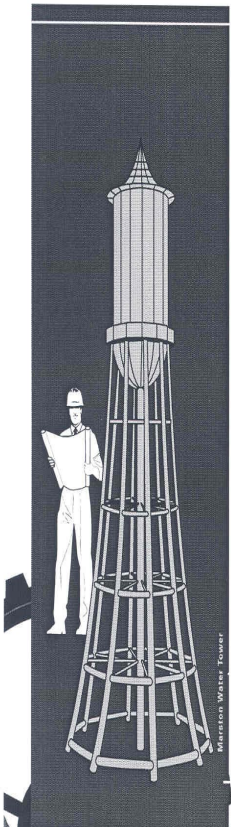


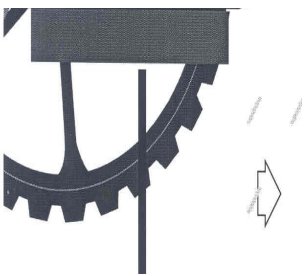
# 48th Annual ASCE Environmental and Water Resources Design Conference

Thursday, March 25, 2010

Scheman Conference Center, Iowa State University, Ames, IA



2010 ASCE Series



- *Learn more about the results of the Water Resources Coordinating Council policy recommendations to the Iowa Legislature for future flood management in Iowa.*
- *Learn more about the current status and challenges for future flood management infrastructure on the Cedar River in Cedar Rapids, Iowa.*
- *Learn more the flood recovery mapping and new floodplain mapping initiatives by the Iowa Department of Natural Resources.*
- *Receive an update on the Iowa Flood Center initiatives at the Institute of Hydraulic Research at the University of Iowa*
- *Learn more about the Rapid Watershed Assessment projects underway by the Natural Resources Conservation Service.*
- *Learn more about the procedures for using LIDAR topographic data for hydrology and hydraulics projects such as floodplain mapping and other water resources related projects.*
- *Improve your understanding of the USACE dam break and risk analysis program.*
- *Receive an update on the new Iowa Water Quality standards and anti-degradation policy.*
- *Learn more about the new Long-term CSO control plan underway in Omaha, Nebraska.*
- *Learn more about the water supply planning and a new drinking water treatment facility for the City of Council Bluffs, Iowa.*
- *Improve your understanding of the procedures and economics of dam removal on rivers in Iowa.*
- *Learn about the design procedures for porous pavement systems for urban stormwater management.*
- *Learn more about the impact of climate change and changing Iowa precipitation patterns on future water resources management in Iowa.*

## **Purpose and Scope**

The quality of life we enjoy in Iowa, both now and in the future is directly related to the quantity and quality of our water resources. Point and non-point sources of pollution continue to endanger the groundwater and surface water resources in Iowa. After the flooding in Iowa in 2008, major policy changes under development for floodplain and watershed management across the state. Iowans have experienced multiple "record" flood events across the state and Iowa's population continues the transition from more rural, small communities to larger urban areas. The challenges of managing a rapid increase in suburban growth, aging stormwater system infrastructure in our older urban areas, in addition to other land use issues, creates increased opportunities for flooding problems. Today's engineers, planners, and city governments must continue to seek new and improved methods for forecasting flood events, and be proactive in planning, designing, and implementing stormwater control systems.

This conference will focus on examining the management and engineering challenges that lie ahead in addressing the important water resources issues. The health and welfare of the people of Iowa, and the continued development of the state economy, will depend on sound and timely engineering practice and management skills to ensure protection of our vital water resources.

## **Who Should Attend**

Practicing engineers, scientists, geologists, managers, stormwater managers, developers and urban planners, and administrators from both the private and public sectors. Participants will find the conference to be timely and relevant to the water resource challenges facing Iowans in the new century. Individuals from public interest groups and the legislative arena will benefit from many of conference presentations. In addition, the conference provides opportunities for informal discussion and exchange of information among colleagues interested in the ever-changing problems in environmental engineering and water resources.

## **Sponsors**

The conference is sponsored by the Iowa Section—ASCE, and the Department of Civil, Construction, & Environmental Engineering and University Extension, at Iowa State University.

## **Location**

The conference will be held at the Scheman Continuing Education Building in the Iowa State Center complex which is located on the Iowa State University campus in Ames, IA. The Iowa State Center is located on the south-east edge of the campus. To get to the center, take the University Boulevard exit off of U.S. Hwy 30 and go north to Center Drive. Plenty of parking is available on the north side of the Scheman building.

## **Registration**

The advance registration fee for the conference is \$175 for ASCE members and \$200 for non-members, prior to March 24, 2010. An additional \$20 fee will be assessed for registrations received after March 24, 2010. All cancellations must be received by 5:00 pm on or before March 24, 2010 to receive a full refund less a \$25 cancellation fee. No refunds will be given after March 24<sup>th</sup>. Substitutions are welcome at any time. The registration fee includes all scheduled meals, refreshments and conference materials.

Send a copy of the registration form with your payment to Continuing Education and Professional Development, Iowa State University, 102 Scheman Building, Ames, IA 50011. **You may register via FAX** by calling 515-294-6223 and transmitting a copy of the completed registration form containing complete credit card information. On-line registration is also available at <http://www.uccs.iastate.edu/mnet/waterresources/home.html>.

## **Professional Development**

This conference has been planned in accordance with the criteria established by the ISBELSE for professional development hours (PDHs). A total of 6.25 PDHs are available for the conference program.

## **Conference Planning Committee:**

**Mike Ryan**, P.E., Howard R. Green Company,  
Cedar Rapids, IA; Chairman

**Roger Schletzbaum**, P.E., Marion County Engineer,  
Knoxville, IA

**Jack Reissen**, P.E.

**Rob Middelmis-Brown**, US Geological Survey,  
Iowa City, IA

**Dennis J. Keitel**, P.E., Hall and Hall Engineers, Inc.,  
Cedar Rapids, IA

**Kevin Landwehr**, P.E., Rock Island District, Corps of  
Engineers, Rock Island, IL

**Jeff McClenathan**, P.E., U.S. Army Corps of Engineers,  
Omaha District

**Andrew McCoy**, P.E., HDR Engineering, Des Moines, IA

**Dave Claman**, P.E., Iowa DOT, Ames, IA

**Stephen E. Jones**, P.E., CCEE, Iowa State University,  
Ames, IA

## **For More Information**

For questions about program content, contact Stephen Jones at 404 Town Engineering, ISU, Ames, IA 50011-3232, phone 515-294-3957, or e-mail at [sejones@iastate.edu](mailto:sejones@iastate.edu).

For registration questions, call Continuing Education and Professional Development at (515) 294-6222.

# ASCE Environmental and Water Resources Design Conference Program Agenda

**Thursday, March 25, 2010**

7:30 - 8:30 AM

**Registration and Refreshments**

## **Morning Program: Joint Session**

**Presiding:** Mike Ryan, P.E., Howard R. Green Company,  
Chairman, Environmental and Water Resources Committee, IA-section ASCE

8:25 - 8:30 AM

**Welcome and Introductory Remarks**

8:30 - 9:00

**Report on the Water Resources Coordinating Council Recommendations to the Iowa Legislature**, *William A. Ehm, Water Policy Director, Iowa Department of Natural Resources, Des Moines, IA*

9:00 - 10:00

**Flood Management Planning and Analysis on Cedar River at Cedar Rapids, IA**, *Chris Haring, PG, Project/Study Manager in Planning, Programs and Project Management Division, USACE, Rock Island, IL*

10:00 - 10:15

**Refreshment Break**

10:15 - 11:00

**Flood Recovery Maps and DNR Flood Plain Mapping Program**, *Bill Cappucio, Flood Plain Management Program, Iowa DNR, Des Moines, IA*

11:00 - 11:30

**Iowa Flood Center Program Update**, *Witold Krajewski, Ph.D., Director, Iowa Flood Center, IHR, University of Iowa, Iowa City, IA*

11:30 - 12:00

**NRCS Rapid Watershed Assessment**, *Marty Adkins, Assistant State Conservationist for Water Resources, National Resources Conservation Service, Des Moines, IA*

12:00 - 1:15 PM

**Luncheon:**

**Climate Change Trends and Impact on Water Resource Planning**, *Gene Takle, Ph.D., Director, Climate Change initiative and Professor of Atmospheric Science, Iowa State University, Ames, IA*

## **Afternoon Program: Concurrent Sessions**

### **Water Quantity Session**

1:15 - 2:30 PM

**Utilization of LIDAR for Project planning and Design: Applications for Hydrology and Hydraulics Modeling and Design**, *Norman Friedrich, P.E., NRCS, West Union, IA and Curt Fopma, NRCS, Newton, IA; Mark Land, P.E., Adam Bullerman, P.E., Snyder & Associates, Inc., Ankeny, IA*

2:30 - 3:00

**USACE Dam Break and Risk Analysis**, *Roger Kay, P.E., Supervisory Hydraulic Engineer, USACE, Omaha, NE*

### **Water Quality Session**

1:15 - 1:45 PM

**Iowa Water Quality Standards and Anti-degradation Policy**, *Chuck Corell, Chief, Water Quality Bureau Iowa DNR Water Quality Bureau*

1:45 - 2:15

**Omaha CSO - Implementing the Long Term Control Plan**, *Scott Aurit, P.E, Project Manager, HDR Engineering, Inc., Omaha, NE*

2:15 - 3:00

**Case Study: Council Bluffs Water Works South Water Treatment Plant - Planning for the Future**, *Eric Berggren, P.E., Water Program Manager, HDR Engineering, Chicago, IL*

## **Afternoon Program: Joint Session**

3:00 - 3:15

**Refreshment Break**

3:15 - 3:45

**The Economics of Dam Removal**, *Andy Selle, Inter-Fluve, Inc., Madison, WI*

3:45 - 4:30

**Design of Porous Pavement Systems for Stormwater Management**, *Stephen E. Jones, P.E., Civil Construction & Environmental Engineering, Iowa State University, Ames, IA*

4:30

Adjourn

Continuing Education and Professional Development  
102 Scheman Building  
Ames, Iowa 50011  
P300-1414

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Thursday, March 25, 2010

10-2022

Registration Information: \*  Mr.  Ms.  Mrs.  Dr.  Female  Male

First Name	Middle Name (Initial)	Last Name
Company/Affiliation		Day Phone
E-mail		Fax Number
Mailing Address 1		Night Phone
Mailing Address 2		
City	State	Zip Code
		Iowa County

### Conference Registration:

	On or before 3/24	On-site
<input type="checkbox"/> ASCE Member Registration Fee	\$175.00	\$195.00
<input type="checkbox"/> Non-member Registration Fee	\$200.00	\$220.00

ASCE member Number: \_\_\_\_\_

I have special dietary needs and/or need accommodations for a disability.  
Please list: \_\_\_\_\_

### It's easy to register!

#### On-line:

[www.cepd.iastate.edu/events](http://www.cepd.iastate.edu/events)

#### Mail:

Continuing Education and  
Professional Development  
Iowa State University  
102 Scheman Building  
Ames, IA 50011

Fax: (515) 294-6223

### Method of Payment

Check (Payable to Iowa State University)

Credit Card  Visa  MasterCard  Discover

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_/\_\_\_\_

Cardholder Name \_\_\_\_\_ Signature \_\_\_\_\_

Purchase Order (Please indicate billing address below, if different from above)

PO Number \_\_\_\_\_

Send invoice to: Name \_\_\_\_\_

Billing Address \_\_\_\_\_

Telephone/Fax: \_\_\_\_\_

(Only one registration per form – Duplicate for additional registrations)

\* Iowa State University requests this information to pre-register you for a conference. No one outside the university, with the exception of participants in this conference, is routinely provided this information. If you fail to provide the required information, we cannot promise accurate registration.  
(Reference: Iowa Code, Chapter 22.11; Iowa Fair Information Practices Act)

Iowa Section  
**ASCE** American Society  
of Civil Engineers

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UNIVERSITY