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# **Top Story**

# Holiday Treats, Watered Down

By measuring post-holiday spice levels in waterways, scientists hope to raise awareness of the public's role in protecting water quality

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University of Washington (UW; Seattle) researchers and students deploy a conductivity-temperature-depth system to collect water samples. Photo courtesy of UW. Click for larger image.

In 2006 Richard Keil, associate professor of the UW School of Oceanography, started monitoring benign spices in the local waterways. His goal was to find an interesting way of showing citizens how their everyday activities affect the natural world.

Keil works with Research Scientist/Laboratory Manager Jaqui Neibauer, SoundCitizen Program Coordinator Brittany Kimball, and his students to gather samples and perform the research. Water samples are processed in UW's Aquatic Organic Geochemistry Lab, where the team measures levels of cinnamon, thyme, and vanilla. Read more

# **Critical Fresh Water Needs in the American Southwest**

'Running Dry' examines Southwest water resources, discusses desalination and aquifer recharge, and calls for a national water policy



Could the fast-growing Southwest run out of water? This is the question posed by James Thebaut, director of the recently released documentary, "The American Southwest: Are We Running Dry?" According to experts, a water inventory is needed to answer this question. <u>Read more</u>



The responsible use of water in the Southwest, including Palm Springs, Calif. pictured above, is one issue addressed in the documentary "The American Southwest: Are We Running Dry." "It's not whether you grow; it's how you grow" explained Pat Mulroy, general manager, Las Vegas Valley Water District and Southern Nevada Water Authority. Photo courtesy of The Chronicles Group. Click for larger image.

# WEF's Young Professionals Leave Their Mark in Chicago At WEFTEC.08

The Water Environment Federation (WEF; Alexandria, Va.) Students and Young Professionals Committee (SYPC) left Chicago better than they found it this year at WEFTEC. On Oct. 18, approximately 60 volunteers from WEF, consulting firms, universities, industry, and a local high school joined forces to build a rain garden at Pulaski Park for the first annual community outreach project, "Gettin' Out of the Gutter." <u>Read more</u>

# WEFTEC.08 Gallery

The Water Environment Federation's (WEF's; Alexandria, Va.) 2008 Annual Technical Exhibition and Conference, WEFTEC.08, was held in Chicago from Oct. 18 to 22. Take a look at the event's activities by visiting the WEFTEC.08 Gallery.



Photo courtesy of Oscar Einzig Photography. Click for larger image.



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## Holiday Treats, Watered Down

By measuring post-holiday spice levels in waterways, scientists hope to raise awareness of the public's role in protecting water quality

As the aroma of spices fills the air this holiday season, scientists from the University of Washington (UW; Seattle) want citizens to remember that what they consume has a direct impact on their local waterways.



Researchers travel on the Clifford A. Barnes, a University of Washington (UW; Seattle) research vessel, to collect water samples. Photo courtesy of UW. Click for larger image.

In 2006 Richard Keil, associate professor of the UW School of Oceanography, started monitoring benign spices in the local waterways. His goal was to find an interesting way of showing citizens how their everyday activities affect the natural world.

Keil works with Research Scientist/Laboratory Manager Jaqui Neibauer, SoundCitizen Program Coordinator Brittany Kimball, and his students to gather samples and perform the research. Water samples are processed in UW's Aquatic Organic Geochemistry Lab, where the team measures levels of cinnamon, thyme, and vanilla.

"The nice thing about the spices is that they're not threatening," said Neibauer. She explained that university scientists hope people make the connection between consuming spices and consuming other compounds such as medicine to start understanding how their routines have a significant impact on the surrounding environment.

"We want people to be aware that what you do in your home directly impacts Puget Sound," Neibauer said. "The spices are just a nice, lighthearted way to go about trying to drive home the same message to people."



The UW research team originally tried to test for caffeine, but it was found to be constantly present in waterways. The team also tried to test for theobromine, which is present in chocolate, but found it is difficult to detect. Experiments to find these compounds have been pushed aside for now, Neibauer explained.

#### **Holiday Spices**

Cinnamon — in the form of cinnamic acid — is only found in Seattle waterways around Thanksgiving and Christmas.

"Cinnamon is a good tracer of the holidays," Neibauer said. "There's an immediate sign of cinnamon in our water right after Thanksgiving." She explained that in 2007 the scientists did not see cinnamon 2 days before Thanksgiving, but the spice was present 1 day after the holiday, rising to peak 4 days after the holiday.



This image, created by Keil and his research team, shows the spikes in cinnamon levels in Seattle around the holiday season. Click for larger image.

"It just shows how connected we are," she said. "What you do in your home is immediately sent out to Puget Sound."

Levels of thymol, the main constituent in thyme, are almost nonexistent from mid-January through mid-November. But in 2007, thymol levels peaked 4 days after Thanksgiving. "We see very obvious peaks of [thymol] right after Thanksgiving and Christmas," Neibauer said.



This image, created by Keil and his research team, shows the extreme spikes in thymol levels in Seattle around the holidays. Click for larger image.



### Vanilla: Spice for All Seasons

Artificial vanilla, or ethyl-vanillin, is found in the largest concentration in Seattle's waterways. This finding did not surprise UW scientists since artificial vanilla is used frequently as a flavor enhancer and to cover up the bitter taste in medicines. Three times stronger than pure vanilla, artificial vanilla often is used in manufactured products to provide the same flavor as natural vanilla for much less cost, Neibauer explained.

Both pure and artificial vanilla levels follow the same trend: They peak during the summer, and spike following the year-end holidays and Valentines Day.

UW scientists found that the levels of pure vanilla are higher during the winter holidays and lower during the summer. They hypothesized that people use pure vanilla in their home-baked holiday recipes, but companies that produce ice cream use the cheaper artificial vanilla, Neibauer said.

In addition, levels of veratraldehyde — a derivative of vanilla found in waffle cones — spiked prominently during the summer. Because waffle cones are often produced by companies using artificial vanilla, this spike further reinforces the link between ice cream consumption and artificial vanilla levels, Keil said.

#### **Sampling Locations**

Since the environmental spices project started, the UW research team has accumulated a total of 150 water samples from the area, with about 40 collected from Puget Sound, 30 collected from Clayoquot Sound, and 80 collected from the West Point Treatment Plant (Seattle). Samples are taken more frequently around the holidays.

Seattle is one of many cities located near Puget Sound, an estuary that receives water from more than 10,000 rivers and streams before draining into the Pacific Ocean, according to UW Fish Collection Web site. Clayoquot Sound is located on the outer coast of Vancouver Island and is considered a pristine location because it is removed from the affects of large human populations living nearby, Neibauer explained. At Clayoquot Sound scientists found lower concentrations of each spice tested, with only a notable amount of vanillin because it is a lignin and found in the woody parts of trees and plants.

The West Point Treatment Plant, located near downtown Seattle on the shores of Puget Sound, is designed to handle an average wet weather flow of 503,000 m<sup>3</sup>/d (133 mgd) and a peak combined flow of 1.6 million m<sup>3</sup>/d (440 mgd). The plant is part of the regional wastewater treatment systems for about 1.4 million people of 1088 km<sup>2</sup> (420 mi<sup>2</sup>) in the region. The scientists at UW have stopped taking samples at the West Point Treatment Plant, but they hope to expand their sampling with the help of local residents through the Sound Citizen Program.

#### SoundCitizen Program



UW's School of Oceanography has recently established a not-for-profit citizen-based water sampling program called SoundCitizen. The program allows all citizens to participate in monitoring their local waterways by sending collected information to the University's lab. The program also offers the option of sending a water sample to the lab to test for spices.



"People love it," Neibauer said. "Anyone can do this." The project will help broaden spatial and temporal coverage of Puget Sound in UW's environmental spices research. The program was launched in

SoundCitizen sampling kits are now available to Seattle citizens interested in helping the University of Washington (UW; Seattle) monitor local waterways. Photo courtesy of UW. Click for larger image.

October 2008 with a Nov. 22 Spice Kit Kickoff Event. So far, 190 kits have been distributed, and UW scientists are hoping to gather many water samples during the 2008 holiday season. For more information see <u>www.soundcitizen.org</u>.

#### Future of the Project

Neibauer explained that the research team is attempting to expand the number of spices it monitors and will be looking at additional cinnamon and vanilla compounds. The team has also done experiments to extract rosemary, sage, pepper, and garlic, but it still is working on getting a clear identifying compound for these spices, she added. In addition, the UW Aquatic Organic Geochemistry Lab is working to adapt its current methods to measure compounds such as hormone disrupters, drugs, pesticides, flavors, and fragrances, Neibauer said. For more information on the UW Environmental Spices project, see <a href="http://depts.washington.edu/aog/spices">http://depts.washington.edu/aog/spices</a>.

- Jennifer Fulcher, WEF Highlights

## Seattle's Sweet Secret

For the past 2 years, scientists at the University of Washington (Seattle) have measured the concentration of spices in local waterways. From the amount of spices found, the research team calculated how many cookies were consumed. If all of the spices in Puget Sound were attributed only to holiday cookies, this would mean that Seattle area residents consume 250,000 cookies during the year-end holidays, or at least two cookies per person per day. Based on other findings, researchers estimated that about 165,000 of these cookies are butter or chocolate chip cookies, and 85,000 are cinnamon-containing cookies such as snickerdoodles or gingerbread.



## **Critical Fresh Water Needs in the American Southwest**

'Running Dry' examines Southwest water resources, discusses desalination and aquifer recharge, and calls for a national water policy

Could the fast-growing Southwest run out of water? This is the question posed by James Thebaut, director of the recently released documentary, "The American Southwest: Are We Running Dry?" According to experts, a water inventory is needed to answer this question.

"We don't have a really good feel for how much water we actually have, and a bigger point that we don't understand is how much water is actually going back into the groundwater," said Mark Stone, ecological engineer, Desert Research Institute (Reno, Nev.).

Beyond a scientific-based, big-picture look at Southwest water resources, the film supports a national water policy and promotes technical innovation and resource-conservative development choices to resolve the looming crisis.

### Gone Faster than Mother Nature Can Replenish

The film begins with growth data — "by 2050 the U.S. population will increase to 438 million" — and the Southwest is pegged for the most rapid development.

According to the 2005 U.S. Census, population in the western United States is expected to grow 46% between 2000 and 2030. Nevada and Arizona top the list of projected high-growth states. Utah, Wyoming, and New Mexico follow, not far behind, on the list.



Water is a fundamental regional problem and it is already being used at a faster rate than it is being replenished, mostly by

Responsible use of water in homes and for recreation, such as the water used for the Palm Springs (Calif.) MOSTIV by golf course above, is one issue addressed in "Running Dry." Photo courtesy of The Chronicles Group. Click agriculture and for larger image.

agriculture and water-hungry urban centers. At the same time, underground aquifer systems are not being recharged.

For example, the Colorado River has dropped considerably over



the last decade "and rarely reaches the Sea of Cortez," according to Thebaut.

Striking camera work and poignant comments by senators and representatives, water utility professionals, and scientists describe the threats to the Colorado River, a main source of water for seven states, the Rio Grande, and California's Sacramento–San Joaquin River Delta System.

Potential fights over water is one reason the film, and those interviewed in it, are calling for federal policy.

#### When There is Little Water

Regional water shortages are most apparent in the Southwest's vast Native American reservations, which rely on underground aquifers from community wells. Each year there is less water to go around.

"If projects take too long and if there's not enough water resources not getting recharged, then it really has an impact on the things that we do," said Lena Fowler, vice chair, Navajo Water Rights Commission.

Complicating this problem is the Colorado River Compact, the allocation agreement signed by six states in 1922, which not only left out Native American communities, but also resulted in newer cities such as Las Vegas coping with far less than an equal share of water than other population-rich areas, such as Southern California.

#### Threats to Agriculture and Power

The film also describes how a collapse in the extensive Sacramento–San Joaquin River Delta System, a water transport system with thousands of miles of dirt levies, could threaten much of Southern California's water supply and the country's key agricultural center.

The intense drain on the Colorado River also compromises energy production. Lake Mead has receded to an extent that many fear the long-term viability of Hoover dam's power generation.

"We didn't anticipate this. We expected those reservoirs to be full; we expected to be able to use hydroelectric power generation as long as the dam stood there. It didn't occur to us that the reservoir would go dry and we wouldn't be able to generate electricity from that



the dam stood there. It didn't occur to us that The viability of Lake Mead's water supply, seen above, is in question as its water levels receed. Photo courtesy of The Chronicles Group. Click for larger image.



water. So ... this is one of the consequences of the changes in climate that we're seeing," said Gene Whitney, Office of Science & Technoloav Policy, Executive Office of the President.

#### **Reuse and Conservation Solutions**

"Running Dry" highlights communities that embrace water reuse. Closed-loop systems using stormwater and reusing wastewater can be controversial, but in the Southwest, these streams are water sources, and treated effluent is used again.

"We're a community that's 100% recycled so if we get water into our sewer system, we reuse it either directly or indirectly," said Pat Mulroy, general manager, Las Vegas Valley Water District and Southern Nevada Water Authority.

Recycled water is most often used for irrigation. "We prefer to call it showers-to-flowers," said Tim Brick, chairman, board of directors, Metropolitan Water District of Southern California. In addition, green measures, including onsite water harvesting, are becoming a way of life.

In 2003, the authority began paying customers about \$11/m<sup>2</sup> (\$1/ft<sup>2</sup>) for xeriscaping — replacing grass with sustainable landscaping — an effective water conservation strategy.

### **Desalination and Solar Energy**

Desalination, despite its energy-intensive nature and its difficult-to-dispose brine byproduct, is viewed by Thebaut and those interviewed in the film as a part of good regional planning.

If Southern California sourced seawater and released its 5.4 billion m<sup>3</sup> (4.4 million ac-ft) per year of Colorado River water, than there would be more for upper river communities.

To support a desalination system large enough for Southern California, renewable solar energy is a possible source. "There's a lot of land area in the high desert that's open and ready to put in solar panels. That power can be generated and wheeled through the high-voltage lines already in place for specific use at that desalination plant," said Floyd Wicks, president and chief executive officer, American States Water Co. (San Dimas, Calif.).

#### The Solution is Planning

The film's bottom line is that a national policy and planning is the lynchpin for avoiding disaster.

"I am counting on the goodness of the American people that once they understand the gravity of the crisis they will have a policy to plan with a function that can work," said Thebaut.

Designed for general audiences, the documentary airs on public television nationwide. For more information, see www.runningdry.org.



Andrea Fox, WEF Highlights

# WEF's Young Professionals Leave Their Mark in Chicago At WEFTEC.08

The Water Environment Federation (WEF; Alexandria, Va.) Students and Young Professionals Committee (SYPC) left Chicago better than they found it this year at WEFTEC. On Oct. 18, approximately 60 volunteers from WEF, consulting firms, universities, industry, and a local high school joined forces to build a rain garden at Pulaski Park for the first annual community outreach project, "Gettin' Out of the Gutter."

The rain garden will simultaneously keep stormwater out of the sewer system and promote stewardship for the water environment. It provides an example

homeowners can

implement in a single day, said Haley Falconer, SYPC **Community Service** Project sub-committee co-chair. The SYPC is looking forward to watching the project's development over time, she added.



of a simple project that Volunteers from WEF, consulting firms, universities, industry, and a local high school built a rain garden in Chicago at WEFTEC.08. Photo courtesy of Oscar Einzig Photography. Click for larger image.

This year's project included removing soil from an 18.5-m<sup>2</sup> (200-ft<sup>2</sup>) plot, about 0.3 m (1 ft) deep, and bringing in top soil, planting native plants, and mulching the area.

The SYPC collaborated with the Center for Neighborhood Technology (Chicago), the Chicago Park District, the Metropolitan Water Reclamation District of Greater Chicago, and the Illinois Water Environment Association (West Chicago) to plan and coordinate the project, recruit volunteers and sponsors, and provide construction labor. The Illinois Water Environment Association will maintain the rain garden.

The planning process has begun for the WEFTEC.09 outreach project in Orlando, Fla. For more information contact Haley Falconer at haley.r.watson@gmail.com or Rebecca McLarty at McLartyRG@cdm.com.



# **Top News**

# WEFTEC.08 Breaks Records

Record-setting numbers of 21,950 attendees and 1111 companies using a net of 26,941 m<sup>2</sup> (290,000 ft<sup>2</sup>) of exhibit space have designated WEFTEC.08 as the largest event in its 81-year history.

Onsite exhibit booth sales for WEFTEC.09 in Orlando, Oct. 12-14, 2009, surpassed initial booth sales for Chicago. Onsite exhibit booth sales are only available to the current year's exhibitors.

WEFTEC.09 Orlando exhibit booth reservation information and available booth space will be available online by mid-January 2009 at <u>www.weftec.org</u>.

For more information or to be added to the mailing list for the exhibit prospectus, contact <u>exposales@wef.org</u> or call (703) 684-2434.

## WEF Forms Nutrient Task Force

The Water Environment Federation (WEF; Alexandria, Va.) has formed a nutrient task force to assist the U.S. Environmental Protection Agency (EPA) in its response to a Nov. 27, 2007, petition from the Natural Resources Defense Council (New York) regarding revising secondary treatment regulations, specifically to address limits for nitrogen and phosphorus. The work group, chaired by WEF Vice President Jeanette Brown (Stamford [Conn.] Water Pollution Control Authority) and Nancy Wheatley (independent consultant; Siasconset, Mass.) is working on a background document that will provide technical and cost information and should prove a valuable resource to EPA and the water quality sector.

For more information on WEF's response, contact Kiri Kroner at <u>kkroner@wef.org</u> or (703) 684-7741. For background information on nutrient removal, see WEF's <u>Access Water Knowledge Nutrient Removal Resource</u> <u>Center</u>.

## WEF Presented With Green Leadership Award

The Water Environment Federation (WEF; Alexandria, Va.) recently has been given the 2008 Green Leadership Award from the trade publication *Bisnow on Business*, in partnership with the U.S. Green Building Council (Washington, D.C.), George Washington University (Washington, D.C.), and the Sustainable Business Network of Washington (D.C.). This first annual award recognized 25



organizations that have implemented green initiatives and are leading the way to sustainability in the Washington, D.C., metropolitan area.



WEF is now in the third phase of its Low Carb(on) Diet program, which is aimed at reducing the Federation's carbon footprint. The first phase focused on WEF's building and facilities, and the second phase engaged WEF staff and visitors in an educational outreach program. WEF cut its electricity consumption in half after making upgrades to its heating and cooling systems. It also is installing a new energy management system that will allow realtime, online controls of HVAC and lighting to allow for downtime, seasonal adjustments, and better control in individual areas.

WEF books, journals, magazines, newsletters, and other publications either are being produced less or produced digitally. Items still printed are produced on post-consumer, recycled-content paper. In addition, WEF recycles all paper, cardboard, glass, metals, and other materials. Employee trash bins have been replaced with recycling bins, and nonrecyclable trash bins are placed in centrally located areas. Other efforts include:

- Green Seal-certified cleaning products in use since 2005.
- Incentives for employees to use mass transit.
- Bicycle racks and showers for employees who commute by bicycle.
- Flexible work schedules to reduce commuting times.
- Minimum 30% post-consumer, recycled paper in all copiers and printers.
- Use of Energy Star-qualified copiers that are leased for easy upgrades.
- Recycled toner cartridges.
- Use of low-emissions paint and construction materials.

Other large-scale projects in the works include a green roof and green terrace. The green roof will extend the life of the roof to 40 years compared to 10 to 15 for a standard roof. The terrace will provide an outdoor area with tables and paths for employees to enjoy.



## Alexandria Sanitation Authority Celebrates NBP EMS Certification

The Alexandria (Va.) Sanitation Authority's (ASA) National Biosolids Partnership (NBP) environmental management system (EMS) certification celebration was held on Nov. 14 in Alexandria.

Representatives from the NBP, Water Environment Federation (Alexandria, Va.), National Association of Clean Water Agencies (Washington, D.C.), U.S. Environmental Protection Agency (Washington, D.C.), and the Commonwealth of Virginia attended the event. As part of the ceremony, the NBP certification plaque was presented to ASA General Manager Karen Pallansch and the EMS leadership team, led by George Floyd.



From left: EPA Office of Wastewater Management Director Jim Hanlon; NBP Chair Dick Lanyon; ASA General Manager Karen Pallansch; Alexandria, Va., Mayor William D. Euille; Virginia Department of Natural Resources Assistant Secretary Jeff Corbin; WEF Executive Director Bill Bertera; and NACWA Managing Director of Government and Public Affairs Adam Krantz. Click for larger image.

Alexandria's biosolids EMS was verified on April 29, 2008, by the audit firm NSF International (Ann Arbor, Mich.). Alexandria is one of 22 wastewater agencies in the United States to receive this distinction. Click <u>here</u> for more information on the ASA EMS. For more information on the ASA biosolids program, see <u>www.alexsan.com/info\_center.htm</u>.

## **WEF News**

# WEF Bulletins Moving to Electronic Format

Beginning in January 2009, Water Environment Federation (WEF; Alexandria, Va.) technical bulletins are moving to an electronic-only format. This change — prompted by member survey data indicating a preference for electronic bulletins — will apply to *Biosolids Technical Bulletin, Industrial Wastewater, Utility Executive, Water Environment Laboratory Solutions,* and *Water Environment Regulation Watch.* The print editions of these bulletins no longer will be available.



As each new issue is published, subscribers will receive an e-mail notification with a link to the publication Web site, where they will be able to print and download the issue in PDF format. Benefits of the new electronic format include more timely publication delivery, online access to archives, and the ability to keep subscription rates flat despite dramatically increasing paper, printing, and postage costs.

News

Subscribers will receive more detailed information about how to manage their subscription benefits. Subscribers should update their e-mail addresses to ensure WEF has proper information on file to send e-mails announcing new issues. Update your e-mail addresses <u>here</u>, or by contacting WEF Customer Service at <u>csc@wef.org</u>, (800) 666-0206 (within the United States and Canada), or (703) 684-2452.

## Posters Presented at WEFTEC.08 Raise the Bar of Excellence

More than 100 posters were presented at WEFTEC.08 in Chicago. The posters are an alternative presentation media associated with every topic covered on the technical program. They offer an opportunity for one-on-one interaction with experts on the latest water and wastewater technology.

The Poster Symposia Subcommittee is a part of the Water Environment Federation (WEF; Alexandria, Va.) Program Committee. Symposia Chair Baikun Li of the University of Connecticut (Storrs) and Vice Chair Ramesh Goel of the University of Utah (Salt Lake City) led a team of 24 judges to select two outstanding poster presentations in each of the six poster sessions. The criteria for selection were originality, status of the project, technical content, benefits and significance, and overall quality. The presenters who will receive a certificate of award are:

- T. Datta, S. Tahir, and R. Goel "Polyphosphate Accumulating Organisms and Nitrifying Population Ecology in an Activated Sludge Process Aimed to Achieve Nutrient Removal and Sludge Reduction Simultaneously."
- G.M. Jamesson, N.J. Bucurel, K.J. Linn, K. Crestani, and L. Laven "Exploring Potential Causes of Whole Effluent Toxicity in a Large POTW."
- Y. Sharma and B. Li "Optimizing Hydrogen Production from Organic Wastewater."
- S.M. Partington, W. Fernandes, N. McKeown, J.E. Welp, and G. Bollier — "Outfall Disinfection Innovation G.E. Booth (Lakeview) WWTP Mississauga (Toronto) Ontario, Canada."
- C. Wallis-Lage, T. Chan, F. Rogalla, and S. Tarallo "Sustainable Wastewater Treatment: Optimizing Options and Outlook of Opportunities."



- D.-U. Lee, S.-H. Woo, S. Svoronos, and B. Koopman "Diauxic Lag of Denitrifying Bacteria in a Continuous Flow Reactor under Alternating Oxic/Anoxic Conditions."
- T. Fred, M. Heinonen, L. Sundell, and S. Toivikko "Modeling Total Air Emissions at Large Municipal Wastewater Treatment Plant."
- S. Nuss, D. Persinger, T. Brunner, and J. Netzel "Performance of Instrumentation and Control Upgrades to Multiple Hearth Sludge Furnace, Anchorage, Alaska."
- S.C. Hardin, A.J. Pinto, N.G. Love, and A. Shaw "Impact of Contaminant Specific Corrective Action Strategies on Wastewater Treatment Plant Performance and Recovery."
- A. Menniti and E. Morgenroth "The Influence of Aeration Intensity on Predation and EPS Production in Membrane Bioreactors."
- S. Christian, S. Grant, D. Wilson, P. McCarthy, and D. Mills "Pilot-Scale Study of the Anaerobic Membrane Bioreactor Process for Treatment of a Salad Dressing Wastewater."
- M. Monserrate, R. Booker, and A. Quinones "Moving Beyond Chlorine in Puerto Rico: A Comprehensive Evaluation of Wastewater Disinfection Alternatives."

Several posters were presented by young professionals representing the Canham Scholarship, Stockholm Junior Water Prize, Student Paper Competitions, and other programs.

## Florida Team Wins WEFTEC.08 Design Competition

The University of Florida (Gainsville) team won the 2008 Water Environment Federation's (WEF's; Alexandria, Va.) Design Competition during WEFTEC.08. The team's project, "Design Alternatives for the City of Tallahassee Reclaimed Water Project" was selected from nine WEF Student Chapter design teams from across North America.

In its seventh year, the competition is a program of the WEF Students and Young Professionals Committee intended to promote "real world" design experience for students interested in pursuing an education and/or career in water/wastewater engineering and sciences. The University of Florida design team has won first place in three of the seven WEFTEC competitions.

For the WEFTEC competition, each team presented their projects to an audience of 130 and a panel of eight judges. The winning team, Felipe Behrens, Anthony Centurione, Matthew Diamond, Brendan McGrath, Laila Salter, and Molly Scheiner, with their faculty advisor, Associate Professor John Sansalone, were presented certificates and a \$3000 award by WEF Past President Al Goodman. For more information, click <u>here</u>.



## WEF Technical Practice Committee Seeks Reviewers

The Water Environment Federation's (WEF; Alexandria, Va.) Technical Practice Committee is looking for reviewers in the development of a new Manual of Practice on Information Technology in water and wastewater utilities.

Reviewers will be responsible for providing written comments at the outline and/or draft stages. If you are interested in participating as a reviewer; able to work closely with other WEF volunteers, the task force chair, and WEF staff; and able to dedicate expertise and time to ensure the development of a quality manual, contact Britt Sheinbaum at <u>bsheinbaum@wef.org</u>.

## Get to Know "Water Heroes" on WEF's Web Site

The Water Environment Federation (WEF; Alexandria, Va.) has launched the "Water Hero" section on its Web site. The first featured Water Hero was Dale Richwine, vice president at MWH (Broomfield, Colo.) in Portland, Ore. Richwine initiated the "Silent Heroes Program" at the Pacific Northwest Clean Water Association (Caldwell, Idaho), which earned the organization a WEF Member Association Achievement Award, presented in Chicago at WEFTEC.08 last month.

The WEF home page will feature five to six Water Heroes a month with photos and brief bios. These heroes are members who work every day to clean the world's water. Recognizing these unsung heroes of clean water will help tell the story of the role WEF members play in protecting public health and the environment. To see the Water Heroes section, click <u>here</u>. To learn more about nominating a Water Hero, contact <u>lkelly@wef.org</u>.

## Attention WaterBloggers, Join the Conversation on WEF's Web Site

The Water Environment Federation's (WEF's; Alexandria, Va.) revamped Web site also includes a new "WaterBlog" section. WEF members and other water quality professionals now have the opportunity to blog with their peers. The WaterBlog is hosted by water quality experts and features discussions about the latest ideas, trends, and news in the profession.

WEF President Rebecca West has been posting her thoughts about infrastructure investment on the blog, and WEF Water Reuse Committee Chair Don Vandertulip of CDM recently has blogged about new developments in purple pipes. Many other respected experts with important topics are in the pipeline for the 2009 WaterBlog. Click <u>here</u> to find out what's new, and start waterblogging today.



### In Memoriam: Geoffrey T. G. Scott, WEF President 1979–1980

Geoffrey T.G. Scott, president of the Water Environment Federation (WEF; Alexandria, Va.) 1979–1980, died Nov. 6. He was 86 years old and had a successful career as a consulting engineer.

"He was one of those larger-than-life people and very charming," said WEF Chief Technical Officer Eileen O'Neill. Scott helped found the Canadian British Engineering Consultants, helped start several international Select Societies of Sanitary Sludge Shovelers, and was a member of the Professional Engineers of Ontario.

### In Memoriam: Timothy Neketin

H. Tim Neketin, former lab supervisor for the Portland Bureau of Environmental Services (Ore.), died Nov. 1 at age 69.

After graduating from Portland State University, Neketin worked as a chemist for the Portland Bureau of Environmental Services for 30 years. He was the editor of the Water Environment Federation (WEF; Alexandria, Va.) publication *Simplified Laboratory Procedures for Wastewater Examination*. He won the Pacific Northwest Clean Water Association (PNCWA; Caldwell, Idaho) Individual Distinguished Achievement Award in 1995, the WEF Arthur Sydney Bedell Award in 1993, and the PNCWA Select Society of Sanitary Sludge Shovelers Award in 1987. In addition he published a series of articles on proper laboratory practices in WEF's now out-of-print publication, *Benchsheet*.

### **More News**

# Free Resources on Water Infrastructure Security

In the past 30 years there have been more than 200 threats and attacks against water and wastewater utilities, according to the *Water Infrastructure Security Enhancements: Guidelines for Water and Wastewater Utilities* educational DVD. This DVD is a part of the Water Infrastructure Security Enhancements (WISE) program designed to address the physical infrastructure security needs for water supply, wastewater, and stormwater, and online contaminant monitoring systems.

The WISE program, developed by the American Society of Civil Engineers (ASCE; Reston, Va.), the American Water Works Association (AWWA; Denver) and the Water Environment Federation (WEF; Alexandria, Va.), with a grant from



the U.S. Environmental Protection Agency (EPA) has provided the following educational materials through four phases:

### Phase I – Guidance Documents

- Security Guidance for Wastewater/Stormwater Utilities
- Security Guidance for Water Utilities
- Guidelines for Designing an Online Contaminant Monitoring System

### Phase II – Training Materials

• Modular training programs are available on CD-ROM for use in educating those responsible for providing physical infrastructure security for water supply and wastewater/stormwater systems.

### Phase III – Voluntary Draft Standard Guidelines for Trial Use

Voluntary guidelines provide utilities with practical information to help implement improved security measures in new and existing facilities of all sizes. The documents also address risks from construction and design perspectives and describe physical security approaches for detecting or delaying malevolent parties. To download a copy, see:

- Guidelines for the Physical Security of Water Utilities, or
- Guidelines for the Physical Security of Wastewater/Stormwater Utilities.

#### Phase IV – WISE Overview and Awareness

- WEF has hosted a series of webcasts.
- AWWA has developed a DVD-CD set including a video for utility managers and operators on the principles of water security, a video for public officials on the importance of security, and a data CD including all of the Phase I and III documents as well as the presentations and recordings of the 2007 webcasts.
- ASCE has conducted five full-day training workshops.

All of these educational materials are free. For more information contact <u>wise@asce.org</u> and include a mailing address and affiliation.

## **U.S. EPA Seeks Comments on Proposal**

The U.S. Environmental Protection Agency (EPA) is seeking comments on its proposed guidelines to control the discharge of pollutants from construction sites.

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The proposal would require all construction sites to implement erosion and sediment control best management practices to reduce pollutants in stormwater discharges, according to an EPA press release. To read the proposal, see <a href="http://www.epa.gov/ost/guide/construction">www.epa.gov/ost/guide/construction</a>. Comments must be received by Feb. 26, 2009.

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Submit comments, identified by Docket ID Number EPA-HQ-OW-2008-0465, through one of the following methods:

- E-mail: <u>OW-Docket@epa.gov</u>.
- Mail: USEPA Docket Center, Environmental Protection Agency, Docket Number EPAHQ- OW-2008-0465, Mailcode 2822T, 1200 Pennsylvania Ave., NW, Washington, DC 20460.
- Hand delivery: USEPA Docket Center, Public Reading Room, 1301 Constitution Ave., NW, Room 3334, EPA West Building, Washington, DC 20004.

For more information, contact Enesta Jones at jones.enesta@epa.gov.

## WEF Offers International Exhibiting Opportunities

For those with business development plans that include the Middle East, Europe, and Asia, the Water Environment Federation (WEF; Alexandria, Va.) offers the opportunity to exhibit with WEF International Pavilions at the Water, Energy Technology, and Environment Exhibition (WETEX); Wasser Berlin; and the China Water Show (formerly WSDWTF). This opportunity allows businesses to exhibit products and services to thousands of new customers under the WEF banner in a prime location.

Click here to view the WEF International Pavilion Program Brochure.

#### WEF Pavilion at WETEX

WETEX will take place March 10–12, 2009, at the Dubai International Convention & Exhibition Centre in Dubai, United Arab Emirates. This annual event will provide access to Emitati and other growing Arab Gulf and Middle Eastern markets. The 2008 WETEX show attracted more than 10,000 trade visitors and 275 exhibiting companies from 28 countries.

#### WEF Pavilion at WASSER Berlin

Wasser Berlin will take place March 30 to April 3, 2009, at the Messe Berlin in Berlin, Germany. This show is hosted every 3 years is a popular event for access to European markets. The 2006 Wasser Berlin show attracted more than 41,000 trade visitors and 546 exhibiting companies from 30 countries.

#### WEF Pavilion at the China Water Show (formerly WSDWTF):

The China Water Show will take place April 28-30, 2009, at the Intex-Shanghai

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and Shanghai Mart in Shanghai. This annual event will provide access to Chinese and other growing Asian markets. The 2008 WSDWTF show attracted more than 28,000 trade visitors and 750 exhibiting companies from 24 countries.

### WEF International Pavilion benefits include:

- Prominent WEF Pavilion location in exhibit hall
- WEF Pavilion included on the VIP tours
- Booth sizes from 9 m<sup>2</sup> (smaller than most show minimums)
- Shell scheme build-out
- Furnishings (to include entry desk, table and chairs, wastebasket, literature stand, lighting)
- Carpeting
- Cleaning services included
- Translation services (as needed)
- WEF-sponsored lounge and meeting area with complimentary beverages
- WEF sponsored on-site reception
- Assistance with connecting to the local U.S. Department of Commerce representative
- Pre- and post-show promotion in WEF's publications including World Water & Environmental Engineering and WE&T
- Pavilion staffed by WEF employees
- Aid in obtaining official invitation letters for visas (as needed)
- Assistance with hotel arrangements close to exhibit hall

For more information, view the <u>brochure</u> or contact Laila Sukkariyyah at <u>lsukkariyyah@wef.org</u>, (703) 684-2458 or (703) 650-8516 (mobile).

The Water Environment Federation would like to thank the following exhibiting companies for their support of the 2008 WEF International Pavilion Program: WSDWTF in Shanghai, and IFAT in Munich, Germany: ADS LLC, Aqua-Aerobics Systems Inc., Aries Industries/Vac-Con, Bio-Microbics Inc., Groth Corp., Hayward Flow Control Systems, Hydro Instruments, Kemira Chemicals (Shanghai) Co. Ltd., LobeStar Pump, Mody Pumps Inc., NEFCO Inc., Neuros Co. Ltd., Penn Valley Pump Co. Inc., Pulsafeeder Inc., Robbins and Myers Fluid Management Group, Ross Valve Mfg Co. Inc., Selwood Pumps, and World Water Works Inc.