

A National Conference

**Tools for Urban
Water Resource Management
& Protection**

February 7-10, 2000

Cosponsored by:

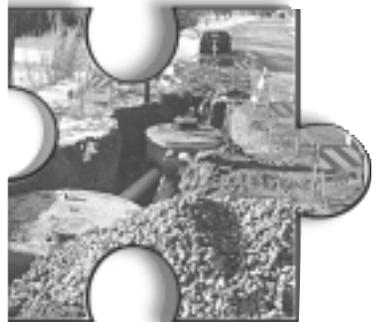
Chicago Botanic Garden

U.S. Environmental Protection Agency
Office of Wastewater Management; Washington, D.C.
Region 5; Chicago, Illinois

Northeastern Illinois Planning Commission

In cooperation with:

Water Environment Federation



A National Conference

Tools for Urban Water Resource Management & Protection

February 7-10, 2000

Overview

A wide array of effective water quality management and protection tools have been developed for urban environments—but their implementation is being hampered by a lack of technology transfer opportunities. This national conference, **Tools for Urban Water Resource Management & Protection**, is designed to facilitate the educational process and transfer state-of-the-art information to state, regional, and local urban water quality practitioners.

The timing of this conference coincides well with the U.S. EPA's anticipated release of the Phase II NPDES Storm Water Program final rules in late 1999. The conference will provide participants with practical, applied information on the most effective tools and technologies for meeting these new NPDES permit requirements. Presentation topics have been carefully chosen to reflect the Phase II Program's six priorities: public education, public involvement, detection and elimination of illicit discharges, construction site runoff control, post-construction stormwater management, and pollution prevention for municipal operations. The conference sessions feature progressive scientists and researchers, along with managers of successful projects from across the country.

On Monday, February 7, two special pre-conference workshops will be held. **Better Site Design & Stormwater Management Techniques for Phase II Communities** will explore the benefits of alternative urban site design approaches, as well as new advances in stormwater management to protect water resources. Your workshop instructors are nationally renowned: Thomas R. Schueler and staff from the Center for Watershed Protection. The second pre-conference workshop, **Introduction to Urban TMDLs**, examines current and pending requirements of Total Maximum Daily Load (TMDL) programs. Your leaders for this workshop are staff from Tetra Tech, Inc., who have conducted numerous training workshops on development and application of TMDLs.

Registration

The conference registration fee is \$195. Registration includes three luncheons, three breakfasts, refreshment breaks, a terrific "Taste of Chicago" reception on Tuesday evening, written materials, and conference proceedings. There are no discounts available for single-day registrations, students, or members of the Chicago Botanic Garden. There is an additional registration fee for each of the pre-conference workshops (you may attend only one since each is an all-day program). Workshop registration includes breakfast, lunch, and written materials. You may register for a workshop without attending the full conference.

IMPORTANT NOTES

Register early—conference and workshop registration is limited! Registrations will be accepted and confirmed on a first-paid basis. A \$25 late fee applies if we do not receive your full payment by January 14. Written materials and meal functions may not be guaranteed for walk-in registrants, or pre-registrants not forwarding payment by January 31. Payment may be made by check (mail) or charged to Visa, MasterCard, or Discover (fax or mail). Sorry, we are not able to invoice you for the registration fee. Telephone registrations or purchase orders will not be accepted. Cancellations are subject to a \$40 processing fee. No cancellations (substitutions only) after January 31.

LOCATION

The Westin Michigan Avenue—in the very heart of downtown Chicago's "Magnificent Mile" and across from the famous Water Tower Place shopping mall and entertainment district. Exceptionally discounted conference rate is \$103 single/\$123 double. **You must make reservations by January 14 to ensure availability.** Call 1-800/WESTIN-1 and mention "Urban Conference" to receive this rate. The Westin is at 909 N. Michigan Ave.; the hotel's local telephone number is 312/943-7200. To preview the amenities, visit the hotel's Web site at <www.westinmichiganave.com>.

The hotel is easily accessible from Chicago's O'Hare and Midway Airports. Compare ticket prices and airlines servicing each airport—often there are significant differences. Information on ground transportation and Chicago's cultural attractions will be forwarded with your conference registration confirmation package.

QUESTIONS?

For registration information, contact the Chicago Botanic Garden's Education Registrar (telephone: 847/835-8365). For other questions relating to the conference, contact Bob Kirschner at the Chicago Botanic Garden (telephone: 847/835-6837; e-mail: bkirschn@chicagobotanic.org).

Monday, February 7

8:00 a.m Workshop Registration and Breakfast

9:00 a.m. –
4:30 p.m.

Pre-Conference Workshop #1

Note: \$95 additional registration fee; includes breakfast and lunch.

BETTER SITE DESIGN & STORMWATER MANAGEMENT TECHNIQUES FOR PHASE II COMMUNITIES

Instructors: Thomas R. Schueler, Richard A. Claytor, Chris P. Swann, and Jennifer A. Zielinski;
Center for Watershed Protection, Ellicott City, Md.

This pre-conference workshop begins with a review of the 20 model land development principles to reduce impervious cover, conserve natural areas, and provide more effective stormwater treatment at development sites. The principles were developed by a national consortium of environmental and development interests, and they respond to economic, marketability, liability, public safety, and other community concerns. Four actual development case studies are presented to document the benefits of better site design in terms of cost, runoff, nutrient loads, and environmental resources. The case studies include low- and medium-density residential developments, office parks, and shopping centers.

During the afternoon, workshop participants will learn about new advances in stormwater management to protect water resources. The session includes an overview of the unified stormwater sizing criteria for water quality, groundwater recharge, stream channel protection, overbank flooding, and extreme storms. The session also reviews acceptable structural and non-structural practices to meet these criteria, along with simplified guidance on selecting the most appropriate practices for individual sites. Incentives for incorporating better site design into stormwater plans will be discussed. Finally, two design examples will be provided for participants to apply what they have learned at real-world development sites.

Workshop Registration and Breakfast

Pre-Conference Workshop #2

Note: \$125 additional registration fee; includes breakfast and lunch

INTRODUCTION TO URBAN TMDLS

Instructors: Leslie Shoemaker, Mohammed Lahlou, and Jim Parker; Tetra Tech Inc., Fairfax, Va.

This pre-conference workshop is designed for those interested in how Total Maximum Daily Loads (TMDLs) can be developed for predominantly urban areas. The workshop begins with a general overview of current and pending requirements of the TMDL program. Case studies and illustrations will be used to describe the TMDL development process, highlight issues requiring special consideration, and examine the range of acceptable methods. As we discuss TMDLs in an urban setting, attention will be directed toward specific pollutants, the types of appropriate analysis and models, as well as regulatory aspects associated with implementation.

The workshop is intended for professionals who may be developing, reviewing, or implementing TMDLs. The program content is applicable to urban areas across the country. No particular background is required, although a general knowledge of environmental regulations, hydrology, and water quality would be helpful. There will be ample opportunity for questions and discussion.

8:00 a.m

9:00 a.m. –
4:30 p.m.

Tuesday, February 8

7:30 a.m. –
5:00 p.m.

CONFERENCE REGISTRATION

7:30 – 8:55 a.m.

CONTINENTAL BREAKFAST

9:00 – 9:30 a.m.

WELCOMES & OPENING REMARKS

Barbara Whitney Carr; President and Chief Executive Officer, Chicago Botanic Garden, Glencoe, Ill.

Francis X. Lyons; Regional Administrator (invited), U.S. Environmental Protection Agency – Region 5, Chicago, Ill.

Ronald L. Thomas, AICP; Executive Director, Northeastern Illinois Planning Commission, Chicago, Ill.

9:30 – 10:30 a.m.

KEYNOTE ADDRESS

Future Direction of U.S. EPA's Urban Wet Weather Programs

J. Charles Fox; Assistant Administrator for Water, (invited), U.S. Environmental Protection Agency, Washington, D.C.

10:30 – 10:45 a.m.

BREAK

10:45 a.m. –
12:00 noon

OPENING PLENARY

Making Urban Waters Safe for Recreation

Cameron Davis; Executive Director, Lake Michigan Federation, Chicago, Ill.

Kathleen M. Baskin; Project Director, Charles River Watershed Association, Newton, Mass.

Mark A. Gold; Executive Director, Heal the Bay, Santa Monica, Calif.

12:00 – 1:30 p.m.

LUNCHEON

The Rising of the Skyscraper

Lynn Osmond; President, Chicago Architecture Foundation, Chicago, Ill.

USING MONITORING TO SET PROGRAM PRIORITIES

1:30 – 3:00 p.m.
Session A

Jordan Cove Urban Watershed National Monitoring Project

Melville P. Cote, Jr.; U.S. Environmental Protection Agency – Region 1, Boston, Mass.

Sources of Phosphorus in Stormwater and Street Dirt from Two Urban Residential Basins in Madison, Wisconsin

Roger T. Bannerman; Wisconsin Department of Natural Resources, Madison, Wis.

Using Biological Criteria to Assess and Classify Urban Streams and Develop Improved Landscape Indicators

Chris O. Yoder; Ohio Environmental Protection Agency, Columbus, Ohio

WATER QUALITY RETROFIT TOOLS FOR URBAN AREAS

Session B

Getting Past the Obvious

Robbin B. Sotir; Robbin B. Sotir & Associates, Inc., Marietta, Ga.

Protecting and Enhancing Urban Waters: Using All the Tools Successfully

Eric H. Livingston; Florida Department of Environmental Protection, Tallahassee, Fla.

Urban Stream Structure and Selection of Structures to Build Habitat That Support Native Fish Populations

Douglas T. Sovern; URS Greiner Woodward Clyde, Seattle, Wash.

BREAK

3:00 – 3:30 p.m.



3:30 – 5:00 p.m
Session A

INFILTRATION & ILLICIT CONNECTIONS

Lessons Learned About Successfully Using Infiltration Practices
Eric H. Livingston; Florida Department of Environmental Protection, Tallahassee, Fla.

Potential New Tools for Indicating Inappropriate Dry Weather Discharges to Storm Drainage Systems
Robert E. Pitt; The University of Alabama at Birmingham

Elimination of Illicit Connections in Coastal New Hampshire Spurs Cooperation and Controversy
Natalie E. Landry; New Hampshire Department of Environmental Services, Concord, N.H.

Session B

STAKEHOLDER & COMMUNITY INVOLVEMENT IN LOCAL STORMWATER MANAGEMENT

Using Collaborative Problem-Solving to Protect North Carolina's Coastal Resources: The Experience of the White Oak River Advisory Board
Leon E. Danielson; North Carolina State University, Raleigh, N.C.

Community Responses to Stormwater Pollution: Case Study Findings with Examples from the Midwest
George P. Aponte Clarke; Natural Resources Defense Council, New York, N.Y.

Integrated Urban Stormwater Master Planning
Eric W. Strecker; URS Greiner Woodward Clyde, Portland, Ore.

5:00 – 6:30 p.m

Taste of Chicago HOSPITALITY RECEPTION

CONFERENCE REGISTRATION

CONTINENTAL BREAKFAST

SITE PLANNING & DESIGN FOR WATER QUALITY IMPROVEMENT: APPROACHES

Conservation Design: Maximizing Prevention for Water Quality Improvement: Approaches

Wesley R. Horner; Brandywine Conservancy, Chadds Ford, Pa.

Start at the Source: A Design Guidance Manual for Stormwater Quality Protection Including Commercial, Industrial, and Institutional Development Site Planning

Thomas Dalziel; Contra Costa Clean Water Program, Martinez, Calif.

Low-Impact Development Design: A New Paradigm to Stormwater Management

Larry S. Coffman; Prince George's County, Largo, Md.

TOOLS FOR SELECTING BEST MANAGEMENT PRACTICES (BMPs)

A National Menu of BMPs for the Phase II NPDES Storm Water Program

James H. Collins; Tetra Tech, Inc., Fairfax, Va.

Determining Urban Stormwater BMP Effectiveness

Eric W. Strecker; URS Greiner Woodward Clyde, Portland, Ore.

Texas Nonpoint SourceBOOK Is Now On-Line!

John Promise; North Central Texas Council of Governments, Arlington, Texas

BREAK

SITE PLANNING & DESIGN FOR WATER QUALITY IMPROVEMENT: CASE STUDIES

A Comparison of the Long-Term Hydrological Impacts of Urban Renewal vs. Urban Sprawl

Jon Harbor; Purdue University, West Lafayette, Ind.

Comparative Nutrient Export and Economic Benefits of Conventional and Better Site Design Techniques

Jennifer A. Zielinski; Center for Watershed Protection, Ellicott City, Md.

Predicting Erosion Rates on Construction Sites Using the Universal Soil Loss Equation in Dane County, Wisconsin

Jeremy D. Balousek; Dane County Land Conservation Department, Madison, Wis.

7:30 a.m. – 5:00 p.m

7:30 – 8:25 a.m.

8:30 – 10:00 a.m.
Session A

Session B

10:00 – 10:30 a.m.

10:30 – 12:00 noon
Session A

Wednesday, February 9

Session B	PUBLIC INVOLVEMENT Public Involvement Programs That Support Water Quality Management Josephine A. Powell; Wayne County Department of Environment, Detroit, Mich. The Water-Wise Gardener Program: Teaching Nutrient Management to Homeowners Marc T. Aveni; Virginia Cooperative Extension, Manassas, Va. The Chicago Wilderness Program: Toward a Regionwide Conservation Culture John D. Rogner; U.S. Fish and Wildlife Service, Barrington, Ill.	BREAK	3:00 – 3:30 p.m.
12:00 – 1:30 p.m.	LUNCHEON Community-Based Disaster Resistance and Stormwater Management: What Do They Have In Common? Maria J. Vorel; National Director, Project Impact, Federal Emergency Management Agency, Washington D.C.	NEW TECHNOLOGIES Use of a Continuous Deflection Separation (CDS) Unit for Sediment Control in Brevard County, Florida Gordon B. England; Brevard County Stormwater Utility, Viera, Fla. Use of Automated Technologies in Watershed Management Planning Daniel R. Cook; Lake County Stormwater Management Commission, Libertyville, Ill. Sediment and Runoff Control on Construction Sites Using Four Applications of Polyacrylamide Mix Aicardo Roa-Espinosa; Dane County Land Conservation Department, Madison, Wis.	3:30 – 5:00 p.m. Session A
1:30 – 3:00 p.m. Session A	NUTRIENT & PESTICIDE MANAGEMENT A Survey of Nutrient Behavior Among Urban Residents in the Chesapeake Bay Watershed Chris P. Swann; Center for Watershed Protection, Ellicott City, Md. Lawn Care and Water Quality: Finding the Balance Jerry Spetzman; Minnesota Department of Agriculture, St. Paul, Minn. The San Francisco Bay Area's Pesticide Toxicity Reduction Strategy Geoff Brosseau; Bay Area Stormwater Management Agencies Association, Oakland, Calif.	INSPECTION & ENFORCEMENT TOOLS Construction Site Planning and Management Tools for Water Quality Protection Thomas E. Mumley; California Regional Water Quality Control Board, Oakland, Calif. Regulating Sedimentation and Erosion Control for Streams: What Really Works and Why? Seth R. Reice; University of North Carolina at Chapel Hill, Chapel Hill, N.C. Effectiveness in Erosion and Sediment Control: New Initiatives in Indianapolis Greg H. Lindsey; Indiana University, Indianapolis, Ind.	Session B
Session B	CASE STUDIES IN PLANNING & IMPLEMENTATION Administering the NPDES Industrial Stormwater Program at the Municipal Level Michael J. Pronold; City of Portland, Portland, Ore. Planning to Protection: The Ulao Creek Abstract from the Ulao Creek Stormwater Management Plan Brian A. Lennie; Bonestroo, Rosene, Anderlik and Associates, Mequon, Wis. Lessons Learned from Three Watershed-Sensitive Development Demonstration Projects in the Great Lakes Basin Sarah Bennett Nerenberg; The Conservation Fund, Chicago, Ill.	SPECIAL EVENING DISCUSSION SESSION The Final Storm Water Phase II Rule: Issues and Questions John Kosco, Project Director of the U.S. EPA's Storm Water Phase II "Implementation Toolbox," will review the recently released final rules under the Phase II program. Session participants then will have an opportunity to raise issues, share concerns, and ask questions relating to the program's implementation.	7:30 – 9:30 p.m.

Thursday, February 10

7:30 – 8:25 a.m. CONTINENTAL BREAKFAST

8:30 – 10:00 a.m. URBAN WETLAND MANAGEMENT
Session A

Using Constructed Wetlands to Reduce Nonpoint Source Pollution in Urban Areas

Jon Harbor; Purdue University, West Lafayette, Ind.

Advanced Identification (ADID) Techniques Used to Protect Wetlands and Water Resources in a Rapidly Growing County

Dennis W. Dreher; Northeastern Illinois Planning Commission, Chicago, Ill.

Local Government Involvement in Mitigation Banking

Lisa T. Morales; U.S. Environmental Protection Agency, Washington, D.C.

Session B MUNICIPAL STORMWATER PROGRAMS

Development, Implementation, and Refinement of the Massachusetts Stormwater Management Policy/Regulations

Bethany Eisenberg; Vanasse Hangen Brustlin, Inc., Watertown, Mass.

Implementation of Michigan's Voluntary Storm Water Permit: A Community Perspective

Kelly A. Cave; Wayne County Department of Environment, Detroit, Mich.

California's Model Urban Runoff Program (MURP): A How-To Guide for Developing Urban Runoff Programs for Small Municipalities

Jennifer A. Hays; City of Monterey, Calif.

10:00 – 10:30 a.m. BREAK

10:30 a.m. – 12:00 noon STORMWATER BMPs
Session A

New Stormwater Treatment BMPs: Determining Acceptability to Local Implementing Agencies

Gary R. Minton; Resource Planning Associates; Seattle, Wash.

By Any Measure...

Thomas Adams; Vortech, Portland, Maine

Stormceptor Hydrology and Nonpoint Source Pollution Removal Estimates

Graham Bryant; Stormceptor Canada, Inc., Etobicoke, Ontario

STORMWATER PROGRAM COSTS AND FUNDING

Session B

NPDES Phase II Program Cost Estimates

Andrew J. Reese; Ogden Environmental and Energy Services, Inc., Nashville, Tenn.

The Stormwater Utility Concept in the Next Decade (Forget the Millennium)

Hector J. Cyre; Water Resource Associates, Inc., Kirkland, Wash.

Reducing Erosion Problems from Land Development: An Economic Incentive for Erosion Control

Martha C. Herzog; U.S. Geological Survey, Reston, Va.

LUNCHEON

12:00 – 1:30 p.m.

After the Final Stormwater Phase II Rule: What's Next?

Charles H. Sutfin; Director, Water Permits Division, Office of Wastewater Management, U.S. Environmental Protection Agency, Washington, D.C.

CONFERENCE ADJOURNMENT

1:30 p.m.

Conference Planning Committee

Robert J. Kirschner

Conference Coordinator; Chicago Botanic Garden, Glencoe, Ill.

Thomas E. Davenport

Project Co-Officer; U.S. Environmental Protection Agency—Region 5, Chicago, Ill.

John A. Kosco

Project Co-Officer; U.S. Environmental Protection Agency, Washington, D.C.

Deborah S. Caraco

Center for Watershed Protection, Ellicott City, Md.

Martin H. Kelly

Southwest Florida Water Management District, Brooksville, Fla.

Thomas E. Mumley

California Regional Water Quality Control Board, Oakland, Calif.

Eric W. Strecker

URS Greiner Woodward Clyde, Portland, Ore.





Tools for Urban Water Resource Management & Protection



February 7-10, 2000 ▪ The Westin Michigan Avenue ▪ Chicago, Illinois

Name _____

Division/Department _____

Organization _____

Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ E-mail _____

(please PRINT e-mail address carefully!)

Your **first name** as you want it to appear on name badge: _____

Registration Fees:

check appropriate box(es)

\$95 Pre-Conference Workshop #1 “Better Site Design...” (Monday, February 7) (COL1001)

\$125 Pre-Conference Workshop #2 “Urban TMDL Development...” (Monday, February 7) (COL1002)

\$195 “Tools for Urban Water Resource Conference” (Tuesday – Thursday, February 8 – 10) (COL100)

Total Enclosed \$ _____

(add \$25 late fee if full payment not received by January 14)

Charge to: VISA MasterCard Discover

Card #: _____

Signature: _____ Expires: _____

Make check payable to: Chicago Botanic Garden

Do you plan to attend...

Luncheon on Tuesday, February 8? yes no (COL100LTU)

Reception on Tuesday, February 8? yes no (COL100R)

Luncheon on Wednesday, February 9? yes no (COL100LW)

Luncheon on Thursday, February 10? yes no (COL100LTH)

Check if you prefer vegetarian meals (Conference AND Workshop registrants) (COL100V)

Don't forget to make
your hotel reservations
by [January 14!](#)

If you plan to attend but expect delays in forwarding payment, please fax completed registration form and indicate how/when payment will arrive. (Note: registration is not guaranteed until payment arrives.) Mail check (mail or fax credit card charges) with this form to:

Registrar - Urban Water Quality Conference, Chicago Botanic Garden, 1000 Lake Cook Road, Glencoe, IL 60022 (fax: 847/835-6874).

Registration questions? Call the Registrar at 847/835-8365. **Other questions?** Call Bob Kirschner at 847/835-6837.