gradient Anomalies on Onondaga Lake, New York:  
Are They Geologic or Anthropogenic?”

Home School

Science Teacher - Karen Valentino

Sponsored by the New York Water Environment Association

**North Carolina**

Eileen Jang

“Natural Organics Control Aggregation of  
Mercury Sulfide Nanoparticles in Freshwater Systems”  
North Carolina School of Science and Mathematics

Science Teacher - Myra Halpin

Sponsored by the North Carolina Water Environment Association

**North Dakota**

Benjamin Sun

“Sink or Source: The Role of Street Solids  
in Heavy Metal Pollution of River Water”

Red River High School

Science Teacher - Jenny Sun

Sponsored by the North Dakota Water Environment Association

**Ohio**

To Be Announced Soon

Sponsored by the Ohio Water Environment Association

**Oklahoma**

Jenna Huling

“Global Warming Effects on Ground Water/Surface Water Interactions”  
Ada Junior High School

Science Teacher - Kelly Reynolds

Sponsored by the Oklahoma Water Environment Association

**Oregon**

Ashutosh Patra and Siheng You

“Novel Water Lens for Cost Effective Electricity Generation  
and Water Cleansing”

Sunset High School

Science Teacher - John Sheu

Sponsored by the Pacific Northwest Clean Water Association

**Pennsylvania**

Vincent Zampelli

“A Novel Synthesis of MFCs on the Reduction of Chemical Oxygen Demand  
in Wastewater Treatment Plants”

Conrad Weiser High School

Science Teacher -

Sponsored by the Pennsylvania Water Environment Association

**Puerto Rico**

Patricia A. Gonzalez

“Municipal Landfill Leachate on Surface Waters of Juncos, Puerto Rico”  
Escuela Jose A. Lopez Castro

Science Teacher - Tere De L. Hernandez  
Sponsored by the Puerto Rico Water & Environment Association

**Rhode Island**

Emily Papazian  
“How Does Temperature Affect Total and Fecal Coliform  
Presence in Rhode Island Ponds?”  
LaSalle Academy  
Science Teacher - Leslie Martinelli  
Sponsored by the New England Water Environment Association

**South Carolina**

Emily Bakaj  
“The Effect of Ferrous Ammonium Sulfate Concentration  
on Marine *Synechococcus sp.*'s CO<sub>2</sub> Absorption and O<sub>2</sub> Production”  
Spring Valley High School  
Science Teacher - Robin Henderson  
Sponsored by the Water Environment Association of South Carolina

**South Dakota**

Jennifer Ratzlaff and Victoria Rezac  
Is Salt Accumulating in the Right of Way of Highways?  
Avon High School  
Science Teacher - Paul Kuhlman  
Sponsored by the Water Environment Association

**Tennessee**

Gregory Markov  
“Using Algae and Nitrate-Polluted Water in a Photobioreactor  
for Hydrogen Production”  
Franklin High School  
Science Teacher - Sergei Markov  
Sponsored by the Kentucky-Tennessee Water Environment Association

**Texas**

Li Boynton  
“Using Bioluminescent Bacteria to Detect Water Contaminants”  
Bellaire High School  
Science Teacher - Anna Loonam  
Sponsored by the Water Environment Association of Texas

**Utah**

Christie Hewlett  
“A Comparative Study of the Mercury Content in the Bear, Jordan, and Weber Rivers  
and its Effects on the Wildlife and the Great Salt Lake”  
Weber High School  
Science Teacher - Lareen Radle  
Sponsored by the Water Environment Association of Utah

**Vermont**

Stephanie Chang  
“Reducing Phosphorus in Dairy Effluent  
via Constructed Wetland-Steel Slag Filter System”

South Burlington High School  
Science Teacher - Curtis Belton  
Sponsored by the New England Water Environment Association

**Virginia**

Amanda Schanz  
"The Effect of Estrogen Level in Water on the Average Root Length  
and Average Number of Roots of the *Epipremnum Tricolor*"  
Mathematics and Science High School at Clover Hill  
Science Teacher - Erin Peebles  
Sponsored by the Virginia Water Environment Association

**Washington**

Ashiyah Cays-Vesterby  
"Nitrate Removal from Water Using Conifer Tissues"  
Sequim High School  
Science Teacher - Mary Omberg  
Sponsored by the Pacific Northwest Clean Water Association

**West Virginia**

Briana Breault  
"Hydroelectric Power Potential in the Ohio River Valley"  
Bishop Donahue Memorial High School  
Science Teacher - Robert Ball  
Sponsored by the West Virginia Water Environment Association

**Wisconsin**

Jamie Molloy  
"The Effect of Nano Metal Oxides on Sentinel Organisms  
in the Aquatic Environment"  
Divine Savior Holy Angels High School  
Science Teacher - Betty Jo Azpell  
Sponsored by the Central States Water Environment Association

**Wyoming**

Talysa Stockert  
"Variation in Containment Methodologies for the Remediation  
for CBM Effluents"  
Greybull High School  
Science Teacher - Joel Kuper  
Sponsored by the Rocky Mountain Water Environment Association