Front Page

December 2007, Vol. 44, No. 10

Top Story

WEFTEC.07: It's a Wrap!

With WEFTEC®.07 in our rearview mirror, it's time to reflect, and time to look ahead to WEFTEC.08.

Click here to view WEFTEC.07 photos

Photos by Oscar Einzig.

This year's WEFTEC, held Oct. 13–17 in San Diego, set a number of records and remained the largest water quality event in North America. It was the largest conference in the event's 80-year history, with 19,929 attendees and 1017 companies occupying 268,405 ft² of floor space. The previous record for attendees was 18,704 at WEFTEC.02 in Chicago.

Read more WEFTEC.07 wrap-up, the WEFTEC.07 Poster Session, and check out the new WEFTEC.07 Photo Gallery.

From the President: A New Year Begins at WEF

Adam Zabinski

One of the great pleasures of serving as president of the Water Environment Federation (WEF; Alexandria, Va.) is the opportunity to talk to WEF members. *WEF Highlights* is the vehicle in which the WEF leadership can put decision-making into context, outline our aspirations for ourselves and WEF, and ask you for assistance. During the course of the year, I hope to talk about the role of Member Associations (MAs), committees, and where WEF fits in the world of water and the world as a whole. Read more

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News & Events

- Farm Bill Update: WEF Supports Regional Water Enhancement Program
- WEF Announces 2007–08 Board of Trustees, Committee Chairs
- Record Number of Posters Presented at WEFTEC.07
- Literature Review Authors Sought for WER Literature Review
- 'Water Is Life' Offers New Public Awareness Survey
- Reviewers Sought for WEF Manuals of Practice
- Funding Available for Environmental Research, Development

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Features
December 2007, Vol. 44, No. 10

Features

WEFTEC.07: It's A Wrap!
A Look Back to San Diego, Looking Forward to Chicago, New Orleans

With WEFTEC.07 in our rearview mirror, it's time to reflect on what was and look ahead to what's to come at WEFTEC.08.

This year's WEFTEC, held Oct. 13–17 in San Diego, set a number of records and remained the largest water quality event in North America. This year's conference featured 119 technical sessions focusing on various aspects of the water sector, such as climate change, workforce planning and succession, and microconstituents.

WEFTEC.07 also had the most attendees in the conference's 80-year history, with 19,929 attendees and 1017 companies occupying 268,405 ft² of floor space. The previous record for attendees was 18,704 at WEFTEC.02 in Chicago.

Coming up in 2008, WEFTEC heads back to the Windy City, then takes a trip south to Orlando, Fla. in 2009. The following year, WEFTEC.10 hits the Big Easy in New Orleans, where the convention center has regained its momentum and is hosting large-scale meetings and events.

New Orleans' Ernest N. Morial Convention Center — which suffered damage during Hurricane Katrina — has been operating at full capacity for more than a year. With approximately $60 million in restoration work and several million more in renovation upgrades, the majority of the Center reopened in June 2006, with 741,257 ft² of exhibit space, 99 meeting rooms, a 4000-seat auditorium, and a 36,000 ft² ballroom. The remaining areas of the Center — four halls, 41 meeting rooms, and a 32,000-plus ft² ballroom, opened in November 2006.

"We are more than pleased to report that this fall, New Orleans is consistently hosting successful and important meetings in all sectors of domestic and international business," said Stephen Perry, president and CEO of the New Orleans Convention and Visitors Bureau. "This trend continues into the new year, with many other special events and meetings in store."

WEFTEC.07: Sustainability Moves to the Forefront
The Opening General Session officially kicked off WEFTEC.07 on Sunday, Oct. 14. Keynote speaker Perry L. McCarty, the 2007 Stockholm Water Prize Laureate, spoke about sustainable solutions to both new and long-standing challenges the water and wastewater sectors face.

"Each of us must do our part if the overall problem is to be solved," McCarty said. "Water is such a precious resource, something we often forget unless we are forced to do without."

The Stockholm International Water Institute (Sweden) honored McCarty with the 2007 Stockholm Water Prize for his pioneering work in developing the scientific approach for the design and operation of water and wastewater systems and establishing the role of fundamental microbiology and chemistry in the design of bioreactors.

In his keynote speech, McCarty discussed some of the innovations in wastewater treatment that have emerged in the last 50 years, and suggested how past advances might help solve current and future problems.

McCarty highlighted four major problem areas in wastewater treatment: pathogens, dissolved oxygen deficiency, industrial waste, and eutrification.

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"We have addressed the first quite well with drinking water, but we are just beginning to get serious about addressing the latter three," he said.

McCarty cited problems that water and wastewater professionals have faced in the past, such as the burning Cuyahoga River in Ohio, U.S. dependence on oil, treatment plants turning into bubble baths, and rivers running dry.

"We were in need of solutions," he said. "Fortunately, research to address this need was crisply instigated and solutions came about rapidly."

McCarty emphasized the energy aspect of wastewater treatment and how it affects climate change. Waste handling and treatment represents 4% of the world's greenhouse gas emissions, according to McCarty. Because chemicals produced during the handling and treatment of waste — such as methane and nitrous oxide — contribute to climate change, water professionals are directly associated with the cause of climate change and the need for sustainable solutions, he said.

McCarty also believes the wastewater sector is one of the easiest and most cost-effective to control in terms of greenhouse gas emissions. While methane is a greenhouse gas, it also is a biofuel that can be used for energy.

"Its collection and use as a fuel can offset the use of fossil fuels," McCarty said, referring to methane.

Later in the Opening General Session, WEF President Mohamed Dahab stressed the importance of sustainability in the face of climate change and the world's growing population. He said water scarcity is the next world water crisis, and while finding solutions will be difficult, human imagination, persistence, and ingenuity can solve these problems.

"We must be serious about sustaining our environmental resources, and we must learn to live as responsible members of the human family," Dahab said.

To read more about the Opening General Session and about WEFTEC.07, see www.wef.org/magazine or the December issue of *WE&T*.

***— Michael Bonsiewich**, WEF Highlights*

From the President: A New Year Begins at WEF

One of the great pleasures of serving as president of the Water Environment Federation (WEF; Alexandria, Va.) is the opportunity to talk to WEF members. *WEF Highlights* is the vehicle in which WEF leadership can put decision-making into context, outline our aspirations for ourselves and WEF, and ask you for assistance. During the course of the year, I hope to talk about the role of Member Associations (MAs), committees, and where WEF fits in the world of water and the world as a whole. I will share facts about WEF that you may not know in an effort to broaden knowledge about WEF. For example, did you know WEF's membership is 33,000 and growing?

In return, I ask for your feedback. One of the greatest challenges facing us within the Board of Trustees is the simple process of decision-making. It is relatively easy to develop data — our staff and committees are outstanding in this regard — but aligning new decisions with WEF's vision and mission is what drives everything we do. Our vision is simply to be a leader in protecting and enhancing the global water environment. Input from our members is invaluable in setting the framework. Please contact me directly at azabinski@wef.org, or send comments to the *Highlights* editor. I will get them and respond, either individually or in a future *Highlights* column.

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Features
December 2007, Vol. 44, No. 10

As I meet with MAs, I try to give context about the importance of the things we do. It is possible to drive a bus and care nothing about the transportation industry, but it is impossible to be a water professional and care nothing about water. For us our profession is more than a job — it is a vocation. That is reflected in the interest we share in all aspects and impacts of water around the world. We wonder how we will maintain our aging infrastructure, what the true impacts of microconstituents released to the environment are, and how global climate change will affect future generations.

As water professionals, we have been at the forefront of one of the longest running wars in the history of humanity: the fight against waterborne disease and the quest to improve quality of life. Last year, the *British Journal of Medicine* cited the advances in sanitation as the single greatest factor in extending human life in the last 150 years. We have a lot to of which to be proud, especially here in North America. In fact, we have done such a good job that the work we do is rarely acknowledged. With the exception of drought or pipe breakage, the public rarely thinks about us at all. The public expects to turn on a spigot and get safe water, to flush a toilet, and to be able to enjoy a safe environment, and they don't usually have any idea how this is accomplished.

The Future of WEF

Most of us came into our profession and joined WEF to make a difference. For previous generations there were ample opportunities to do things that offer dramatic improvement here at home. Not so for our younger members.

Our young WEF members have a great passion to make a difference throughout the world. Domestically, water resource availability and climate change are strong and important interests. The plight of the rest of the world, however, is a larger story. Young people's humanitarian compassion is drawn to the fact that 20% of the world's population (1.2 billion people) doesn't have access to adequate water, and twice that number doesn't have adequate sanitation. The challenge for WEF is to integrate this desire to do good in the world while continuing to do good at home, and coupling that with limited resources. After all, the wealth of nations has not eliminated these problems — yet.

How will we handle all the challenges that face us? Frankly, I neither know the answers nor see the paths clearly. What I do have is faith that we will come up with the best way possible to use WEF's resources to protect the water resources of our planet. That faith is grounded in what I see as the unique strength of WEF. We are an organization of individuals coming together from many backgrounds and working together in many ways to find and implement solutions for the water environment.

While we have a community of interest, we are not a trade organization nor speak for any special interest. Our stock in trade is knowledge, its development and dissemination, and we are recognized as a center of excellence. Why? Because we believe decisions should be grounded in real science. This gives us credibility. How do we accomplish this? We find ways to work together with others to achieve a beneficial goal. We can be members of WEF committees and communities of practice, or MAs and their associated activities. There is something for all of us, ranging from science and its application, to training and operation assistance, to advocacy for the environment.

An individual can make a difference, and WEF affords many avenues for us to do so. My path is only one of many. It is up to you to find your opportunities, and I will be glad to assist. In future columns I will highlight some ways, but please don't wait that long. Every day lost is just that, lost.

***— Adam Zabinski**, 2007–2008 WEF President*

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News & Events
December 2007, Vol. 44, No. 10

News & Events

Farm Bill Update: WEF Supports Regional Water Enhancement Program

The U.S. House of Representatives passed the Regional Water Enhancement Program (RWEP) as part of the 2007 farm bill reauthorization, and the U.S. Senate currently is debating the bill. RWEP would enable agricultural producers and owners of forest lands to work cooperatively with partners, such as local water and wastewater agencies, to achieve environmental gains on a local watershed basis.

For several months the Water Environment Federation (WEF; Alexandria, Va.) has supported the inclusion of RWEP as part of the farm bill's overall conservation title, believing that it would substantially strengthen the U.S. Department of Agriculture's (USDA) conservation programs. WEF has been actively working with other water organizations to support passage of RWEP.

As stated in the program's proposed legislative language, "The goal of the program is to improve water quality or ground and surface water quantity through coordinated program activities on agricultural lands."

Under RWEP, eligible partners — such as agricultural producers, state or local government agencies, and municipal water and wastewater agencies — may create cooperative projects aimed at meeting defined water quality and quantity goals within their watershed. USDA will review partnership proposals and competitively award multi-year grants to enact the plans. The House's proposed package could provide as much as $300 million over 5 years to fund the grants.

Last year, the WEF Board of Trustees approved WEF's position statement on agricultural programs in anticipation of Congress' reauthorization efforts of the farm bill. The reauthorization of the farm bill provides an important opportunity for continued progress toward improving the quality of our surface and groundwater resources.

WEF's position statement can be found on the Government Affairs page on WEF's Web site.

***— Martha Ravenhill**, WEF Highlights*

Water Environment Federation Announces 2007–08 Board of Trustees, Committee Chairs

The Water Environment Federation (WEF; Alexandria, Va.) recently confirmed its 2007–2008 Board of Trustees at WEFTEC®.07 in San Diego.

The 2007–2008 WEF officers were confirmed during a ceremony on Oct. 16 where WEF President Mohamed Dahab passed the ceremonial gavel of leadership to incoming President Adam Zabinski of Newberg, Ore. Following the presentation, Rebecca West, director of Technical Services for the Spartanburg Sanitary Sewer District in Spartanburg, S.C., was named president-elect.

Paul Freedman, founder and president of Limno-Tech in Ann Arbor, Mich., was elected as vice president. Charles Weir, general manager of East Bay Dischargers in San Francisco, will begin the second year of a 3-year term as treasurer. WEF Executive Director Bill Bertera serves an indefinite term as secretary.

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The trustees, confirmed by WEF's House of Delegates, include: Jeanette Brown, executive director for the Stamford Water Pollution Control Authority (Stamford, Conn.); Rick Corbett, vice president for Associated Engineering, BC Ltd. (British Columbia, Canada); Judy Jones, project engineer for Cobb County Water System (Marietta, Ga.); Liliana Maldanado, senior vice president/Northeast regional manager for CH2M Hill (Englewood, Colo.); Ron Moeller, operations specialist for Kennedy/Jenks (San Francisco); Daniel Nolasco, president of Nolasco & Associates Inc. (Buenos Aires, Argentina); Leslie Samel, project manager and principal for CDM (Cambridge, Mass.); Cordell Samuels, superintendent for Duffin Creek Water Pollution Control Plant (Ontario, Canada); Christopher Schmit, professor in the department of Civil and Environmental Engineering at South Dakota State University (Brookings); Tracy Stigers, vice president of Brown & Caldwell (Walnut Creek, Calif.); Bjorn von Euler, director of corporate communications for ITT Corp.'s (White Plains, N.Y.) Fluid Technology and Motion & Flow Control groups; and Jay Witherspoon, vice president and technology director of wastewater treatment services at CH2M Hill.

Complete biographies are posted on WEF's Web site in the About_WEF section. Those interested in obtaining print-quality electronic photos should contact Lori Harrison at lharrison@wef.org.

The WEF Committees welcomed new leadership as well. Following is a list of new chairs and vice chairs.

- Air Quality and Odor Control Committee: chair, Ray Porter (CH2M Hill); vice chair, Richard Pope (Malcolm Pirnie Inc.; White Plains, N.Y.).
- Conference Local Arrangements Committee: co-chairs, Brian Perkovich (Metropolitan Water Reclamation District of Greater Chicago) and Scott Trotter (Scott Trotter Trotter & Associates; Charles, Ill.).
- Environmental Management Systems Committee: chair, Tom Pedersen (CDM); vice chairs, Michele Farmer (Orange County Sanitation District; Calif.), Jim Horne (U.S. Environmental Protection Agency [EPA]), and Andy Kricun (Camden County Municipal Utilities Authority; N.J.).
- Municipal Wastewater Treatment Design Committee: chair, Julian Sandino (CH2M Hill); vice chair, Sam Jeyanayagam (Malcolm Pirnie Inc.).
- Operations Challenge Committee: chair, Jeffrey Pratt (Alexandria Sanitation Authority; Va.); vice chair, Cordell Samuels (Regional Municipality of Durham; Pickering, Ontario).
- Nominating Committee: chair, Larry Jaworski (Black & Veatch; Kansas City, Mo.); vice chair, Lynn Orphan (Clean Water Coalition; Henderson, Nev.).
- Residuals and Biosolids Committee: chair, Peter Brady (Alpine Technology Inc.; Austin, Texas); vice chair, Todd Williams (CH2M Hill).
- Water Environment Research Biological and Environmental Research Committee: chair, Michael Stenstrom (University of California, Los Angeles); co-vice chairs, Spyros Pavlostathis (Georgia Institute of Technology; Atlanta) and Rao Surampalli (EPA).
- Water Reuse Committee: chair, Don Vandertulip (Kimley-Horn; San Antonio); vice chair, Craig Riley (Department of Health; Spokane, Wash.).
- Watershed Management Committee: chair, Tad Slawecki (Limno-Tech Inc.); vice chair, Sri Rangaraja (Hydroqual Inc.; Mahwah, N.J.).

Record Number of Posters Presented at WEFTEC.07

A record 160 posters were presented at WEFTEC.07 in San Diego. The posters are an alternative presentation media to technical sessions and cover every topic discussed at WEFTEC.

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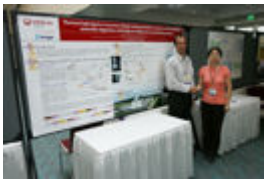
News & Events

December 2007, Vol. 44, No. 10



Left: Program Committee Poster Symposia Vice Chair Baikun Li and first-place winner Julien Chauzy. Right: Poster Symposia Chair Eakalak Khan and Khyati Jain. Click on each picture for a larger image.

In addition to coordinating the poster presentations, Program Committee Poster Symposia Chair Eakalak Khan and Vice Chair Baikun Li led a team of 26 judges to select two outstanding poster presentations in each of the six poster sessions. Each of these presenters will receive a certificate of award.

The winners are:

- "Upflow Anaerobic Filter with Dual Media – A Novel Concept," K. Jain, I. Wei, A. Panchal, N. Varandani.
- "Security Aspects of the Free Chlorine Versus Monochloramine Debate for Disinfection By-Product Control," D. Kroll, K. King.
- "Modeling Fixed Film Processes: Practical Considerations and Current Limitations From a Consulting Viewpoint," H.M. Phillips, A. Shaw, B. Sabherwal, M. Harward, T. Lauro.
- "How to Minimize Solids for Disposal While Meeting Stringent Effluent Limits: Industrial Park Case Study," J.A. Meidl, K.L. Chou, H. Juang.
- "Realizing the Full Potential of Existing Secondary Clarifiers to Increase Sustained Peak Wet Weather Capacity," R. Merlo, A.R. Appleton, L. Sawyer, M. Macaulay.
- "Natural Treatment System Alternatives for Effluent Thermal (Temperature) Management in Western Oregon," H.M. Emond, M.F. Madison, F.W. Sinclair, C.L. Stultz.
- "Thermal Hydrolysis to Increase Sludge Biodegradability or how To Turn Mesophilic Anaerobic Digestion of Biological Sludge Into an Attractive Process," J. Chauzy, D. Cretenot, A. Bausseron, X. Gokelaere.
- "Using Bench-Scale Techniques to Cost Effectively Assess Treatment Options for an Advanced Water Purification Facility," R. K. Chakraborti, U.G. Erdal, J.C. Lozier, M.L. Vorissis, K. Ortega, T. Maloney.
- "Influence of Permeation Relaxation on Particle Dispersion in Wastewater Membrane Bioreactor Processes," J.P. Nywening, M. MacPhail, H. Zhou, H. Behmann.
- "Performance of a Large-Scale Biotrickling Filter and Activated Carbon Odor Scrubber System at the Joint Water Pollution Control Plant," Lee, R. Morton, C.-C. Tang, R. Horvath.
- "Accelerated Ageing Procedures for Assessing Decline in Fine-Pore Diffusers Performance," A. Kaliman, M.K. Stenstrom, S.-Y. Leu, D. Rosso.
- "Comparison of Methanogenic Communities in an Anaerobic Digester and an Acidic Bog: Opportunities for Extending Low pH and Temperature Stability of Digesters?" L.M. Steinberg, J.M. Regan.

To participate in the WEFTEC®.08 Poster Symposia, submit abstracts online at www.weftec.org/Education/CallforAbstracts/. **The deadline for submissions is Dec. 3, 2007.** For additional information, contact Rhoda Miller at rmiller@wef.org.

Authors Sought for WER Literature Review

Authors are currently being sought to prepare a review of the literature for the following sections in the *Water Environment Research* Annual Literature Review:

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News & Events
December 2007, Vol. 44, No. 10

Biological Fixed-Film Systems;
Biosolids and Sludge Management;
Effects of Pollution on Freshwater Aquatic Organisms;
Food-Processing Wastes;
Lake and Reservoir Management;
Minerals and Mine Drainage;
Monitoring, Sampling, and Automated Analysis;
Power Production Waste;
Radioactive Waste;
Storage, Disposal, Remediation, and Closure;
Thermal Effects; and
Water Reclamation and Reuse.

Reviews of literature published in 2007 on the above subjects are due in spring 2008. The typical term of service on the committee is 5 years. Interested individuals should indicate in which section(s) they are interested and e-mail a brief resume to Lorna Ernst at lernst@wef.org.

'Water Is Life' Offers New Public Awareness Survey

The Water Is Life, and Infrastructure Makes It Happen™ program has developed a new public awareness survey to help utilities gauge their publics' willingness to pay for infrastructure investment.

The tool will help water and wastewater utilities measure customers' perceptions of their services and value. Designed so that it can be implemented by e-mail, direct mail, or phone, the survey creates a baseline for evaluating the effectiveness of infrastructure education efforts. The implementation guide enables utilities of any size to customize the tool for its size and needs and easily track their progress. The guide also gives advice on how to convey the results to advisory boards or commissioners.

The survey instrument is one of many communication tools such as ads, bill stuffers, and fact sheets available through the Water Is Life, and Infrastructure Makes It Happen program. Visit www.WaterIsLife.net or contact Lorraine Loken at (703) 684-2498 or lloken@wef.org.

Reviewers Sought for WEF Manuals of Practice

The Water Environment Federation's (WEF; Alexandria, Va.) Technical Practice Committee is looking for individuals willing to serve as reviewers in the revision of *Design of Municipal Wastewater Treatment Plants* (MOP 8) and *Prevention and Control of Sewer System Overflows* (MOP FD-17).

Reviewers will be responsible for providing written comments at the outline and/or draft stages according to the respective development schedules.

If you are interested in participating as a reviewer and will be able to work closely with other WEF volunteers, the task force chair, and WEF staff and dedicate your expertise and time to ensuring that a quality manual is developed according to the publication development schedule, please contact Britt Sheinbaum, at bsheinbaum@wef.org.

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News & Events
December 2007, Vol. 44, No. 10

Funding Available for Environmental Research, Development

The U.S. Department of Defense (DOD), through the Strategic Environmental Research and Development Program (SERDP), is seeking to fund environmental research and development efforts. The funding would help to identify, develop, and transition the underlying science and environmental technologies that support the long-term sustainability of DOD's training and testing ranges, as well as significantly reduce current and future environmental liabilities. Proposals responding to focused statements of need, which pertain to the water environment industry include:

- Environmental Restoration — innovative technologies for the detection, characterization, containment, and remediation of a wide range of contaminants in soil, sediments, and water; and
- Sustainable Infrastructure — natural resources (e.g., ecosystem-based management; threatened, endangered, and at-risk species; land management and watershed protection; and maritime sustainability), facilities (e.g., installation/regional sustainability, energy, noise, air and water quality, and facility waste), and cultural resources.

Proposals responding to statements of need for fiscal year (FY) 2009 will be selected through a competitive process. The Core Solicitation provides funding in varying amounts for multi-year projects. For the Core Solicitation, pre-proposals from the non-federal sector are due by Jan. 8, 2008. Proposals from the federal sector are due by March 6, 2008. The Statements of Need and detailed instructions for federal and private sector proposers are available on the SERDP Web site at www.serdp.org/funding.

New This Year
Through the U.S. Environmental Protection Agency Technology Innovation Program, SERDP Executive Director Bradley Smith will conduct an online seminar SERDP Funding Opportunities on Dec. 14, 2007, 1:00–2:30 p.m. (EST). This "how to play" briefing will offer essential information for those who are interested in new funding opportunities within SERDP. During the online seminar, participants may ask general questions about the funding process, submitting proposals, and the current FY 2009 SERDP solicitation.

To learn more about this online seminar or to register, see www.clu-in.org/conf/tio/serdpfunding/.

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