National Conference on Urban Storm Water: Enhancing Programs at the Local Level

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FOREWORD

The U.S. Environmental Protection Agency is charged by Congress with protecting the Nation's land, air, and water resources. Under a mandate of national environmental laws, the Agency strives to formulate and implement actions leading to a compatible balance between human activities and the ability of natural systems to support and nurture life. To meet this mandate, EPA's research program is providing data and technical support for solving environmental problems today and building a science knowledge base necessary to manage our ecological resources wisely, understand how pollutants affect our health, and prevent or reduce risks in the future.

The National Risk Management Research Laboratory is the Agency's center for investigation of technological and management approaches for reducing risks from threats to human health and the environment. The focus of the Laboratory's research program is on methods for the prevention and control of pollution to air, land, water, and subsurface resources; protection of water quality in public water systems, remediation of contaminated sites and groundwater; and prevention and control of indoor air pollution. The goal of this research is to catalyze development and implementation of innovative, cost-effective environmental technologies; develop scientific and engineering information needed by EPA to support regulatory and policy decisions; and provide technical support and information transfer to ensure effective implementation of environmental regulations and strategies.

This publication has been produced as part of the Laboratory's strategic longterm research plan. It is published and made available by EPA's Office of Research and Development to assist the user community and to link researchers with their clients.

> Hugh McKinnon, Acting Director National Risk Management Research Laboratory

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ABSTRACT

A wide array of effective storm water management and resource protection tools have been developed for urban environments, but their implementation continues to be hampered by a lack of technology transfer opportunities. At the national conference *Urban Storm Water: Enhancing Programs at the Local Level*, attendees learned about state-of-the-art technologies and implementation programs that have proven success in local communities.

The timing of this Conference coincided well with the implementation of U.S. EPA's Phase II NPDES Storm Water Program. Participants learned about the most effective tools and technologies for meeting these new NPDES permit requirements. Attendees included staff and engineers representing local municipalities, as well as water resource managers, conservation groups, local officials, researchers, educators, and state agency personnel.

Conference sessions featured progressive scientists and researchers, along with managers of successful projects from across the country. Two concurrent sessions—one focusing on tools and technology, the other focusing on program implementation—allowed participants to tailor the Conference experience to fit their personal educational goals.

This Conference was the fifth in a popular series of water quality specialty conferences sponsored by the U.S. Environmental Protection Agency's Region 5 Water Division office. The Chicago Botanic Garden, which is owned by the Forest Preserve District of Cook County and managed by the Chicago Horticultural Society, was pleased to coordinate the conference. Also cosponsoring the event were the U.S. Environmental Protection Agency's Office of Wastewater Management and Office of Research and Development, as well as Tetra Tech, Inc. The conference was conducted in cooperation with the Center for Watershed Protection. Approximately 350 attendees participated.

Three pre-conference workshops were held on February 17. **Smart Watersheds: Building Municipal Programs to Restore Urban Watersheds** provided practical and useful advice on how to implement "smart" watershed programs, which relate to a group of 17 municipal programs that can be integrated together at the watershed level to improve the quality of runoff and habitat in urban streams. The workshop was led by staff from the Center for Watershed Protection. The second pre-conference workshop, **Countdown to the Phase II Implementation Deadline: Putting the Final Touches on Your Storm Water Permit**, presented details that Phase II municipal programs and construction site operators need to know in order to complete their programs and storm water permit applications. Instructors for this workshop were staff from

Tetra Tech, Inc. The third pre-conference workshop, *Certified Professional in Storm Water Quality (CPSWQ) Exam Review Course*, provided participants with an understanding the CPSWQ exam's content and format. Instructors for this workshop were from Certified Professional in Erosion and Sediment Control, Inc.

This Conference Proceedings includes many of the papers presented during the conference, and a copy has been provided to each attendee. All papers included were peer reviewed. Additional copies, in either paper or CD-ROM format, are available free of charge from the U.S. Environmental Protection Agency's National Center for Environmental Publications: telephone 800/490-9198, or visit their Web site at http://www.epa.gov/ncepihom/>.

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