Drainage Water Quality Workshop Registration Form

Please use a separate form for each registering individual.

Name:
Business Name:
Address:
City:
State, Zip:
Phone:
Email:

Registration Fees: Fees include morning refreshments, lunch, and workshop

materials.

Fee per participant: \$150

Late Registration: \$175 (After December 13)

Payment Options:

- ☐ Check (Checks should be made payable to "Webster County Extension".)
- ☐ Credit Card (Call Webster County Extension Office to register.)

Cancellation Policy:

Refunds (registration amount less 10%) will only be issued for cancellation requests received by 5:00 PM on December 13. No refunds will be issued after 5:00 PM on December 13.

Why Should I Attend?

Subsurface drainage is an important part of agricultural systems in Iowa. To function most efficiently, all components of a subsurface drainage system should be designed to work together for optimum efficiency.

This program will provide information essential for designing and planning water quality practices of bioreactors, control structures, drainage water management, saturated buffers, and wetlands. While the economic benefits of tiling are well recognized, there are also environmental impacts from drainage. These new technologies can be useful in minimizing negative environmental impacts. Implementation of such practices will be discussed and designed.

Who Should Attend?

Drainage contractors, watershed coordinators, technical service providers, agency staff, engineers, drainage consultants, producers, landowners, and others interested in the design and implementation of water quality practices for the improvement of farmland drainage.

CEUs or CCA Credits

The workshop qualifies for Certified Crop Advisor (CCA) credits. Credits have been applied for. Completion certificates for PDHs or CEUs will also be available after the workshop concludes.

Mail registration & payment to:

ISU Extension - Webster County 217 South 25th St., Ste. C12 Fort Dodge, IA 50501 (515) 576-2119 lcline@iastate.edu

Drainage Water Quality **Practices** Design Workshop



December 18, 2019 ISU Extension & Outreach Fort Dodge, Iowa

In Collaboration With:



Opportunities. Delivering Results.



Agricultural Research **Service**

IOWA STATE UNIVERSITY

Extension and Outreach

Schedule of Workshop Activities

Morning Session

- 8:00 Coffee/Rolls & Registration
- 8:15 Welcome & Introductions Jerry Chizek, Regional Extension Education Director
- 8:30 Nutrient Reduction Practices -An Overview - Kapil Arora, Field Agricultural Engineer, ISUEO
- 9:00 Woodchip Bio-reactor Sizing and Layout, Matt Helmers, Professor & Extension Engineer, ISUEO
- 10:30 Break
- 10:45 Managing Drainage with Control Structures, Chris Hay, Senior Environmental Scientist Iowa Soybean Association
- 12:15 LUNCH

Afternoon Session

- 1:15 Site Selection & Design of Saturated Buffers, Tyler Groh, Post-Doctoral Research Associate, NREM-ISU
- 2:45 Break
- 3:00 Siting Wetlands in Small
 Watersheds, Kapil Arora,
 Agricultural Engineering Field
 Specialist, ISUEO
- 4:00 Evaluations & Emerging Practices
- 4:30 Adjourn

Workshop Details

Laptop Requirements

Each participant should bring a laptop computer equipped with a USB drive. Excel software used for designing of select practices will be provided on a thumb drive. All laptops must have Microsoft Excel pre-installed on them to run the spreadsheets and to perform design calculations. Use of laptops will be limited to practices using the spreadsheets for making design calculations.

Contact Information

Questions regarding the workshop can be directed to Kapil Arora, Agricultural Engineering Field Specialist by phone at (515) 291-0174 or by email at pbtiger@iastate.edu

Limited Seating Available

Participants must pre-register by sending in the completed registration form along with payment to the ISU Extension - Webster County office. Registrations are limited to first 30 participants. Walk-in registrations will not be accepted.

lowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran. (Not all prohibited bases apply to all programs.) Inquiries regarding non-discrimination policies may be directed to the Diversity Officer, 2150 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, 515-294-1482, extdiversity@iastate.edu. All other inquiries may be directed to 800-262-3804.

Workshop Information

This all-day workshop will focus on the design and layout of new practices currently being considered for water quality improvements of farmland drainage. The workshop will be held at the Iowa State University Extension & Outreach - Webster County office in Fort Dodge, Iowa. For directions or questions, please contact the Extension office at (515) 576-2119 or by email at lcline@iastate.edu

The morning session will focus on different ways to reduce nitrogen loads, woodchip bioreactor sizing and layout, and water table management with shallow tiles and installation of control structures. The afternoon session will include work sessions on the site selection & designing of saturated buffers, and managing drainage water quality with wetlands on small watersheds.

Workshop materials, refreshments, and lunch are included in the registration fee. The fees will also be used to offset direct expenses and to support the Agriculture and Natural Resources Extension County Programs.

The workshop is a collaborative effort amongst Iowa Soybean Association, United States Department of Agriculture -Agricultural Research Service, and Iowa State University Extension & Outreach.

Iowa Drainage Guide will be available for purchase for \$25 per copy at the workshop.