



**American Water Works  
Association**

The Authoritative Resource on Safe Water®

**September 19–22, 2010**

Gaylord National Hotel  
and Convention Center  
National Harbor, Maryland

Conference and Exhibits  
September 19–21  
Facility Tours September 22

# announcement



# DSS

*Distribution Systems  
Symposium 10  
& Exposition*

## Distribution Systems Symposium and Exposition

The Event for Distribution, Engineering  
and Operations Professionals

## Water Security Congress and Exposition

Advancing Security and Emergency  
Preparedness in the Water Sector

## Water Security Congress 2010





## **D**istribution Systems Symposium and Exposition

The Event for Distribution, Engineering and Operations Professionals

## **W**ater Security Congress and Exposition

Advancing Security and Emergency Preparedness in the Water Sector

AWWA's 2010 Distribution Systems Symposium (DSS) and Exposition and Water Security Congress will be held in one location at one time. Each conference will have its own distinct technical programs, but the exhibit hall will be shared. What does this mean for you, the attendee? MORE VALUE. A full-conference registration will provide you access to both conference technical programs and exhibits at no additional cost.

DSS is the event for distribution, engineering, and plant operations professionals. For more than 20 years, DSS has brought together decision makers and key influencers involved in water distribution. Water Security Congress is the event for water security and emergency preparedness professionals. Each year, the AWWA Water Security Congress draws water industry professionals who want up-to-date information on innovative products and services for protecting water and wastewater infrastructures and how to be prepared for new and emerging water security challenges.

## Preliminary Conference Schedule

### Sunday, September 19

7:30 a.m.–6:00 p.m.	Registration Open
8:00 a.m.–5:00 p.m.	Workshops (not included in full-conference registration)
noon–1:00 p.m.	Lunch (for full-day workshop attendees)
4:00–4:30 p.m.	New Member/New Attendee Program
4:00–6:00 p.m.	Exposition Open
4:00–6:00 p.m.	Meet & Greet Reception in Exhibit Hall

### Monday, September 20

7:00 a.m.–6:00 p.m.	Registration Open
7:15–8:15 a.m.	Exhibit Hall Education Sessions
8:30–10:00 a.m.	Opening General Session
10:00–10:30 a.m.	Break in Exhibit Hall
10:00 a.m.–6:00 p.m.	Exposition Open
10:00 a.m.–noon	Technical Sessions
noon–1:30 p.m.	Luncheon in Exhibit Hall
1:30–5:00 p.m.	Technical Sessions
3:00–3:30 p.m.	Break in Exhibit Hall
5:00–6:00 p.m.	Networking Reception in Exhibit Hall

### Tuesday, September 21

7:00 a.m.–3:30 p.m.	Registration Open
7:15–8:15 a.m.	Exhibit Hall Education Sessions
8:30 a.m.–noon	Technical Sessions
10:00 a.m.–1:30 p.m.	Exposition Open
10:00–10:30 a.m.	Break in Exhibit Hall
noon–1:30 p.m.	Luncheon in Exhibit Hall
1:30–5:00 p.m.	Technical Sessions

### Wednesday, September 22

8:00 a.m.–noon	Technical Tours
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### Who Attends–DSS

- Distribution Specialists
- Managers
- Designers & Engineers
- Project/Program Managers
- Operators
- Executive Management

### Who Attends–Water Security Congress

- Utility Security Specialists
- Executive Management
- Managers
- Designers & Engineers
- Project/Program Managers



WSC  
2010

## Preliminary Professional Program

Please note that the Distribution Systems Symposium (DSS) and Water Security Congress programs have been combined to illustrate the added value to the attendee.



## Continuing Education Units (CEUs) and Professional Development Hours (PDHs)

AWWA is pleased to offer attendees CEUs for several workshops, exhibit hall education sessions, and technical sessions; and PDHs for the exposition and technical tours. If you wish to take advantage of the opportunity to earn CEUs and PDHs, visit [www.awwa.org/ceupdh](http://www.awwa.org/ceupdh) for more information.

## Sunday, September 19

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### SUN1—Reducing Water Loss: Getting Real ... Then Getting Even

8:00 a.m.—4:00 p.m.

Moderator: Jerry Anderson

This interactive workshop will help participants learn to assess and control water losses from transmission and distribution pipeline systems. Field detection of leaks and repair methods will be presented, along with associated costs. Water audit software based on AWWA M36 will be used with leak-detection case studies to provide participants an understanding of structured leak-detection programs and methodical real-loss reductions. Results of leak surveys and repair costs will be compared with the value of water saved to develop benefit–cost analyses. Leakage problems will be used to help participants frame real utility leakage survey data and repair issues.

### SUN2—Valve and Hydrant Maintenance Workshops

8:30 a.m.—4:30 p.m.

Moderator: Marlay Price

Participants in this instructional workshop will learn the fundamentals of valve and hydrant functions, operations, and maintenance using documented resources and best practices as provided by experienced water industry professionals. The valve portion will include hands-on experience with equipment and exercises in GIS data collection and locating. The hydrant portion includes guidance for conducting a system wide fire hydrant assessment as well as instruction on hydrant assessment, maintenance, and repair. Tools and equipment will be provided.



### SUN3—Operational Resiliency

1:30 p.m.—5:00 p.m.

Moderator: Shannon Spence

The workshop will provide an overview of future legislation, the new AWWA Security and Preparedness Standards, tools in resource typing, suggestions on how to implement practical business continuity plans, and how to enhance your emergency response planning through mutual-aid agreements.

### SUN4—Excellent Security Programs Depend on People

1:30 p.m.—5:00 p.m.

Moderator: Marie C. Shadden

Marie Shadden has assembled an excellent workshop that will highlight the importance of the quality people that work for water utilities. Come in and see how they are the cornerstone for implementing and maintaining excellent security programs.



## Monday, September 20

### OGS—Opening General Session

8:30–10:00 a.m.

8:30–8:50 a.m. Welcoming Remarks: *John Donahue*, Chair DSS Planning Committee, *Ken Thompson*, Chair WSC Planning Committee, and Local Host (TBD)

8:50 a.m.—Gimmicks & Gadgets & Opflow Best Paper Awards

9:00 a.m.—Keynote Address—*Dr. Lucille Jones*, Chief Scientist, Multi-Hazard Demonstration Project, United States Geological Service

9:30 a.m.—Keynote Address—*Mr. Corey Gruber*, Assistant Deputy Administrator, FEMA National Preparedness Directorate (Invited)

### MON1—Washington News

10:00–11:00 a.m.

Moderator: **Brian Murphy**

What happens in Washington doesn't stay in Washington, so it's important you don't miss this session in which information will be presented regarding the latest regulatory initiatives being considered. This session includes an extended Q&A with AWWA's Director of Security and Regulatory Affairs, Mr. J. Alan Roberson.



### MON1—Federal and Sector Issues

10:30 a.m.—noon

Moderator: **Kevin Morley**

What's new in the federal arena related to security? Also come and learn about what some of the other sector issues are that may affect your utility.



### MON2—Hydraulic Modeling at 30,000 Feet

10:00–11:00 a.m.

Moderator: **John Donahue**

This session will focus on two case studies whereby distribution system modeling was performed to assist community leaders in developing a master plan to design and operate a major transmission main, size pumps, and analyze hydraulic performance. It will also demonstrate how hydraulic modeling can be used to identify pressure-zone boundaries and support phasing options to control capital costs during a struggling economy.



### MON2—Security and Preparedness

10:30 a.m.—noon

Moderator: **Shannon Spence**

This session will address different risk management approaches to improve physical security concurrent with improvement in cyber-security plus the basics of Business Continuity Planning, and will also provide a non classified briefing outlining the most up-to-date security-related risks and threats to water and wastewater utilities and how best to leverage WaterISAC.



### MON3—Distribution System Modeling

10:30 a.m.—noon

Moderator: **Ken Thompson**

This will be a joint session with DSS and WSC presenters. The presentations will focus on different applications of TEVA-SPOT Modeling for optimizing online water quality monitoring site locations in large distribution systems.



### MON3—Manage Your Tanks to Improve Water Quality and Operations

1:30–5:00 p.m.

Moderator: **Gerald Caron**

This session will highlight water quality issues related to distribution system water storage tanks. Case studies will be presented highlighting the importance of tank mixing, tank inspections, and how to use your tanks for energy management.



### **MON4—Green Energy Management for Water Utilities**

**1:30– 5:00 p.m.**

**Moderator: Colleen Arnold**



Sustainability is a buzz word, but this session goes beyond the buzz by providing case studies and approaches that utilities are implementing to integrate green thinking into optimized operations. Novel, money-saving approaches to energy procurement, automated operations for energy management, reducing electricity use and carbon footprints will all be addressed.

### **MON5—Infrastructure Assessment and Renewal**

**1:30–5:00 p.m.**

**Moderator: Ahmad Habibian**



Presentations include assessment of asbestos–cement and ferrous mains, acoustic leak monitoring of plastic pipes, and pipeline rehabilitation by CIPP. The session will also feature an investigation of alternatives for NYC’s Catskill Aqueduct capacity enhancement.

### **MON6—Innovative Pipeline Design and Construction**

**1:30–5:00 p.m.**

**Moderator: Gary Hoffman**



Case studies include designing pipe systems underwater for various pressure conditions, planning water main rehabilitation and replacement around seasonal water demands, and booster pumping into a closed distribution system. Research topics include premature failure of plastic piping systems and assessment of potential failure of underground infrastructure because of other construction projects.

### **MON4—Consequence Management**

**1:30 –5:00 p.m.**

**Moderator: Raymond A. Riordan**



Having a well-designed approach for the determination of a contamination event and an approach for response that has been tested is essential for an effective CWS program. Learn and leverage new techniques being developed by utilities.

### **MON5A—Federal Policies and Guidelines**

**1:30–3:00 p.m.**

**Moderator: Rob Hulshouser**



What are the new federal policies and guidelines for water security that we need to be planning for? Come learn what is happening on Capitol Hill these days and what can be expected in the near future.

### **MON5B—Lessons Learned**

**3:30–5:00 p.m.**

**Moderator: Rob Hulshouser**



Utilities in North America are implementing a number of innovative approaches for security programs. The presentations will provide new tools that can easily be adapted for your utility needs without reinventing the wheel.

### **MON6—Decontamination/Lab Consumer Complaints**

**1:30–5:00 p.m.**

**Moderator: Ken Thompson**



This session will focus on two key areas for implementing successful contamination warning system projects. Learn about a most apparent emerging area of decontamination practices and new laboratory techniques. Customers have always been a critical signaling factor utilities have used for detecting events. These presentations will focus on how to leverage customer information rapidly for identifying contamination events.



September 19–22, 2010  
 Gaylord National Hotel & Convention Center  
 National Harbor, Maryland  
 Registration Form

Please cut along dotted line before faxing this form.

AWWA Member No. \_\_\_\_\_  Individual  Organization

First Name (FOR BADGE) \_\_\_\_\_ M.I. \_\_\_\_\_ Last Name \_\_\_\_\_

Title \_\_\_\_\_

Company or Organization \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_

State/Prov. \_\_\_\_\_ Country \_\_\_\_\_ ZIP/Postal Code \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_

Name of Registered Spouse/Guest (extra cost) \_\_\_\_\_

**Q** Check here if you have a disability and may require special accommodation to fully participate. You will be contacted by AWWA.

**Q BUSINESS AND INDUSTRY** Please circle the description below that best describes you.

- A. Public Water Supply Utility—Municipally Owned
- B. Public Water Supply Utility—Investor Owned
- C. Governmental-Federal, State, Local
- D. Consultant
- E. Contractor
- F. Private Industrial systems or Water Wholesaler
- G. Manufacturer of Equip & Supplies including Reps
- H. Distributors of Equip & Supplies
- I. Ed. Inst. Faculty
- J. Fully Retired
- K. Research Lab
- L. Other

**Registration** Check the items below for which you are registering.  
**Preconference Workshops (include Sunday reception)**

- SUN1** Reducing Water Loss (Full day with lunch).....\$225
- SUN2** Fire Hydrant & Valve Maintenance (Full day with lunch).....\$325
- SUN3** Operational Resiliency (Half day—no lunch).....\$150

**Member registering on or before 8/19/10**      **Nonmember & Member registering on or after 8/20/10**

SUN4 Operational Resiliency (Half day—no lunch) .....\$150  
 SUN4 Excellent Security Programs (Half day—no lunch) .....\$250

**Technical Sessions and Exposition**

**My main focus is**  **DSS**  **Water Security Congress**

- A** Full-Conference (does not include workshops; includes Monday & Tuesday lunches & Sunday and Monday receptions) .....\$540
- B** Monday Only (Includes Monday lunch and Monday reception) .....\$330
- C** Tuesday Only (Includes Tuesday lunch) .....\$330
- G** Exhibits Only.....\$60
- H** Student (same as Full-Conference).....\$60
- P** Speaker (40% discount off of a Full-Conference Registration).....\$325

**Additional Options**

- SA** Spouse/Guest Registration (includes admittance to Exhibit Hall and Sunday and Monday receptions).....\$35
- Q** New Member/New Attendee Program ..... No cost

**Total \$** \_\_\_\_\_ **Total \$** \_\_\_\_\_

**Method of Registration Payment (US funds only)**

Registration forms **MUST** be accompanied with payment or a photocopy of purchase order.

Check (make checks payable to AWWA in US funds)

American Express  Discover  MasterCard  VISA  P.O. # \_\_\_\_\_

Credit Card No. \_\_\_\_\_ Expiration Date \_\_\_\_\_

Signature \_\_\_\_\_

**Cancellation Policy**

On or before 8/19/10: 25% administrative fee will be deducted from refund for registration cancellation. This is also the cutoff date for advance registration pricing. On or after 8/20/10: No refunds will be granted for cancellation. However, substitute registrants are welcome. Fax substitute information to 303.347.0804.

To register, visit  
 awwa.org/conferences  
 and submit online or complete this  
 registration form and fax or mail it with full  
 payment or credit card information

FAX 303.347.0804  
 AWWA—DSS/Water Security  
 6666 West Quincy Avenue  
 Denver, CO 80235-3098  
 Questions? Call 800.926.7337



## Tuesday, September 21

### TUE1—Optimize Distribution System Water Quality

8:30 a.m.—noon

Moderator: Charly Angadicheril



Presentation topics include optimization of water quality in the distribution system with proper monitoring and utilizing modern techniques, using GIS to improve a unidirectional flushing program, and maintenance of water quality to meet current and proposed regulations.

### TUE2—Serving the Customer—Improving Meter Performance and Cross Connection Control

8:30 a.m.—noon

Moderator: Gregg Kirmeyer



Presentation topics include assessing the effects of age and wear, understanding the benefits of electronic meters, and using 3G communications technology for improved metering telemetry. Cross-connection control regulations in various states, private industry responsibilities for cross connection control, and establishing industry best management practices will be addressed. Guidance on performing surveys of an industrial complex and experience and lessons learned from enhancing a cross-connection control program will be presented.

### TUE3—Capital Investment Priority Planning

8:30 a.m.—noon

Moderator: Colleen Arnold



This session includes a diverse selection of presentations on both detailed methodologies for prioritizing infrastructure renewal and replacement along with pertinent utility case studies. Integrating data from various applications (GIS, CMMS, etc.), consideration of new risk-based and condition data, and approaches for tying everything together to develop a defensible and cost-effective capital improvement plan will be presented.

### TUE1—WARN/Regional Exercises/Lessons Learned

8:30 a.m.—noon

Moderator: Kevin Morley



Learn about the advances across the nation in the WARN Program. There will also be presentations on regional response exercises and lessons learned from utilities and response partners.

### TUE2—Physical Security

8:30 a.m.—noon

Moderator: Jack W. Moyer



Focusing on physical security, presentations include several utility case studies, a review of means to measure success in physical security, and the role of consumer complaints in water security management

### TUE3—Utility Case Studies

8:30 a.m.—noon

Moderator: Jerry J. Scott



Presentations include updated utility case studies on contamination warning systems. The session will also feature enhanced distribution system monitoring and implications for system security.



**TUE4—Tools and Processes  
to Improve System Operations**  
8:30 a.m.–noon  
**Moderator: Jerry Anderson**



Presentations include using network models, digital data systems, and break and leak history to stage construction projects, assess risks, and increase productivity. Also, best practices for distribution system O&M programs will be investigated.

**TUE4A—Health Response**  
1:30–3:00 p.m.  
**Moderator:**  
**Madeline F. Goddard**



Presentations include tools to develop an emergency water supply for hospital and health care facilities and how a utility can prepare for the pandemic flu. The session will also present the results of a “drive-through” emergency supply distribution.

**TUE5—Making the Most  
of Your Hydraulic Model**  
1:30–5:00 p.m.  
**Moderator: John Donahue**



Presentations provide insight on practical approaches for developing a hydraulic model of water distribution systems including the integration of GIS and the use of hydrant tests to help in model calibration. Examples of the use of hydraulic modeling to evaluate the effect of water hammer and a system-wide transient analysis are also included.

**TUE4B—All Hazards/BCP**  
3:30 –5:00 p.m.  
**Moderator: Madeline F. Goddard**



Presentations will provide a business case for business continuity plans for all hazards, not just security, and how to get started in developing a plan for the utility and the community.

**TUE5—Chlorine/Cyber  
Security**  
1:30–5:00 p.m.  
**Moderator: Ken Thompson**



This will be a split session between presentations associated with the upcoming changes in the CFATS federal legislation and challenges utilities face in protecting their Cyber/IT applications (i.e., SCADA, business, security)

**TUE6—Optimizing Operations  
to Reduce Energy Demand**  
1:30–5:00 p.m.  
**Moderator: Brian Murphy**



This session complements the Monday Energy session with presentations focused on specific operational tools for reducing energy demand, as well as tapping into a renewable energy source already present in some pipe networks. Topics include optimizing pump operations through epoxy coatings and variable speed drives, using models to optimize pump operation, and harnessing the existing hydro-energy in over-pressurized distribution systems.

**TUE6A—On-line Water  
Quality Monitoring**  
1:30–3:00 p.m.  
**Moderator: Shannon Spence**



This session will include two case studies on two utilities’ experience with implementing their Event Detection Systems (EDS). In addition, preliminary results from the US Environmental Protection Agency’s EDS challenge will be presented.

**TUE6B—OWQM**  
3:30–5:00 p.m.  
**Moderator: Shannon Spence**



This session will include case studies addressing one utility’s experiences in executing its EDS Requirements Analysis and another’s with executing an exercise with its Emergency Water Quality Sampling Kits. In addition, the testing results from USEPA’s Technology Testing and Evaluation Program’s evaluation of several total organic carbon and ultraviolet spectrometry instruments will be provided.

**TUE7—Water Audits & Meter Accuracy: A Utility's Best Friend**  
1:30–5:00 p.m.  
Moderator: **John Van Arsdel**



This session will help attendees understand how to gain control of non revenue water by determining where the losses are through the use of information management and water audits. The session will also present results of water meter accuracy testing conducted through the Water Research Foundation and strategies for reducing real losses by managing a utility's "cash register," its water meters.

**TUE8—Moving and Storing Water**  
1:30–5:00 p.m.  
Moderator: **Richard Hope**



Presentations address design issues for water pumping stations and storage facilities. An overview of the fundamentals of pump station design is followed by case studies of the design of three pump stations. The final two presentations provide a summary of key issues to be included in the design of water storage tanks.



# Conference Extras

## Networking Receptions

Sunday, September 19, 4:00–6:00 p.m.  
Monday, September 20, 5:00–6:00 p.m.

Greet old friends and make new ones at two special networking receptions for all registered attendees and guests. The receptions offer a great way to network with other professionals in a relaxed and informal atmosphere. One complimentary drink ticket will be provided for each reception. Light hors d'oeuvres will be served, and additional beverages will be available for purchase.



## New Member/ New Attendee Program

Sunday, September 19, 4:00–4:30 p.m.

If you're new to the conference, the water industry, or AWWA and would like to learn more about them, plan to attend the New Member/New Attendee Program. Participants can meet each other and get useful tips on getting the most out of the conference. Please indicate on your registration form that you will attend the program.



## Combined Exhibit Hall

New in 2010, a combined exhibit hall! Learn about service providers and manufacturers within the distribution and security industries together, in one place.

## Exposition Hours

Sunday, September 19 4:00– 6:00 p.m.  
Monday, September 21 10:00 a.m.–6:00 p.m.  
Tuesday, September 20 10:00 a.m.–1:30 p.m.



## National Harbor, MD

Rising from the banks of the Potomac, just south of the Woodrow Wilson Bridge, is National Harbor. This brand-new, 300-acre development offers tree-lined promenades with scores of the region's most exciting destinations for shopping and dining.

This expansive waterfront includes dynamic marinas, electrifying outdoor concerts, interactive art and other signature events, all within steps of the historic Potomac River.

### Hotel Information

**Gaylord National Hotel and Convention Center**  
201 Waterfront Street  
National Harbor, MD 20745

Just minutes outside of Washington, DC, Gaylord National Hotel & Convention Center offers visitors to the Capital region everything they are looking for in a vacation, weekend getaway, business trip or just a night out. AWWA has secured a block of rooms at the special conference rate of \$151 plus resort fee and applicable taxes per night. A resort fee of \$15.00 per night will be in effect and covers such amenities as in-room Internet access, fitness center access, local shuttle, and more.



## Three Ways to Reserve Your Hotel Room

**Housing Reservation Deadline: Thursday, August 19, 2010**

### Register Online:

When you make your hotel reservation online, you will not only experience real-time reservations, you'll also get immediate confirmation of your reservation. Visit [www.awwa.org](http://www.awwa.org) to make your hotel reservation online in real time.

### Register by Fax:

Complete the Attendee Housing form located at [www.awwa.org/DSSWSC](http://www.awwa.org/DSSWSC) and fax it to the AWWA Housing Bureau at 310.649.3554. Do not fax the form to AWWA.

### Register by Mail:

Complete the Attendee Housing Form located at [www.awwa.org/DSSWSC](http://www.awwa.org/DSSWSC) and mail it to the AWWA Housing Bureau, c/o Par Avion, 6033 W. Century Blvd., #780, Los Angeles, CA, 90045. Do not mail the form to AWWA.

All rooms require a credit card deposit in the amount of one night's lodging. This deposit is nonrefundable if you are a no-show. Refunds of deposits will be made only on cancellation requests received 72 hours prior to the day of scheduled arrival. Reservation requests received after Thursday, August 19, 2010, will be accepted on a space-available basis at the hotel's prevailing rates, if rooms remain.

# Three Ways to Register

## To register online:

Visit the Web at  
[www.awwa.org/DSSWSC/REGISTER](http://www.awwa.org/DSSWSC/REGISTER)

## To register by fax:

Complete enclosed registration form—with full payment by credit card— and fax to 303.347.0804. To avoid duplicate charges, do not mail the original of the faxed form.

## To register by mail:

Complete enclosed registration form and mail with full payment by check or credit card to: AWWA—DSS/Water Security Congress  
6666 West Quincy Avenue  
Denver, CO 80235-3098

- A confirmation will be mailed to all registrants whose registration is received by AWWA by Thursday, August 19, 2010
- Registrations cannot be processed without payment or government purchase order.

## Cancellation Policy

Registration cancellations and requests for refunds must be made in writing. Please keep the following deadlines in mind:

**August 19, or before:** A 25% administrative cancellation fee will be deducted from refund for cancellation.

**After August 19:** No refund will be granted for cancellation. However, substitute registrants are welcome. Fax your request for substitutions to 303.347.0804.

## IMPORTANT INFORMATION

Information such as the Housing Form, Registration Form, Planning Committee, and other specific details can be found at [www.awwa.org/conferences/distribution](http://www.awwa.org/conferences/distribution). If you have questions or need assistance registering, please contact Customer Service at **1.800.926.7337**.



## CONFERENCE TOUR INFORMATION

will be made available online.



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6666 West Quincy Avenue  
Denver, CO 80235-3098  
T 800.926.7337  
www.awwa.org



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[www.awwa.org/DSSWSC/REGISTER](http://www.awwa.org/DSSWSC/REGISTER)

**1.800.926.7337**

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