

# Tiling and Conservation Drainage Field Tour and Workshop August 28–29, 2012, Hankinson, ND

**An investment in drainage lasts more than a lifetime.  
Let's do it right.**

## A new era of drainage

Weather patterns are changing, demand for agricultural productivity keeps rising, and people want flood protection and healthy water for future generations. In response, new approaches to agricultural drainage are being developed by counties, watershed districts, researchers, and landowners. These "conservation drainage" approaches can make farmland more productive, reduce flood risk, and reduce impacts on the environment such as excess nutrients. Here are some strategies for managing drainage:

- **Widespread storage for flood damage reduction:** goal for the Red River Valley is 1 mil ac.-ft of water storage.
- **Temporarily store water** to delay stormwater runoff to streams and increase evaporation and infiltration.
- **Design and manage tile systems** to allow control over how much water is drained from a field.
- **Use innovative ditch designs** that help slow down water and reduce nitrate levels.
- **Design outlets** to protect roads, streambanks and ditches from erosion by outlet water.
- **Maintain ditch buffers** to reduce maintenance costs and reduce the need for water storage.

These practices combined across the landscape, create effective agricultural drainage, reduced flood damage risk, reduced impacts on downstream neighbors, and improved water quality.

## See it in action

Highlights of the August 29 field tour:

- On Brian Rinke's farm, see how he is using a tile system to manage the water table.
- Watch tile installation equipment in action.
- At the North Ottawa impoundment, see how water storage systems can provide an adequate outlet for agricultural drainage and provide flood damage reduction.
- At the Fairmount research site, see sub-surface irrigation, how to manage salts on drained land, and a comparison of yields on tilled and non-tiled land.

## Presented by:



**Bois de Sioux  
Watershed District**

**UNIVERSITY  
OF MINNESOTA**  
Driven to Discover™

## With support from:



**RED RIVER WATERSHED  
MANAGEMENT BOARD**

**ADMC**  
Agricultural Drainage Management  
Coalition



**Agri Drain**  
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# Tiling and Conservation Drainage

Dakota Magic Casino, Hankinson, ND

## TUESDAY, AUGUST 28, 2012 BLUE DOG ROOM

5:00-7:00 PM Social hour with appetizers and trade show

7:00-9:00 PM Water Management in the Red River Basin

- Potential hydrologic impacts of tile drainage – Gary Sands (University of Minnesota)
- The Red River BTSAC Briefing Paper #2: Presentation and discussion of options for managing tile drainage - Chuck Fritz (International Water Institute)
- See Briefing Paper at <http://www.rrbdin.org/archives/649>

9:00-10:00 PM Social hour continues

## WEDNESDAY, AUGUST 29, 2012 ARENA

8:00 AM Breakfast, Registration, and Trade Show

9:00 AM Welcome – Jerome Deal (Red River Retention Authority)

9:20 AM Conservation Drainage Plans for Landowners – Al Kean (Board of Water and Soil Resources)  
Sonia Jacobsen (Natural Resources Conservation Service)

10:00 AM Board Buses

10:40 AM Site 1: The Brian Rinke Farm – Making controlled drainage work – Brian Rinke (Producer),  
Leonard Binstock (Agricultural Drainage Management Coalition)

11:30 PM Board Buses

11:50 AM Site 2: Tile Installation Demonstration – Herman, MN – Trever Scheile (New Horizons Co-op)

12:20 PM Board Buses

12:40 PM Lunch at North Ottawa Impoundment  
Solutions to Red River Basin Issues – Jon Roeschlein (Bois de Sioux Watershed District)

1:15 PM Site 3: North Ottawa Impoundment Project – The value and logistics of large-scale water projects

2:00 PM Board Buses

2:30 PM Site 4: Fairmount Demonstration Site – Results from on-farm tile drainage research – Xinhua Jia  
(North Dakota State University)

3:30 PM Board Buses

4:00 PM Arrive back at Dakota Magic Casino

# Registration Form (pre-registration required)

Register online: [www.regonline.com/FieldTourHankinson](http://www.regonline.com/FieldTourHankinson) Visa and Mastercard accepted. Or return this form along with payment by August 21st to:

University of Minnesota Extension, 130 Learning and Environmental Sciences, 1954 Buford Ave St. Paul MN 55108  
Registration questions? Call 800-876-8636 or 612-624-4900.

Name: \_\_\_\_\_ Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Names of additional attendees: \_\_\_\_\_

Sessions we are attending:

\_\_\_\_\_ August 28th BTSAC Briefing Paper discussion

\_\_\_\_\_ August 29th field day

# attending \_\_\_\_\_ X \$25.00 = Total amount due: \_\_\_\_\_

Payment Options:

\_\_\_\_\_ Check payable to University of Minnesota, enclosed

Visa\_\_ Mastercard\_\_ Card number \_\_\_\_\_ Expiration date \_\_\_\_\_

Name on card \_\_\_\_\_ Phone number (if different from above) \_\_\_\_\_

Billing address (if different from above) \_\_\_\_\_

Lodging:

**Dakato Magic Casino** 16849 102nd St. SE Hankinson ND, 58041 1-800-325-6825 ext. 398



# Know your options.

## Thinking about improving drainage?