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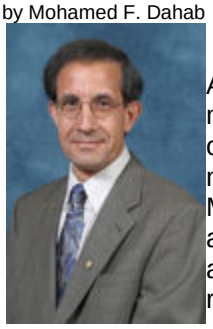
From the President

Working with the Academic Community

by Mohamed F. Dahab



As I travel and meet with many of our Member Association (MA) members and leaders, I am faced with the sobering reality that not only is the Water Environment Federation's (WEF; Alexandria, Va.) membership not growing, but neither is the membership of most MAs. The reality is that we are growing older more quickly than we are able to find replacements — not only to participate in our association, but more importantly to carry out our jobs and responsibilities as we retire from the field. Continue reading.

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In Memoriam

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George B. Crawford

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Features

From the President:
Working with the Academic Community

Mohamed F. Dahab

As I travel and meet with many of our Member Association (MA) members and leaders, I am faced with the sobering reality that not only is the Water Environment Federation's (WEF; Alexandria, Va.) membership not growing, but neither is the membership of most MAs.

The reality is that we are growing older more quickly than we are able to find replacements — not only to participate in our association, but more importantly to carry out our jobs and responsibilities as we retire from the field.

The WEF and MA membership puzzle requires many solutions. One of the most logical alternatives is to substantially increase our efforts to attract young members. Bringing young members in requires that we work closely with the academic community to build connections to our schools and universities.

So what makes this task so difficult? More appropriately, what makes the academic community such a "hard nut" to crack? From my vantage point as a professor, the answer is quite easy. Academics must find a home within WEF and the Member Associations' ranks to help bring students in. An MA that cannot attract the professors will probably not be able to attract students, either.

Perhaps due to my calling, I am frequently asked about what MAs can do to bring the academic community into their fold. Although I do not profess to have a global or foolproof answer, there are many suggestions that WEF MAs can implement to bring about meaningful involvement from the academic community.

For many academics types, professional diversity is very compelling. Diversity, in this case, refers to the fact that academics generally engage in many activities related to the environment, including the water environment, whereas WEF and MAs, for the most part, have traditionally had a single focus: wastewater. The monoculture of our organizations is, without a doubt, one of the biggest impediments that we need to ultimately overcome.

Overcoming this monoculture does not mean that we need to abandon or lessen our attention and commitment to wastewater and wastewater treatment issues. It simply means embracing the true implications of being an organization devoted to the water environment. Once we truly embrace our vision of protecting and enhancing the water environment, the issues of professional diversity within our organization will evaporate.

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The next step is realizing that academics seek an atmosphere where they can engage their skills and talents and further in their individual careers by presenting their research and other scholarly works. Conferences provide the perfect forum for this. So, to facilitate this, invite university professors to present their work at conferences. Better yet, ask them to bring their students along.

Nearly 20 years ago, the Nebraska Water Environment Association (NWEA; Omaha) established a student research paper program. This program has been very successful for two main reasons. First, NWEA was successful in getting faculty mentors to shepherd the program, and second, NWEA fashioned the program as a means to recognize student and faculty achievement.

Even if an MA went out of its way to invite local university professors and students to participate in conferences and they declined, MAs should not give up, but ask again and again.

Once beyond the invitation stage, it is crucial that MAs lay a foundation for a lasting relationship between their organization and local universities. This foundation will largely depend on the MAs' ability to cultivate a solid working relationship with some professors who will mentor students.

Forming a student chapter can serve as a lasting bridge between MAs and academic programs. Elements of student chapter programs — such as grants to assist with chapter expenses, conference fees, and the cost of WEF and MA memberships — can entice academic departments to establish student chapters. Many MAs have outstanding scholarship programs, which they use very effectively to attract students to their ranks.

Once a student chapter is formed, care must be taken to nurture and maintain it through MA involvement. Involvement means participating in chapter activities, sharing experiences, and being a dedicated mentor to students. It may include your giving a talk, being a guest lecturer, sponsoring a plant tour, serving as a judge, or simply showing up at your students' or faculty's programs. Along the way, students and members will share stories, enjoy a laugh, share a few pizzas, but most importantly members will build friendships and contribute to the education of new professionals.

To be sure, the task is not as unwieldy as it may seem. Remember, university programs — and by extension faculty and staff — want their students to succeed and move on to become noted professionals. The success of all academic programs is directly measured by the success of their primary products: the students.

While it can be difficult to access universities and professors, don't give up. It may help to remember that in addition to attracting faculty and students, an MA's ability to work with universities will provide tremendous educational resources; access to classrooms and laboratories; and in many cases, a direct link to research programs that can help an MA fulfill its mission.

My parting thought is quite simple: We, as the stewards of the environment, lay claim to one of the noblest of all professions. My sense and experience tell me that students relate to this calling in more ways than many of us seem to recognize. Let's take advantage of it for the good of the environment and our profession.

— Mohamed F. Dahab
2006–2007 WEF President

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National Biosolids Partnership News

Three Wastewater Agencies Receive NBP EMS Certification

The National Biosolids Partnership (NBP; Alexandria, Va.) recently awarded certification to three of its participating wastewater agencies that successfully underwent an independent third-party audit of their environmental management system (EMS) for biosolids programs. NBP is an alliance of the Water Environment Federation (WEF; Alexandria, Va.) and National Association of Clean Water Agencies (NACWA; Washington, D.C.), with advisory support from the U.S. Environmental Protection Agency (EPA).

The Orange County Sanitation District (OCSD; Fountain Valley, Calif.) received the NBP EMS Platinum Level Plaque at WEFTEC®.06 in Dallas. Left to right: Jim Hanlon, director of EPA Office of Wastewater Management; Mike Moore and Layne Baroldi (OCSD); and Ken Kirk, executive director of the National Association of Clean Water Agencies.

Following is a list of newly certified wastewater agencies and their certification dates:

- Columbus Water Works (Ga.), Nov. 15, 2006
- City of Raleigh Public Utilities Department (N.C.), Dec. 19, 2006
- City of Grand Rapids (Mich.), Dec. 20, 2006

All three newly certified agencies is planning celebrations of their EMS certification that will include representatives of the NBP partnering organizations. There are 96 wastewater agencies in the United States participating in the NBP's EMS program — 16 of which have been certified. The NBP Seal of Approval recognizes that a wastewater agency has met all of the requirements of certification for admittance to the NBP EMS program, as verified by an NBP-accredited auditing firm.

A complete listing of participating agencies and more information on the NBP can be found here.

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NBP Honors Wastewater Agencies Achieving Platinum Level EMS Status at WEFTEC®.06

The National Biosolids Partnership (NBP; Alexandria,Va.) honored several of its wastewater agencies participating in the Partnership's EMS program with certificates and plaques denoting their Platinum Level status during an EMS Recognition Breakfast held Oct. 23 during WEFTEC in Dallas. More than 40 individuals were in attendance.

Platinum Level status represents NBP's highest achievement in biosolids management and environmental stewardship. These agencies were previously certified by NBP, but, in addition, have successfully met the Interim Audit requirements to maintain certification for the NBP EMS Program. The ceremony was highlighted by presentations from Jim Hanlon, director of EPA's Office of Wastewater Management, and Ken Kirk, executive director of NACWA.

The following 10 wastewater agencies have now achieved Platinum Level status in the NBP EMS Program:

- Orange County Sanitation District (Fountain Valley, Calif.)
- Los Angeles Bureau of Sanitation
- Metro Denver Wastewater Reclamation District City of Fort Worth Water Department (Texas)
- Encina Wastewater Authority (Carlsbad, Calif.)
- Butler County Department of Environmental Services (LeSourdsville, Ohio)
- Madison Metropolitan Sewerage District (Wis.)
- District of Columbia Water & Sewer Authority
- City of Lawrence Department of Utilities (Kan.)
- Kent County Regional Wastewater Treatment Facility (Dover, Del.)

NBP Releases 2006–2007 Annual Report: A Decade of Progress in Environmental Stewardship

The National Biosolids Partnership (NBP; Alexandria, Va.) is pleased to announce its release of its *2006–2007 Annual Report*. The report includes an overview of the NBP environmental management system (EMS) program, 2006 accomplishments, 2007 action plan, a listing of geographical locations of participating EMS agencies, testimonials from participating EMS agencies, NBP EMS program offerings, platinum level program recipients, financial summary, listing of volunteer contributors, and more.

The NBP also will be celebrating the 10th anniversary of its formation in 2007. Hard copies of the *Annual Report* will be distributed, and electronic copies are posted in several locations on the NBP Web page (see Technical Resources directory and select the NBP Downloadable Documents submenu). Download a copy of the report here.

Laboratory Practices Committee Turns 20

The Laboratory Practices Committee (LPC) of the Water Environment Federation (WEF; Alexandria, Va.) is celebrating its 20th year in existence. Formed in 1987, the committee provides a nationwide platform for laboratory analysts to train, educate, and network with each other. Kathy Cook, past LPC chair, shares the history and development of the committee.

In the early 1970s, when the U.S. Environmental Protection Agency was created and the Clean Water Act was born, wastewater facilities nationwide began adhering to new requirements to meet stringent discharge parameters.

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Effluents became cleaner, containing fewer contaminants that negatively affected stream quality and promoted healthy biolife in the receiving waters.

The laboratory and its analysts became instrumental in assuring clean discharges. More sophisticated testing was required by regulatory agencies. Analysts struggled to become aware of requirements, keep up with changing technology, and learn how to apply the lab data they produced to the operation of the plant.

In the early 1980s, lab analysts in many states began networking by forming groups to exchange information. Several of these groups became member committees of their Water Environment Federation (WEF; Alexandria, Va.) member associations. They became part of the whole so that analysts, operators, vendors, and stakeholders could share information vital to the mission of providing clean water discharges.

In 1987, former WEF President Beth Turner, currently of E. I. du Pont De Nemours & Company (Wilmington, Del.), and I founded the WEF Laboratory Practices Committee to provide a nationwide platform to train, educate, and network with laboratory analysts. The first LPC had five members: Jane Winkler, lab manager for the City of Hamilton (Ohio), and Dave Hill of Brown & Caldwell (Walnut Creek; Calif.). The first goal of the committee was to recruit members.

The committee formed goals to address the needs of analysts. The three most important issues defined were specific training for analysts, standardization of laboratory practices, and development of new technology. WEF responded to these goals by providing training through conferences, workshops, and publications such as the *Water Environment Laboratory Solutions* newsletter. WEF and the Association of Boards of Certification (ABC) worked together to publish a study guide for analysts to assist them in preparing for lab analysts certification exams given in about 16 states.

Members of the LPC also significantly contributed to the NELAC (National Environmental Laboratory Accreditation Conference) group in developing standard practice for labs nationwide.

LPC members also helped to establish analytical methods for new technology and methods. Each year an LPC member gives a report on emerging technologies and regulations that will affect discharge permits at the Lab Practices Committee meeting at WEFTEC. Member Bill Telliard has served for several years in this capacity.

LPC recently established the Crystal Crucible Society — the lab equivalent to the Select Society of Sanitary Sludge Shovelers (5S) operators — which recognizes and honors individuals for their outstanding contributions that promote professionalism in the wastewater laboratory field. As in the 5S Society, Crystal Crucible members are given an honorary pin.

Twenty years have come and gone quickly. There have been outstanding, dedicated people who have led the committee forward, many who have worked hard to organize conferences and workshops, and many who have written articles, published papers, and helped where needed.

On a personal note, I am proud of the committee's formation and growth. It could have only worked with the dedication of the members.

— Kathy Cook

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In Memoriam: George B. Crawford

George Byron Crawford, P.E., died on Jan. 22. A life member of the Water Environment Federation (WEF; Alexandria, Va.), George joined the organization in 1948 when it was known as the Federation of Sewage Works Associations.

Photo courtesy of George Crawford, Jr. Click photo for larger image.

Crawford was the husband of Ruth Virtue for 61 years, and was predeceased by his brother Ken. He was the father of Janet Duval, Margaret Dunn, and George Crawford, and the grandfather of Jay and Brooke Duval, Sarah and Scott Wilson, Patricia and George Dunn, and James and Stephen Crawford.

Born in Bowmanville, Ontario, Crawford grew up in Peterborough, Ontario, and graduated from the University of Toronto in Civil Engineering in 1944.

He served with the Royal Canadian Engineers during World War II, after which he joined Gore & Storrie Consulting Engineers (Ontario) in 1945. He began as a consulting engineer, moving up the ranks to become the firm's president in 1975. One of his most notable projects was the Main Toronto wastewater treatment plant at Ashbridges Bay in Toronto. In 1989, he served on the Board of Consulting Engineers with the Toronto Transit Commission.

As a WEF member, Crawford served on the Building Fund Committee, the Building Committee, the Executive Committee, the Board of Directors, and the Program Committee. He was also a life member of the American Water Works Association (Denver), and was a member by invitation of the American Academy of Environmental Engineers (Annapolis, Md.).

Crawford received many awards and honors. In 1981, WEF awarded him the Arthur Sidney Bedell Award to acknowledge his extraordinary service to his member association. In 1987, the Association of Professional Engineers of Ontario presented him with its Engineering Medal. He was inducted into the University of Toronto Engineering Alumni Hall Of Distinction. He was only the second Canadian to be made an Honorary Member of WEF.

Crawford was a member of several associations and clubs, including the Select Society of Sanitary Sludge Shovellers and the Canadian Society of Mayflower Descendents.

Donations may be made in his memory to The Owl Foundation or to The Arthritis and Autoimmunity Research Centre Foundation.

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News & Updates

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News and Updates

WEF Seeks Authors for Hydraulics Publication

The Water Environment Federation's (WEF; Alexandria, Va.) Technical Practice Committee is looking for individuals willing to serve as the authors of chapters for a proposed publication titled Hydraulics for Operations. This effort is being led by Jeanette Brown, executive director of the Stamford (Conn.) Water Pollution Control Authority. It is envisioned that this will be a simplified hydraulics manual to be used by operator level personnel, entry level environmental engineers, consultants, and field staff involved with flow monitoring and condition assessment that have consultants and utilities as clients. A student workbook will also be developed to accompany the manual so that it can be used to instruct environmental engineering students in hydraulics. The proposed outline is as follows:

Chapter 1—Introduction
Chapter 2—Basic Concepts
Chapter 3—Pressure and Force
Chapter 4—Flow
Chapter 5—Pipe Flow
Chapter 6—Open Channel Flow
Chapter 7—Flow Measurement
Chapter 8—Pumps and Pumping
Chapter 9—Hydraulic Profiles

Authors will be responsible for preparing detailed chapter outlines according to the proposed audience, purpose, and scope of the publication. Authors will also be responsible for preparing the chapters for the publication and addressing or incorporating all technical review comments received. Authors must follow the publication development process outlined in the Technical Practice Committee Procedures Manual and meet all deadlines to ensure that the publication is developed on a 20-month schedule.

If you are interested in serving as the author of any of these chapters and will be able to work closely with other WEF volunteers, the Task Force Chair, and WEF staff and dedicate the expertise and time to ensuring that a high-quality publication is developed according to the 20-month publication development schedule, please contact Lorna Ernst, technical publications manager, by March 15, with a brief resume at lernst@wef.org or fax to (703) 836-1794 and indicate in which chapter you are interested.

WEF Needs You!
Nominations Sought for WEF Annual Awards

Nominate your peers for the 28th Annual WEF Awards — a variety of nearly 30 awards that recognize achievement in the water environment profession. If you know someone who has made a difference in the water and wastewater profession, don't let this person go unacknowledged.

The award categories include Individual Service and Contribution, Education, Contributions from Organizations and Associations, Operational and Design Excellence, and Published Papers.

Award nominations are due April 1. For a complete list of awards, click here. For more information, contact WEF Awards Program Coordinator Liz Schulz, at (703) 684-2400, ext. 7738.

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Call for Abstracts: WEF/A&WMA Odors and Emissions 2008

As communities grow in size and population, more municipal, industrial, and agricultural facilities are confronted with issues related to odors and air emissions. To assist the air and water quality professionals tasked with the effective management of these emissions, the Water Environment Federation (WEF; Alexandria, Va.) and the Air & Waste Management Association (A&WMA; Pittsburgh) are co-sponsoring the international specialty conference WEF/A&WMA Odors and Emissions 2008, in cooperation with the Arizona Water & Pollution Control Association (Prescott).

The conference, held every 2 years, brings together environmental professionals from around the world for a showcase on odors and air emissions management. Attendees — facility owners and operators, researchers, and public administrators — can learn more about current issues, regulatory requirements, and methods for analyzing problems and finding solutions at this conference. Technical sessions and workshops allow participants to learn about state-of-the-art techniques for the assessment and control of odors and air emissions. WEF/A&WMA Odors and Emissions 2008 is designed to foster informed decision-making and encourage the use of effective and innovative technologies.

Abstracts, due June 1, addressing the following topics are invited:

- Methods for Sampling, Measuring, and Analyzing Emissions
- Regulatory and Policy Issues
- Fate and Odor Modeling
- Odor and Emissions Control Systems
- Emissions from Biosolids
- Collection System Odors and Corrosion
- Biological Odor Control
- Sustainability and Greenhouse Gases
- Bioenergy Technologies and Emissions Control
- Innovative Technologies
- Animal/Agricultural Waste Emissions
- Emissions from Industrial Facilities
- Source Control and Management Practices
- Odor Control Planning and Monitoring

To submit an abstract, click here . Abstracts must be received at WEF no later than June 1. WEF will notify presenters of acceptance by Sept. 3. Presenters will be required to submit a draft manuscript by Dec. 3 and a final manuscript by Jan. 28, 2008. In accordance with WEF policy, presenters who do not submit a final, peer-reviewed manuscript by the due date will be replaced on the program. Presenters will be responsible for paying their own travel expenses and registration fees for the conference.

Authors whose manuscripts are presented at conference will have the opportunity to submit their work for review and possible publication in WEF's online journal *Water Practice*. Send an e-mail to *Water Practice* for additional information.

The conference will be held April 6–8 in Phoenix at the Phoenix Convention Center. For additional

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information on WEF/A&WMA Odors and Emissions 2008, call (703) 684-400, ext. 7010, or send an e-mail .

Collection Systems Committee Seeks to Expand Information Sharing

The Water Environment Federation (WEF; Alexandria, Va.) Collection Systems Committee (CSC) has released its latest newsletter, which includes several updates and announcements. The committee would like to share its activities with all WEF members. The following items are a sampling of the committee's news.

Private Property Virtual Library. Following up on the interest shown in private property inflow and infiltration (I/I) programs generated by the August 2005 webcast "Dealing with Private Property Programs," Laurie Sharon of FSFM Engineering (Columbus, Ohio) is leading the development of a private property virtual library. The intent of the library is to create a place where communities can go for ideas to solve private property problems.

2007 Collection Systems Specialty Conference. The annual Collection Systems Conference, held this year May 13–16 in Portland, Ore., will focus on optimizing the planning, design, construction, and operation of sustainable collection systems along with an additional focus on issues specific to the Pacific Northwest.

System operations, specific project-related experiences, and case studies will be used to illustrate a range of collection systems issues. Private property programs will be the topic for the conference workshop. The committee is currently seeking more information on more private property programs, including what has worked well and lessons learned. Those who know of a program, e-mail wefcsc@yahoo.com . For more information, click here .

Member Association Coordination Project. The committee is also trying to improve information sharing between the WEF CSC and member associations and directly between member associations through its Member Association Coordination Project. A questionnaire was distributed in 2006 asking for input on topics and communication methods.

The project team, led by Tina Wolff of Metcalf & Eddy (Wakefield, Mass.) and Barbara Robinson of Stantec (Alberta, Canada), is planning to launch a listserv e-mail group this winter. For more information, e-mail wefcsc@yahoo.com

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Water Is Life, and Infrastructure Makes It Happen™ Introduces New Bill Stuffers

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Utilities interested in increasing the public's awareness of the decaying water and wastewater infrastructure can now purchase bill stuffers with hard-hitting messages to send to customers.

The bill stuffers come as part of the Water Environment Federation's (WEF; Alexandria, Va.) program "Water Is Life, and Infrastructure Makes It Happen™" — a comprehensive public education program designed to raise awareness on the need to update our nation's water and wastewater infrastructure and build support for initiatives to finance these upgrades. With the support of a National Advisory Committee, WEF has created a group of tools and materials to help members increase awareness on infrastructure issues, and increase financial support to remedy these problems. WEF is pleased to announce the addition of three new bill stuffers to this family of materials.

The new bill stuffers are full-color, double-sided, and deliver poignant messages to users of water and wastewater services by emphasizing the important role infrastructure plays and the danger of not investing in upgrades and expansions to these systems. The "100 Years Ago" bill-stuffer, for example, puts the aging wastewater infrastructure into perspective by noting what was going on in the nation at the time our wastewater pipelines were being constructed. A black-and-white photo, dated 1936, of men actually building a combined sewer delivers the message visually.

WEF members can view and order the new bill stuffers at the Water Is Life, and Infrastructure Makes It Happen™ Web site by clicking on "Members' Toolkit." The cost is $0.10 per bill stuffer. For free samples, e-mail Program Manager Stephanie Kavanaugh .

WEFTEC.07 Registration Opens April 2

Attendee online registration will be available on Monday, April 2. Don't miss your opportunity to register early to receive the discounted rates and book your housing!

Click here for conference and registration information.

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