

## Who should attend?

- Researchers and educators
- Federal and state agency personnel
- County drainage authorities
- Producers
- Drainage contractors
- Crop consultants
- Anyone interested in drainage and water management research in the upper Midwest.

## Questions

For registration questions, contact our office at (515) 294-6429 or e-mail us at [aep@iastate.edu](mailto:aep@iastate.edu). Program content questions should be directed to:

**Dr. Matthew Helmers**, Agricultural and Biosystems Engineering, Iowa State University. (515) 294-6717, [mhelmers@iastate.edu](mailto:mhelmers@iastate.edu).

**Dr. Gary Sands**, Bioproducts and Biosystems Engineering, University of Minnesota, (612) 625-4756, [grsands@umn.edu](mailto:grsands@umn.edu).

## Sponsors

This forum is sponsored by the Department of Agricultural and Biosystems Engineering, Iowa State University and the Department of Bioproducts and Biosystems Engineering, University of Minnesota. Additional support provided by:

IOWA STATE UNIVERSITY  
University Extension

IOWA STATE UNIVERSITY  
College of Agriculture and Life Sciences

UNIVERSITY OF MINNESOTA

EXTENSION



College of Food, Agricultural  
and Natural Resource Sciences

UNIVERSITY OF MINNESOTA

## Location

The Forum will be held in the Scheman Building, next to Hilton Coliseum at the Iowa State Center. Free parking is available in designated areas north and south of Scheman.



## Lodging

Facility information and maps are available at the Ames Visitors and Convention Bureau Web site: [www.visitames.com](http://www.visitames.com). Three hotels nearest the Iowa State Center (and highlighted on the map above) are:

Holiday Inn - Ames Conference Center  
2609 University Blvd  
(515) 268-8808

Gateway Hotel and Conference Center  
2100 Green Hills Dr  
1-800-FOR-AMES

Best Western University Park Inn & Suites  
2500 University Blvd  
1-800-WESTERN

### ... and justice for all

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.



November 10, 2009

Scheman Building  
Iowa State University  
Ames, Iowa

IOWA STATE UNIVERSITY  
University Extension

UNIVERSITY OF MINNESOTA

EXTENSION

## Program

For additional information, visit  
[www.aep.iastate.edu/drf](http://www.aep.iastate.edu/drf).

### Morning session

- 8:00 am Registration and morning refreshments
- 9:00 Opening remarks
- 9:15 Affect of drainage spacing on water tables and yields on southeast Iowa soils  
*Greg Brenneman*
- 9:50 Identifying pollutant pathways through hydrograph analyses of tile discharge  
*Mark Tomer*
- 10:25 Break
- 10:40 Woodchip bioreactors: A farm-scale practice for nitrate reduction in drainage water  
*Alok Bhandari*
- 11:15 Bioreactor research in Minnesota  
*Andry Ranaivoson*
- 12:00 pm Lunch (provided)

### Afternoon session

- 1:00 Performance of drainage water management in Iowa (IA Conservation Innovation Grant Update)  
*Dan Jaynes and Matt Helmers*
- 1:35 Performance of drainage water management in Minnesota (MN Conservation Innovation Grant Update)  
*Craig Schrader*
- 2:10 Break
- 2:25 Performance of drainage water management in Indiana (IN Conservation Innovation Grant Update)  
*Jane Frankenberger*
- 3:35 Modeling conservation drainage practices for south-central Minnesota  
*Gary Sands*
- 4:00 Adjourn for the day

## Featured speakers

- Alok Bhandari**  
*associate professor, Agricultural and Biosystems Engineering, Iowa State University*
- Greg Brenneman**  
*extension agricultural engineering field specialist, Agricultural and Biosystems Engineering, Iowa State University*
- Jane Frankenberger**  
*professor, Agricultural and Biological Engineering, Purdue University*
- Matt Helmers**  
*associate professor and extension agricultural engineer, Agricultural and Biosystems Engineering, Iowa State University*
- Dan Jaynes**  
*professor, Agronomy and soil scientist, USDA-ARS National Soil Tilth Laboratory, Ames, Iowa*
- Andry Ranaivoson**  
*research associate, Soil, Water and Climate, University of Minnesota*
- Gary Sands**  
*associate professor and extension engineer, Bioproducts and Biosystems Engineering, University of Minnesota*
- Craig Schrader**  
*extension educator, University of Minnesota*
- Mark Tomer**  
*soil scientist, USDA-ARS National Soil Tilth Laboratory, Ames, Iowa*

## CCA Credits

Continuing education credits for Certified Crop Advisers have been applied for in the following category: 4.0 soil and water management.

## Registration

### Three convenient ways to register:

1. Online with a credit card at [www.aep.iastate.edu/drf](http://www.aep.iastate.edu/drf)
2. Fax with credit card information to (515) 294-1311
3. Complete registration form and send with payment to:  
Agribusiness Education Program  
2104B Agronomy Hall  
Ames, IA 50011-1010

Checks should be made payable to Iowa State University. If you have questions regarding the clinic or registration issues, please call (515) 294-6429 or e-mail us at [aep@iastate.edu](mailto:aep@iastate.edu).

### Registration Fee

Includes lunch and refreshment breaks.

Early registration .....\$55

After midnight, November 3 .....\$65

Registrations will be accepted the day of the program at the higher rate.

Total submitted ..... \$ \_\_\_\_\_

\_\_\_\_\_  
Name

\_\_\_\_\_  
Organization

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Daytime phone

\_\_\_\_\_  
E-mail - you will receive your registration confirmation and receipt by e-mail.

\_\_\_\_\_  
CCA number

\_\_\_\_\_  
Credit card number (VISA or MasterCard only)

\_\_\_\_\_  
Expiration date

\_\_\_\_\_  
Name as it appears on card