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WEF HIGHLIGHTS

INSIDE

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WEF Announces New Deputy Executive Director

The Water Environment Federation (WEF) announces the promotion of Eileen O'Neill, Ph.D., to the position of Deputy Executive Director.

O'Neill's prior position was that of Managing Director for Technical and Educational Services where she managed WEF staff with responsibility for the technical content of WEFTEC, specialty conferences, web casts, workshops, and training courses; surveys of municipal and industrial practice; training materials including in print, video, CD-ROM, and web formats. O'Neill has held a number of other positions with WEF including Director of WEF's International Program (1993-1997) and Director of WEF's Industrial Program (1991-1993). She will remain responsible for the technical profile and activities of the Federation while taking on additional responsibility in a number of strategic areas.

"Eileen has earned this promotion through tireless efforts on the behalf of the Federation and a strong and consistent record of solid accomplishments," said Bill Bertera, executive director of WEF.

O'Neill has been involved extensively in the international water field. She has participated with WEF's work with the United Nations (UN) since 1993, including leading WEF's application for consultative status with the Economic and Social Council. WEF has provided technical

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WEF MAs Send Aspiring Water Scientists to National Stockholm Junior Water Prize Competition

The Water Environmen t Federation (WEF; Alexandria, Va.) announces the 2005 U.S. state winners of the Stockholm Junior Water Prize (SJWP) – the most prestigious youth award for a water-related science project. WEF Member Associations (MAs) selected and sponsored state winners to enter the national competition in Portland, Oregon, June 16-18 (At press time, the competition was yet to be held). The U.S. winner will receive $2,500 and an all-expense paid trip to Stockholm, Sweden for the international competition. The U.S. winner's school will receive $1,000 toward enhancing science education and the student will present their research to water quality experts at WEFTEC®.05, WEF's annual technical exhibition and conference in Washington, DC, October 29 – November 2, 2005.

"The SJWP competition is an important element in the Federation's continuing efforts to attract young professionals into the water quality field," said WEF Executive Director Bill Bertera. "The competition promotes leadership, academic excellence and environmental stewardship, which will benefit not only the individual but the entire environ-

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Water Environment Federation®
Preserving & Enhancing the Global Water Environment

From the

EXECUTIVE DIRECTOR

Headline

I love spending money. That is, I love spending money on things that are important to me. I love buying clothes for my daughters because clothes display their self-confidence and show the world who these young women are before they say a word. I love having my taxes spent on libraries because every person has access to read all kinds of books. I am more than happy to pay a higher sewer bill so that Reno can keep repairing sewers and restoring reaches of the Truckee River.

When I didn't have money, I borrowed enough to pay for a good education — an investment that is still paying dividends. I am thrilled to be able to put money into tuition and fees for my girls' education. These are all important things. It is regrettable when we spend money on stuff that is neither memorable nor necessary. Plastic bottles with water in them, new cars, security screening, liability insurance, high prices on mediocre mass-produced products, cute shoes that I won't wear because they hurt or squeak — these are things that are not worth the money you spend on them.

What makes me angry is when we spend money and time on things that do not give any lasting benefit. Rejecting the blending policy is a great shame. The great and beneficial reality was that plants with stormwater accepted the first heavy flush of stormwater pollutants to be treated and removed every time it rained. Then, on those few days with high flows, after the first flush was treated, the higher flows were split in two at the plant; one part went through full treatment, the other part went through settling and disinfection before the flows were blended back together for discharge. I hope that we aren't forced by lawsuits to waste a lot of money eliminating blending and lose the benefit of stormwater treatment.

Every state environmental protection department is understaffed and underfunded. With experienced staff retiring, the remaining staff remains do not have time, experience, or encouragement to be creative in attacking watershed issues. Even while the U.S. Environmental Protection Agency (EPA) in Washington, D.C., is telling us to use watershed-based permits, EPA regional offices and state agencies are not moving fast. A tentative attitude is the biggest barrier to solving problems. I am disappointed that we are dawdling on animal feed lots. Sustainable development is the environmental hit song of the day — good! The biggest water pollution sources in growing communities are pavement runoff, sprinkler overrun, fertilizer overload, and septic tank over-density — so let's keep working with developers and planning departments while they are in the mood to build communities that do not harm the water resources.

In environmental terms there have been some fabulous investments that are paying off. Stormwater permits have started to reduce urban pollutants. The U.S. Farm Bill has paid farmers to take livestock off land next to streams and set aside strips of land as buffers. Recent reports (www.nationalreview.com/comment/mehan200505310953.asp) show that clean air legislation has caused manufacturers to cut mercury emissions 45% in the United States. Mercury use was reduced more than 50% in the United State and 84% in Canada in the 1990s. This shows progress addressing the water quality impacts of urban runoff, agriculture and industry.

As Dolly Levi said in Hello Dolly, "money is like manure, it's only good if you spread it around." So, spend money, spend lots of money, because our environment is worth it. Spend it on controlling the biggest source of pollution; and right now the most benefit comes from urban stormwater, agricultural runoff. and air emissions.

Lynn Orphan
2004-2005 WEF President

WEF HIGHLIGHTS
News for Members of the Water Environment Federation

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Sewers Considered 'Modern Marvel' to History Channel

When Jon Schladweiler unveiled his sewer history exhibit at the Water Environment Federation's (WEF, Alexandria, Va.) 1993 Collections System Conference in Tucson, Ariz., he had no idea it would wind up on the small screen.

The exhibit, which began as a display of old photos, grew when Schladweiler began collecting documents relating to sewer design, construction and maintenance activities. From there, he acquired artifacts to add to the project: pieces of pipe, sewer maintenance tools, etc. Before long, he had quite an exhibit on his hands and decided to share it with others in the field at the 1993 specialty conference.

The exhibit has been displayed at more than 20 conferences and seminars over the last eight to 10 years. According to Schladweiler, several thousand people have visited the exhibit at conferences.

And now, it's about to be shared with a whole new audience: anyone who has cable television.

Several months ago, the History Channel contacted Schladweiler to do an episode for its series Modern Marvels about sewers.

"They had visited www.sewerhistory.org and gotten ideas for formulating the script for the proposed one-hour segment," Schladweiler said. "I was excited that the subject of sewer history would get the chance to be heard by a much larger audience – through the History Channel; an entity that takes pride in how well its productions are researched and thought out, and then presented."

Schladweiler was eventually paired up with Beata Genin, a writer and producer with Actuality Productions (Tarzana, Calif.). Genin and a film and sound crew flew to Mesa, Ariz., and conducted the interview with Schladwelier during the AWPCA's (Arizona Water Pollution Control Association; XXX) 78th annual conference, where he was displaying the exhibit.

So, why sewers?

"Our shows are usually about technology and history, which can sometimes be perceived as dry," Genin said. "I thought this was an unusual topic that could afford me the opportunity to have some fun with the writing, while still dealing with the technology and history of one of our most important infrastructures."

The program entitled, "**Modern Marvels: Sewers**" will air on The History Channel Wednesday, July 27, 2005. Check local listings for times in your area!

According to Genin, the segment will be a one-hour program outlining the history of sewers from the ancient world to today — the triumphs, the set-backs, the ingenuity and sheer manpower that is required to build a sewer system, the sewage treatment process, the potential dangers of not maintaining our sewers, and the awesome technologies that are being used to ensure that sewers keep working well into the future.

Along those lines, Genin said she discovered some thing about sewers, and some things were a bit unsettling.

"I learned that technology doesn't always keep improving," she said. "Ancient civilizations were well on their way to comprehensive sewer systems with public health in mind. When Rome fell, at the onset of the Middle Ages (Dark Ages), all of this ingenuity went down the drain (pardon the pun). Waste matter filled the streets and disease was everywhere. This could have been avoided by looking at the advances of the past. They basically had to start from scratch.

"This was an interesting point in history. I also learned that our sewers could be in trouble and much more needs to be done to ensure they continue to operate safely and effectively. The consequences could be most unpleasant."

In person, the Sewer History Exhibit provides a hands-on opportunity for people to learn about, and sense, the historical "roots" of the present day sewer systems, says Schladweiler.

"It's a joy to work with; especially, when you see the visitor's reactions to viewing the material on display at the exhibit" he said. "A lot of stories and recollections are shared by the conference attendees while at the exhibit."

The exhibit will be on display at WEFTEC.05 in Washington, D.C. For those who can't attend a conference to see it up close, a Web site chronicling the exhibit has been established.

"The sewer history Web site (sewerhistory.org) was placed on line in the late 1990's" Schladweiler said. "Jan McDonald, an exceptionally talented artist and information technologist, is the Web site's Web master. In 2004, the site had thousands of meaningful visits from interested parties from throughout the world; and has received several awards for not only its content, but also for its 'user friendly' format."

Editor's Note: *Jon Schladweiler has been a member of the WEF (and its predecessor, the WPCF) since 1974 and has served on the Collection Systems Committee since the late 1980s. He continues to assist with Collection Systems event at Ops Challenge and with the Sewer History Exhibit. He served as AWPCA's national WEF Director from 1994 to 1997 and as a member of WEF's Executive Committee from 1997 to 1998.*

National Stockholm Junior Water Prize Competition *continued from page 1*

mental and public health community – both domestically and internationally."

The purpose of the Stockholm Junior Water Prize is to increase students' interest in water-related issues and research, and to sensitize them – as future leaders – to global water challenges. The competition for the SJWP award is open to projects aimed at improving the quality of life through improvement of water quality, water resources management, water protection or water and wastewater treatment.

In the United States, WEF and its MAs organize the national, state and regional SJWP competitions with support from the ITT Industries (also the international sponsor), The Coca-Cola Company, and the U.S. Environmental Protection Agency (EPA)'s Office of Research and Development. Internationally, HRH Crown Princess Victoria of Sweden is the patron of the prize. In a royal ceremony, during World Water Week in Stockholm, Sweden, August 21-27, the international winner will receive $5,000 (USD). For more information about the competition visit www. StockholmJunior WaterPrize.org.

State Winners (current as of press time)

Alabama
Jennifer Taylor
Florence High School, Florence, Ala.
"Determination of Antibiotic Presence in the Tennessee River and Inflowing Waters"
Sponsored by the Alabama Water Environment Association

Alaska
Clay Wertheimer & Brenna Heintz
Juneau Douglas High School, Juneau, Alaska
"Seasonal Dynamics of Polynuclear Aromatic Hydrocarbons in Gastineau Channel"
Sponsored by the Alaska Water Environment Association

Arizona
Oanh Nguyen & Nicole Carbajal
Basha High School, Chandler, Ariz.
"Comparison of Rockwool Versus Sand When Used as Filter Media in a Biological Water Filter"
Sponsored by the Arizona Water and Pollution Control Association

Arkansas
Colin Sears
Alma High School, Alma, Ark.
"Non Point Source Pollution Comparative Analysis of the White River and Beaver Lake, Arkansas"
Sponsored by the Arkansas Water Environment Association

California - TBA

Colorado
Ananth Sridhar
Cherry Creek High School, Greenwood Village, Colo.
"A Novel Method to Asist Regulators Determine Site-specific Water Quality Criteria for Copper"
Sponsored by the Rocky Mountain Water Environment Association

Connecticut
Margaret Boushell
Newtown High School, Sandy Hook, Conn.
"The Effects of a Home Heating Oil Spill on the Local Environment"
Sponsored by the New England Water Environment Association

Delaware
NO STATE COMPETITION

District of Columbia
Genevieve Allen
Alice Deal Junior High School, Washington, D.C.
"Pesticides and Ghost Shrimp: A Lethal Combination"
Sponsored by the Federal Water Quality Association "

Florida
Hasib Nasirullah
American Heritage High School, Plantation, Fla.
"An Interdisciplinary Approach to Trichloroethylene Pollution in Groundwater Systems Phase II: Computer Modeling"
Sponsored by the Florida Water Environment Association

Georgia
Abby Blocker-Joyner
Statesboro High School, Statesboro, Ga.
"Sampling & Analysis of Agriculture Related Chemicals in Bulloch County Farm Ponds As Indicators of Accumulation From Runoff, Phase II"
Sponsored by the Georgia Water and Pollution Control Association

Hawaii
April Due & Aimi Latore
Kapolei High School, Kapolei, Hawaii
"The Viability of Processing Cruise Ship Waste at Land-based Wastewater Treatment Facilities"
Sponsored by the Hawaii Water Environment Association

Idaho
NO STATE COMPETITION

Illinois
Daria Zelasko
Guerin College Prep High School, River Grove, IL
"Benevolent Bacteria: Indigenous Bacterial Remediation"
Sponsored by the Illinous Water Environment Association

Indiana
Abigail Hines
Orchard Day School, Fort Wayne, Ind.
"A Comparison of Herbs and Bti as Larvicides on Culex pipiens and Their Effect on
Daphnia magna-Year 2"
Sponsored by the Indiana Water Environment Association

Iowa
Mauree Gibson
Central Lee High School, Donnellson, Iowa
"Daphnia magna: A Possible Smoke Detector for New Water Pollutants?"
Sponsored by the Iowa Water Pollution Control Association

Kansas
NO STATE COMPETITION

Kentucky
Kyle Huninghake
DuPont Manual High School, Louisville, Ky.
"Pesticide Runoff on Aquatic Photosynthesis"
Sponsored by the Kentucky-Tennessee Water Environment Association

Louisiana
Alicia Ranney
Lafayette High School, Lafayette, La.
"Geographical Variation in Concentrations of Metal Residues in Louisiana Bivalves (Crassostrea virginica)"
Sponsored by the Louisiana Water Environment Association

Maine
Ashley Malinowski
Oak Hill High School, Wales, Maine
"A Point Source of Ortho-phosphate in the Sabattus Pond (Maine) Watershed?"
Sponsored by the New England Water Environment Association

Maryland
Emily Brownlee
Calvert High School, Prince Frederick, Md.
"The Use of Clay to Remove Algal Blooms from Chesapeake Bay Waters"
Sponsored by the Chesapeake Water Environment Association

Massachusetts
Eric Wilson
North Attleborough High School, North Attleborough, Mass.
"Improving Phycoremediation via Artificial Directional Selection and Its Application to Mercury Pollution"
Sponsored by the New England Water Environment Association

Michigan
Amanda Bennett
Marysville High School, Marysville, Mich.
"Toxins of the Round Goby: Phase I"
Sponsored by the Michigan Water Environment Association

Minnesota
Elizabeth Welsh
Proctor, Proctor, Minn.
"The Use of Barley Straw to Control Algal and Macrophyte Growth on Wild Rice Lake—Pre and Post-Eutrophic Conditions"
Sponsored by the Central States Water Environment Associaton

Mississippi
Veniece Kirksey
Yazoo City High School, Yazoo City, Miss.
"The Effects of Pollutants on Freshwater Algae and Planaria from Local Eutrophic Waters"
Sponsored by the Mississippi Water Environment Association

Missouri
Sky Vanderburg
Moberly High School, Moberly, Mo.
"The Pipe Dream?: An Analysis of Haloacetic Acids in Wastewater Effluent"
Sponsored by the Missouri Water Environment Association

Montana
Cherry Tomsheck
North Toole County High School, Sunburst, Mont.
"The Effect of a Selected Herbicide (Trifluralin) on the Flagellar Regeneration and Resorbtion of Chlamydomonas reinhardtii"
Sponsored by the Montana Water Environment Association

Nebraska
Laura Johnson
Newman Grove High School, Newman Grove, Neb.
"Duckweed: A Solution to Pollution? Phase II Hog Sludge"
Sponsored by the Nebraska Water Environment Association

Nevada
Lindsay Gilbertson
Elko High School, Elko, Nev.
"Bulrush Burning as a Solids Removal Management Technique- A Study of Ruby Lake National Wildlife Refuge - Year Three"
Sponsored by the Nevada Water Environment Association

New Hampshire
NO STATE COMPETITION

New Jersey
Jonathan Chester
The Peddie School, Hightstown, N.J.
"The Effect of Soil Texture on the Adsorption of Escherichia Coli"
Sponsored by the New Jersey Water Environment Association

New Mexico
Abigail Gray
Manzano High School, Albuquerque, N.M.
"Nitrate and Groundwater in the East Mountains of Bernalillo County - Phase III - Nitrate Variability & Using an Environmental Tracer to Determine Aquifer Recharge Travel Time"
Sponsored by the Rocky Mountain Water Environment Association

National Stockholm Junior Water Prize Competition *continued from page 5*

New York
David Kashi
Solomon Schechter High School of New York, N.Y.
"Distribution of Cholera Through Natural Water Sources"
Sponsored by the New York Water Environment Association

North Carolina
NO STATE COMPETITION

North Dakota
Megan Bladow
Hankinson Public School, Hankinson, ND
"Regional Rivers: Ecological Attributes and Natural Decontaminators"
Sponsored by the North Dakota Water Environment Association

Ohio
Valerie Andrus
Beuamont School, Cleveland Heights, Ohio
"Bioremediation of Parking Lot Run-off Water with Duckweed (Lemna sp. and Wolffia sp.) Phase III: Environmental Fate Analysis of Zinc Over a Six Week Period."
Sponsored by the Ohio Water Environment Association

Oklahoma
Molly Steen
Grove High School, Grove, Okla.
"The Direct Effects of Increased Nutrient Levels on Aquatic Organisms A Bioassay Model of Cave Springs Branch and Honey Creek"
Sponsored by the Oklahoma Water Environment Association

Oregon
Kathryn VanderWeele
Oregon Episcopal School, Portland, Ore.
"Removal of Arsenic From Drinking Water by Water Hyacinths"
Sponsored by the Pacific Northwest Clean Water Association

Pennsylvania
Megan Conroy
Conroy Learning Center, Export, Pa.
"Acid Mine Drainage Remidiation Year II"
Sponsored by the Pennsylvania Water Environment Association

Rhode Island
NO STATE COMPETITION

South Carolina
Jenny Labadorf
Homeschool, Travelers Rest, S.C.
"Seeking the Source: A Longitudinal Study and Analyzation of the Reedy River Watershed in Greenville, S.C. for Sources of Fecal Coliform Nonpoint Source Pollution"
Sponsored by the Water Environment Association of South Carolina

South Dakota
Kaitlynn Krack
Hamlin High School, Hayti, S.D.
"Hamlin County Watershed Analysis: Phase III"
Sponsored by the South Dakota Water Environment Association

Tennessee
Christine Li
Cookeville High School, Cookeville, Tenn.
"Analysis of Macroinvertebrate Population and Diversity and Their Influence on Water Quality - Phase 3 - A Watershed Study"
Sponsored by the Kentucky-Tennessee Water Environment Association

Texas
James Kucherka
Seguin High School, Seguin, Texas
"Wastewater Doesn't Have To Be a Waste"
Sponsored by the Water Environment Association of Texas

Utah
Natalie Hewlett
Weber High School, Pleasant View, Utah
"A Comparison of Inversion and Snowfall pH Levels"
Sponsored by the Water Environment Association of Utah

Vermont
Kevin White
South Burlington High School, South Burlington, Vt.
"Zebra Mussel Extermination"
Sponsored by the New England Water Environment Association

Virginia
Ryan Akrami & Matthew Karenbauer & Daniel Saboe
Centreville High School, Clifton, Va.
"Fecal Matters: Exploring the Fltering Use of Feces"
Sponsored by the Virginia Water Environment Association

Washington
Morgen Anyan
Selah High School, Selah, Wash.
"Immobilization of Hazardous Materials Utilizing Gallionella sp, Klebsiella sp, and Desulfovibrio sp Bacteria"
Sponsored by the Pacific Northwest Clean Water Association

West Virginia
Holly Temple
Martinsburg High, Martinsburg, W.V.
"Home Sweet Home: Can pH Affect the Search for It?"
Sponsored by the West Virginia Water Environment Association

Wisconsin
Laura Jones
University School of Milwaukee, Milwaukee, Wis.
"Determining the Environmental Impact of Sodium Chloride from Road De-icing in Northern Areas"
Sponsored by the Central States Water Environment Associaton

Wyoming
Megan Kuper
Greybull High School, Greybull, Wy.
"Water-Borne PAH Concentrations Associated With Fossil Fuel Production and Their Impact on Apoptosis-Related Proteins"
Sponsored by the Rocky Mountain Water Environment Association

Puerto Rico
Angélica Valdés
Southwestern Educational Society, Mayagüez, P.R.
"Filtering Roof Rainwater Using Zeolites"
Sponsored by the Puerto Rico Water & Environment Association

Calling All Treatment Works!

Operations Forum, a special section of *WE&T* magazine, is looking for a few good treatment facilities. The *Forum's* Profile section provides an up-close look at water and wastewater treatment plants, collection systems, and outstanding operations and maintenance personnel. The *Forum* currently is seeking new entries, so here's your chance to brag about the features, approaches, and people that make your facility exceptional.

For more information or to request a questionnaire, contact Steve Spicer, *Operations Forum* editor, at (703) 684-2463 or sspicer@wef.org.

information to specific UN program offices and provided independent peer review of a UN Environmental Programme (UNEP) policy paper.

For six years, O'Neill directed WEF's collaboration with the US-Asia Environmental Partnership Program (US-AEP) to promote the development of environmental professional associations in India, Indonesia, the Philippines, and Thailand and to provide training and technical assistance in the areas of water reuse; operation and management of wastewater collection and treatment infrastructure; public involvement and outreach; and development of certification and continuing education programs for environmental professionals. She also directed WEF's seven-year collaboration with the U.S. Environmental Protection Agency to provide technical assistance and training in Central and Eastern Europe. The focus included municipal environmental infrastructure development, funding, and operation; source water protection and watershed management; certification and training; pollution prevention; biosolids management; and public participation/stakeholder involvement.

"Eileen has earned this promotion through tireless efforts on the behalf of the Federation and a strong and consistent record of solid accomplishments," said Bill Bertera, executive director of WEF.

O'Neill has more than 25 years of academic, consulting, and association experience. She has a B.S. in Soil Science from the University of Newcastle-upon-Tyne (UK) and a Ph.D. in Soil Science from the University of Aberdeen (UK) and undertook a postdoctoral traineeship in Environmental Toxicology at the University of Wisconsin at Madison. Her area of expertise is the fate and transport of contaminants in the environment. She is the author of more than 25 book chapters, magazine articles, conference papers, and peer-reviewed scientific papers.