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WEF HIGHLIGHTS

April 2004
Vol. 41 No. 3

News for Members of the Water Environment Federation

Communication Key at Biosolids Conference

Successful biosolids management projects depend on public involvement and acceptance, said **Nancy Girard**, director and vice president of the New Hampshire Advocacy Center (Concord) of the Conservation Law Foundation. Girard was the keynote address speaker at the 18th Annual Residuals and Biosolids Management Conference, which was held Feb. 22–25 in Salt Lake City. More than 730 people attended the conference, which was co-sponsored by WEF and the Water Environment Association of Utah (WEAU; Salt Lake City).

The public is interested in many of the same topics that biosolids professionals are interested in, Girard noted, so decision makers and utilities are best served by including the public in decision-making processes. Although the effort of making such processes transparent and easily accessible may mean more work, she said, it pays off in the long run.

For example, she described how a power-generating facility allayed public concerns by paying for an independent third-party expert to review and comment on the proposed plans. The expert was chosen by residents from a list the facility had compiled.

Environmental management systems (EMSs) also allow for public-friendly transparency, Girard said, noting that since 2000 she has been working on an EMS-related advisory committee for the National Biosolids Partnership (NBP; Alexandria, Va.). The NBP's goal, she said, "was to provide an environmental performance beyond the required regulations, developing public acceptance of environmentally sound biosolids practices, minimizing disturbances to project neighbors, and maximizing product value to the customer." Because the NBP EMS is voluntary and relies on independent third-party verification, the public is more likely to trust its results, she said.

"The systematic approaches of environmental management systems have allowed industry not only to comply [with], but exceed regulatory standards, which is pretty important

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Alvaro J. DeCarvalho

WEF Names New Managing Director of External Relations and Public Education

The Water Environment Federation (WEF) has hired **Alvaro J. DeCarvalho** as the new managing director of external relations and public education. "Al's professionalism, knowledge, and strategic approach will take the Federation's public education activities to a higher level and increase our visibility as a leading educational organization and resource for the water quality community," said **Bill Bertera**, WEF's executive director.

DeCarvalho previously was director of environmental safety at the Soap and Detergent Association (Washington, D.C.), where he initiated and managed a broad range of strategic programs and partnerships addressing domestic and international science and policy issues. He attended Wairarapa College (Masterton, New Zealand), and earned an A.Sc. in liberal arts from Massasoit Community College (Brockton, Mass.)

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Water Environment Federation

A Feeling of Purpose

I have worked for associations continually since 1973, and it began by accident. My first love was public administration and government, and I intended to enter the public sector after graduate school. But one of my degree requirements was an internship at a not-for-profit organization, and it turned into a career.

For me, working in this field combines the best of both worlds: an opportunity to work in the public interest and with both public and private organizations. I'm also interested in doing the right things, getting them done well, and understanding why some things work and others don't. I think a lot about that and learn something new almost every day. These days, I learn it from Water Environment Federation (WEF) members and their associates. It is an amazing and exciting classroom, especially as new life breathes into this mature, respected organization.

From the
EXECUTIVE DIRECTOR

Evidence of how some things work turned up at the Federation's mid-year meeting last February. The meeting consists of several days of committee meetings, during which attendees put together the WEFTEC technical program and work on other science-, engineering-, or management-related activities. The meetings begin early in the morning and often extend into the night, and most of the time is spent discussing water, wastewater, best practices, emerging technologies, and so forth, rather than politics, policy, or association governance. In short, it is a meeting where the essence of what our members do takes front stage. The topics are rarely glamorous, but they're important.

This year, attendees were dedicated, as usual, but also excited — the kind of excitement you feel when you're part of something bigger than yourself that has focus and direction and purpose. Several people found the time to look up from their work and comment both publicly and privately that "things feel different" at WEF — in a good way.

This is not accidental or ephemeral. Maturing organizations need to do this to stay responsive and worthy of their members' time. They have to find their institutional place in the world and periodically refine what makes them important to their members and constituencies.

The Federation's volunteer leaders have been working toward this end for almost 3 years. Not only have WEF's finances made a dramatic turnaround, but the decision-making infrastructure has been revamped to be less sluggish. WEF also is developing a clear mission for itself in the all-encompassing watershed, and the organization is quietly, but decidedly, stepping even further into a position of influence in the world water community.

Bill Bertera
WEF Executive Director

'Hot Topics' Spotlight: Sewers

As the concrete crumbles, municipalities have several options for dealing with decaying infrastructure. Available on the Web at http://www.wef.org/techinfoctr/hotopics/index.jtml, *WE&T*'s special sewer rehabilitation section digs deep to analyze the state of sewers today, determine whether to rehabilitate or replace moldering pipes, and evaluate the best upgrade options.

WEF Wants You!

Do you know a WEF member who is an "unsung hero" and whose efforts have made a difference in the field? Please send your nomination and three reasons you think the member should be profiled to **Staci-Jill Sands** at ssands@wef.org.

WEF HIGHLIGHTS
News for Members of the Water Environment Federation

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Letters to the Editor

This letter is in response to a letter published in the January/February 2004 issue of *Highlights* regarding the article "Asset Management Benefits Small Towns, Too," which was published November 2003.

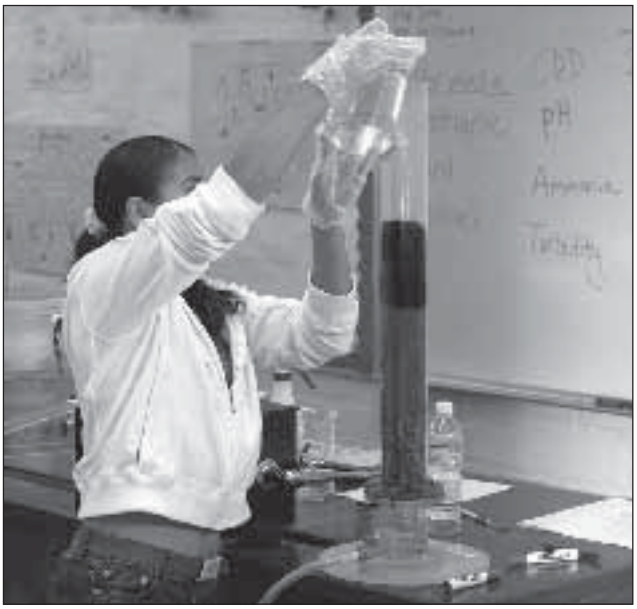
Thank you, Ron, for your response concerning the CMMS vendor reference — you have highlighted a valid and unfortunately common CMMS issue. It has been reported that some 70% of CMMS implementations are unsuccessful! Many software vendors have a wonderful sales force that sell their product as the "asset management solution" and we are led to believe that it will fix our maintenance program. The truth is that the CMMS is just one tool in the O&M toolbox and that a process and extensive (and sometime repetitive) training is needed on how to use the new tool. But some software vendors fail to mention this and the hidden additional costs (i.e. additional training, product upgrades and special reports).

From what we're read and heard, you are not alone in this area. What utilities need to do is share these experiences and become better consumers — so I thank you for your response. There are some good Web sites out there that contain articles on CMMS selection and implementation including the Society for Maintenance and Reliability Engineers (www.smrp.com) and Maintenance Technology Magazine (www.mt-online.com).

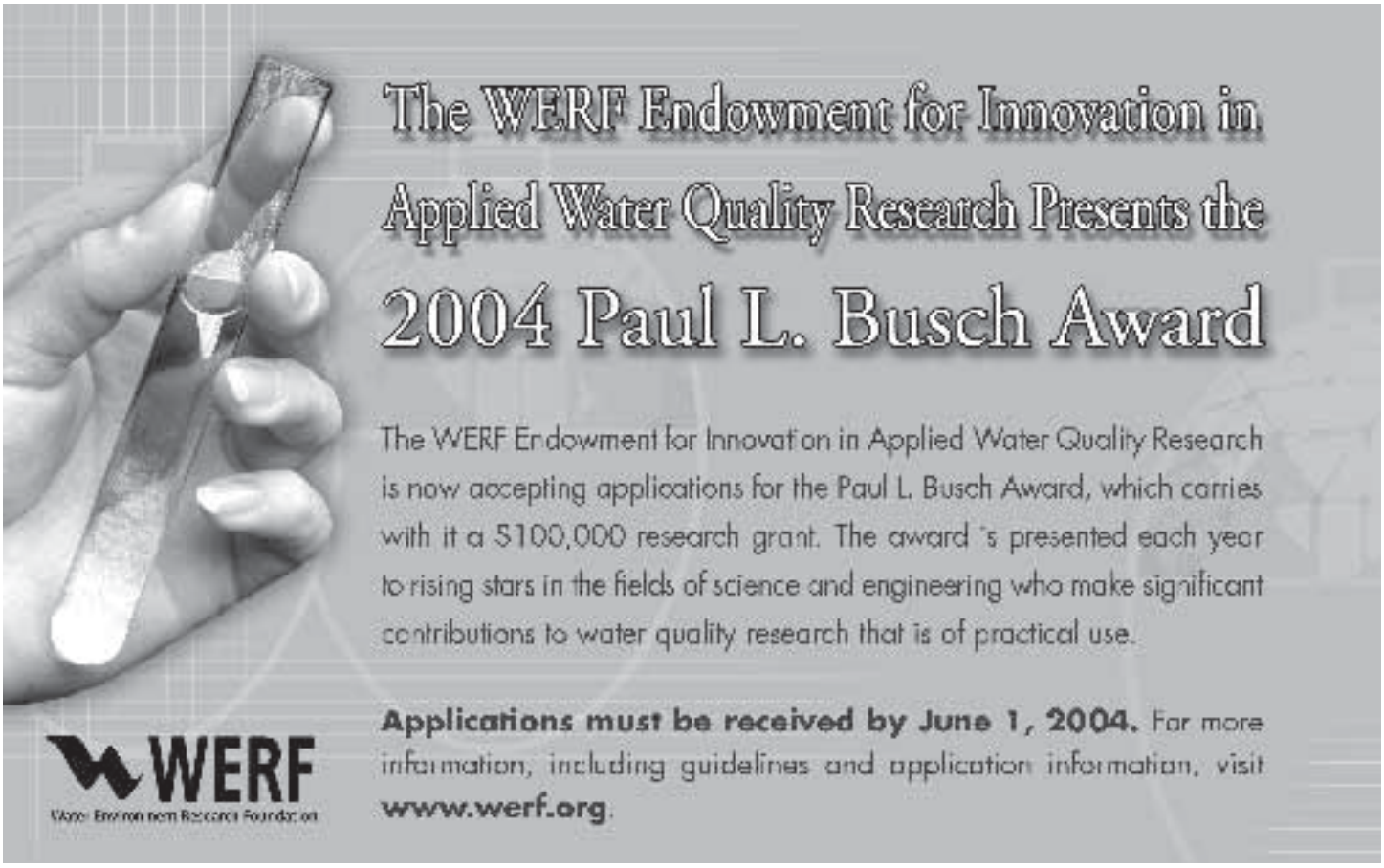
In general, what one will find is that a paper process needs to be in place prior to selecting a computerized system. If in place, then this can help a utility select the most appropriate CMMS for their business. Your response is very important and timely. Please consider my upcoming article in the May/June edition of WEF's Utility Executive, which is focused on "Building a Solid Foundation for Managing a Utility's Assets" and specifically addresses CMMS selection.

John Fortin
Program Manager, Massachusetts Water Resources Authority
Asset Management Committee Chairman, NEWEA

Exploring Water the WEF Way



High school students are learning how to treat wastewater in their own classrooms through Sewer Science, *a mobile simulated wastewater treatment plant that uses specially designed tanks and laboratory analytical equipment. The program was launched at WEF* Teach *2003 and is being facilitated by the City of Los Angeles and Los Angeles County Sanitation Districts. Plans are underway to bring* Sewer Science *to New Orleans at WEFTEC.04®.*



Make a Difference...

Groundwater Guardian Team Needs Your Help

The Orange County Water District's (OCWD; Fountain Valley, Calif.) Groundwater Guardian Team is looking for a few good folks to help with the Children's Water Educational Festival on May 11–12 at Hidden Valley Park in Irvine, Calif. This will be the 9th annual festival for the organization.

The Groundwater Guardian team is a group of volunteers from various industries that works to promote the protection of natural water sources through community events, educational outreach and educational materials. The 2003 Children's Water Festival attracted more than 8,000 attendees and encourages youth to use the tools they learn through festival events to begin a lifetime of environmental stewardship.

More than 80 hands-on interactive activities are available for children to learn about the water cycle, groundwater and surface water protection, wetlands preservation, recycling, pollution prevention, water treatment, distribution and conservation, and local environmental issues. Organizers believe that involving children in water conservation and preservation is the key to protecting water resources for future generations to come.

One innovative activity involves building an edible aquifer out of ice cream, lemon-lime soda and sprinkles. Each layer of the edible aquifer equates a section of the aquifer with sprinkles representing contamination. Through this experiment, students can see (and in this case, taste) that what people do above ground can and does affect our water supply. Another hands-on activity is "Catching Cooties in the Storm Drain," where kids crawl through a make-shift storm drain catching debris, contaminants and trash that would normally make its way to the ocean.

Hands-on activities allow students to come face-to-face with the world of water.

"With the help of the Groundwater Guardian team, who donate thousands of hours in this extremely worthwhile project, Orange County children now have the tools they need to be good stewards of the environment."

Rebecca Long, communications specialist for OCWD.

"With the help of the Groundwater Guardian team, who donate thousands of hours in this extremely worthwhile project, Orange County children now have the tools they need to be good stewards of the environment," said **Rebecca Long**, communications specialist for OCWD. "Youth have the power and ability to make a difference to change the wrongs of previous generations. If given the opportunity and tools, youth will succeed."

Volunteers are needed to staff activity booths, help with registration, and provide direction around the facility. Plastic cups, straws, napkins, ice cream, and squirt guns are also needed for various hands-on learning activities. In addition, monetary donations are being accepted to offset student transportation costs and lunches for volunteers, and no donation is too great or too small.

To find out more about sponsoring or donating supplies, contact Rebecca Long at (714) 378-3362. To learn more about volunteering, contact **Julie Chestnut** at (714) 257-1219. Donations are tax-deductible through the National Water Research Institute (Fountain Valley, Calif).

VOLUNTEER

Water Fest Provides Fun, Education

More than 4000 third- and fourth-grade students, accompanied by teachers and parents, attended the first Annual Niagara Children's Water Festival, held Sept. 12–18 at the Ball's Falls Heritage Conservation Area (Lincoln, Ontario, Canada). Students had the opportunity to participate in 40 hands-on activities related to water attitude, conservation, protection, science, and technology. For example, they played in the sand to learn about erosion, visited a simulated wetlands, watched a septic bed, and used a supervisory control and data acquisition (SCADA) system to dispense Kool-Aid.

The festival was sponsored by the Region of Niagara (Thorold, Ontario), the Niagara Peninsula Conservation Authority (NPCA; Welland, Ontario), the City of St. Catherines, the Ontario Power Generation (Toronto, Ontario), and a host of other agencies, companies, and organizations. About 560 volunteers from local high schools; Niagara College (Niagara, Ontario); and regional, municipal and conservation authorities, as well as other interested adults, helped keep events running smoothly.

Introducing students to common water useage enhances their ability to understand the importance of water conservation.

According to **Mary Stack,** director of communications for NPCA, the primary focus of the festival is to educate children about the importance of water conservation, protection, technology and ecology. Stack says the curriculum encourages students to become more environmentally aware, and that the age group is an ideal avenue for looking out for the future of clean water.

"Students in these grades are young enough to accept new ideas and old enough to understand the impact of what they are being taught," she said. "We depend on water for our very lives. As people become more concerned about the environment, especially water, they want to be more aware about water conservation and protection for future use."

The Festival hopes the attendees will walk away with four major points:

- use water wisely,
- protect your water supply,
- examine the relationship between water and technology, and
- celebrate the role of water in the ecosystem.

Stack says although Niagara is surrounded by an abundance of water, there is a great deal of pressure on water supplies, and educating people about the importance of conservation is a necessity for a future dripping with clean water.

"The festival gives us an opportunity to provide guidance to young people who are receptive to change and encourage them to make a difference through their actions," Stack says.

This year's festival is scheduled for Sept. 20–25. For more information, contact **Deanna Barrow**, Process Engineer, Region of Niagara Water and Wastewater, at (905) 685-1571, or Mary Stack at the Niagara Peninsula Conservation Authority, at (905) 788-3135.

WEF's Public Education Committee Needs a Few Good Boy Scouts

More than 50 volunteers are needed to help set up and staff a hands-on water and wastewater exhibit at the 2005 National Boy Scout Jamboree. The Jamboree is scheduled for July 25–Aug. 3, 2005, at Fort A.P. Hill, Va., and is expected to draw more than 30,000 Scouts from across the United States and other countries.

The Water Environment Federation (WEF) Public Education Committee especially needs one or two "Champion WEF Boy Scouts" to organize volunteers and act as directors onsite. "This is the perfect opportunity for that recently retired, looking-for-some-fun WEF member," said **Robert Adamski**, committee chair. "A retiree could put his/her years of organizing experience to use for the cause of public education and the values of Scouting."

At previous Boy Scout Jamborees in 1997 and 2001 (the event is held every 4 years), WEF's exhibit included activities on watersheds, water conservation, manhole safety, and microlife. For example, Scouts crawled through a 76.2-cm (30-in.) pipe to "see how wastewater gets treated on the other end." The

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New Director Named

continued from page 1

and a B.Sc. in environmental engineering from Rensselaer Polytechnic Institute (Troy, N.Y.). DeCarvalho also is a member of several professional societies, including WEF.

When did you become a member of WEF?
I became involved with WEF in 1992 as a member of an undergraduate environmental engineering research team at Rensselaer Polytechnic Institute. Our team's submission to WEF's annual student paper competition ultimately won second place.

Why did you become a member of WEF?
WEF is the water quality community's home. In addition to disseminating information on educational, technical, legislative, and regulatory topics, WEF is a respected forum that provides opportunities to work with water quality leaders on critical issues. Communicating and interacting with other WEF members helps me continuously improve my technical and managerial skills.

How did you get involved in the water quality field?
As an environmental engineer, it's impossible to not be involved in water quality. All three environmental compartments — aquatic, terrestrial, and atmospheric — overlap and potentially affect each other. Water, and its protection, is the most critical compartment because water is the foundation of life.

Why are you still in the water quality field?
I am passionate about water and the environment. We humans spend our entire lives connected to the aquatic environment. Being involved in water quality issues satisfies my spiritual need to improve and protect the environment: being a WEF member enables me to do so on an intellectually sound scientific and political basis.

How has WEF affected your professional career?
By winning second place in the 1992 WEF student paper competition, I gained immediate recognition, credibility, and respect in the environmental engineering community. Subsequent papers in leading peer-reviewed scientific journals, such as Water Environment Research, have enhanced my reputation and recognition. Also, participating in WEF's technical committees gave me access to discussions and technical expertise unavailable elsewhere.

What is one of your most challenging water quality issues and why?
Getting decision makers, opinion leaders, and others to understand the fundamental importance of water quality remains one of our greatest challenges. Billions of dollars have been spent trying to find water in our solar system. Well, here's the news: we've found water. It's right here on our planet. Let's devote ourselves, our time, our money, and our lives to protecting it.

What project are you most proud of and why?
I am proud of all the projects I have been involved in, not because of my individual contributions, but because of the contributions made by the many talented, enthusiastic, and dedicated individuals with whom I've been fortunate to work. I am proud that these projects, undertaken during the last 2 decades, have made a difference in the way people think and act toward the environment.

What changes over the years do you feel have had the most effect on the field?
Water quality is the most important factor influencing human life expectancy and quality. Unfortunately, water quality's effect on public health has fallen off the radar screen in developed nations, so the mandate for more investment in assets needed to protect water resources — in both developed and transitional nations — has not been established. This lack of investment has put the water quality community in an untenable situation: meet the demand to protect the water environment with aging, limited-capacity, or nonexistent assets and diminishing financial resources and commitments.

Where do you see the future of the water quality community heading?
Global industrialization and commercialization, surging human population, and related consumption and waste will increase pressure on limited aquatic resources. The challenge of sustainable human activity will define the 21st century, and the water quality community's ability to collaboratively address water-related issues will be central to successful resource management.

What role do you see WEF having in the future of water quality?
WEF members bear a unique responsibility for protecting the water environment. So, WEF must increase its leadership role to develop collaborations that ensure the best science, practices, and policies are communicated and used to preserve and enhance the global water environment.

What advice do you have for up and coming water quality professionals?
Find or create opportunities to network and participate in issues important to you. Identify and own emerging topics, such as water reuse, that will be important in the future, because you are the future. Think creatively, be willing to take risks and to fail, and work collaboratively. And finally, recognize that as a leader, your greatness is not measured by your ability to lead, but by your ability to empower others to lead.

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 **Greg Fuhs**, *Operations Forum* editor, at (703) 684-2482 or gfuhs@wef.org.

Biosolids Conference *continued from page 1*

in terms of reacting to the public," Girard said. "You can improve monitoring, you can develop sustainable practices and operations, and [you can] open a dialogue with the public that you serve."

Other topics addressed at the conference included odor control, process operations, and thermal technologies. Participants also had opportunities to attend three pre-conference workshops and five facility tours, as well as meet with 69 exhibitors. **Mark Schmitz** was conference subcommittee chair, and **Mark Lang** was the conference's technical program subcommittee chair. The Bioenergy Subcommittee, chaired by Peter Brady, put together two sessions on thermal technologies.

New Subcommittees Formed

During the conference, **Michael Moore**, chair of WEF's Residuals and Biosolids Committee, announced the creation of two new subcommittees: the Outreach and Education Subcommittee and the Industrial and Agricultural Residuals Subcommittee.

The Outreach and Education Subcommittee, which will be chaired by **Charles Egigian Nichols**, plans to create an easily accessible, up-to-date library of biosolids-related information to keep managers informed about quickly developing issues. The subcommittee also intends to catalog and evaluate biosolids-related outreach materials used nationwide.

The Industrial and Agricultural Residuals Subcommittee, which will be chaired by **John D. Hoff**, intends to help municipal, agricultural, and industrial residuals producers work together on projects that affect or involve all types of residuals.

Boy Scout Jamboree *continued from page 5*

exhibit was humorous as well as educational, and WEF volunteers and Scouts had fun while learning about water-related issues and becoming more deeply committed to the ideals of Scouting.

This year, the Public Education Committee wants to update the exhibit and address such current issues as beneficially using biosolids; reducing sanitary sewer overflows (SSOs); managing fats, oil, and grease; and reusing water. The WEF exhibit also will be designed to help fulfill Boy Scout requirements for environmental merit badges and the coveted Conservation Area patch.

Tim Madhanagopal, the Organizing Subcommittee chair, is actively seeking new ideas, activities, and volunteers. "We need to freshen up the exhibit, give it a cutting edge feel on issues, and make sure that it not only educates, but inspires," he said. "By engaging Scouts through hands-on activities and making them think about water quality, we have the opportunity to change behavior in support of the water/wastewater treatment field."

At previous Jamborees, Scouts received a collectable hatpin after going through the exhibit. This was an extremely popular item in the Jamboree's Conservation Area; volunteers distributed about 15,000 pins with the WEF logo, name, and motto, "Protect & Preserve Water Resources." The pins previously were paid for by WEF Member Association (MA) donations, and the committee hopes MAs will again fund the Scouts' hatpins in 2005.

To volunteer, please contact **Lorraine Loken**, WEF senior manager of public education, at lloken@wef.org or (703) 684-2487. Camping will be available onsite for volunteers, and WEF will pay registration fees. Volunteers are responsible for travel expenses and must have a health exam before the Jamboree.

Excellent Technical Program Planned for WEFTEC.04

WEFTEC.04® technical sessions are expected to be better than ever because the Water Environment Federation (WEF) Technical Program Committee had 35% more abstracts than usual to choose from. The program also has been reorganized to better reflect the current interests of water and wastewater treatment professionals, according to Committee Chair **Sue Lior**. "We are committed to keeping WEFTEC North America's premier water quality event known for its timely and comprehensive technical program," Lior said.

More than 1100 abstracts were submitted for consideration (compared to more than 800 in 2002 and 2003), and most were submitted electronically through WEF's new online abstract submittal system, which was designed to simplify the submittal process. To submit an abstract, you access www.wef.org/applications/abstractsubmission/ on the Web, fill in the form, attach the abstract as a Word file, and hit send.

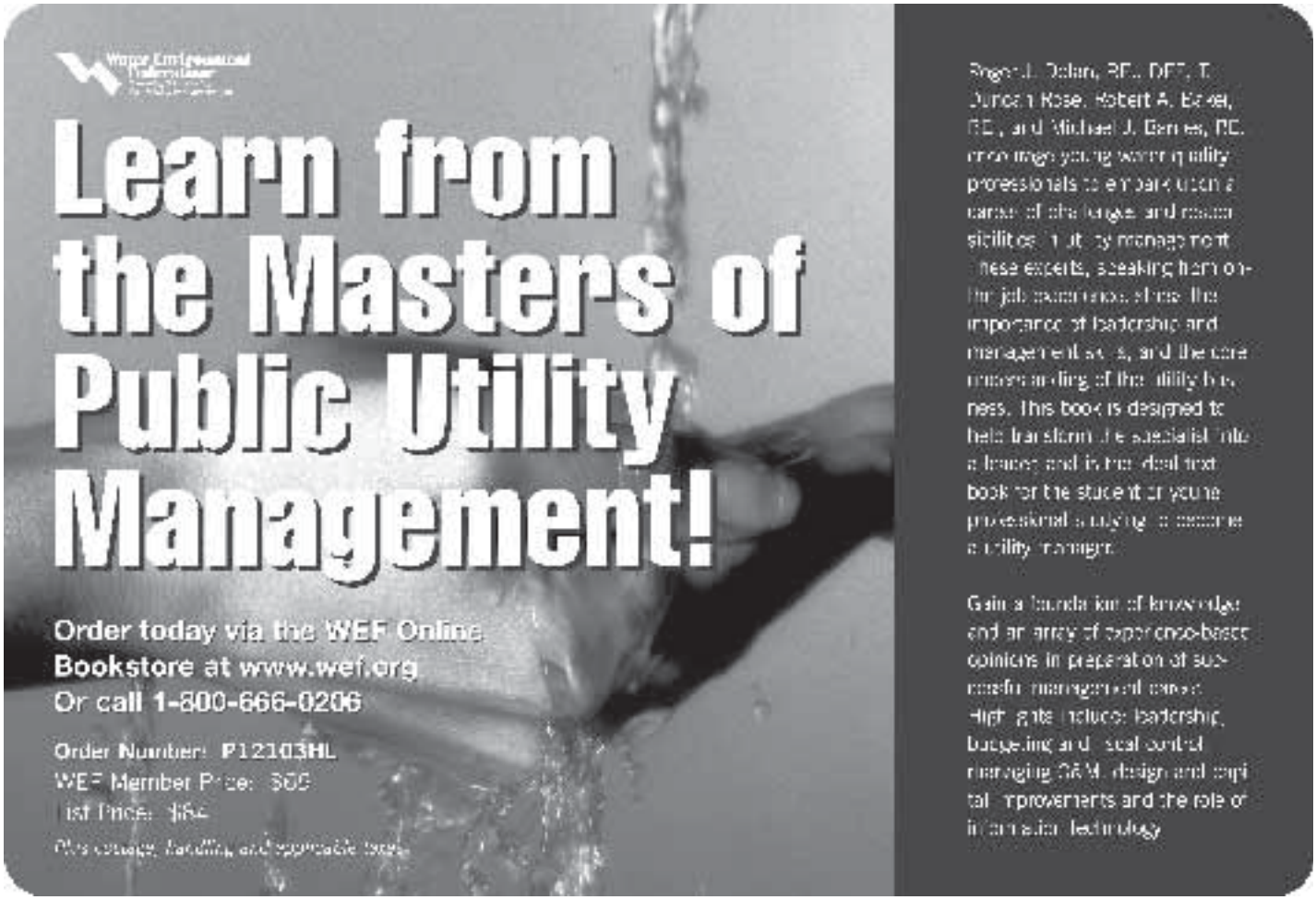
WEFTEC.04 will be in New Orleans, La., on Oct. 2–6, and at press time, online registration was expected to begin in late March. WEFTEC typically draws more than 800 exhibiting companies and 16,000 attendees each year.

For more information on the conference, access www.weftec.org, call (800) 666-0206 or (703) 684-2400, or send e-mail to confinfo@wef.org.

WEF Launches MA Management Center on the Web

To help Member Associations (MAs) with daily management activities and 'doing business' with the Water Environment Federation (WEF), the Federation launched its MA Management Center on www. wef.org last October. Information provided is arranged by topical order and includes, but is not limited to: Governance, Membership, Management Resources, Public Education, Student Chapters, and Young Professionals. It is an efficient and effective tool for sharing relevant and timely information to MA Leaders.

New to the Management Center is the Communications Calendar section. Here, MA Leaders have access to: the MA Calendar, a monthly reminder resource tool for time-sensitive matters that require MA action; the Events Calendar, which includes 2004 WEF events, and MA annual meetings with WEB links for quick access to the event information. A 2005 Events Calendar providing a tentative list of events scheduled for 2005 is also available.

The Center offers the MA Leader audience a Web-based accessible avenue to locate desired and newly-posted information.

For more information, access the MA Management Center on the Web at www.wef.org/whoweare/MA/, or contact **Dianne Crilley** at (703) 684-2445 or dcrilley@wef.org.