# Please join us for the University of Nebraska 10<sup>th</sup> Annual West Central Crops & Water Field Day.

Water is one of Nebraska's most valuable natural resources. This Field Day offers a unique opportunity for farmers and policy makers to learn and see irrigation practices and cropping systems on a farm scale that maintain or increase crop production while conserving water.

Participants will also hear from University of Nebraska-Lincoln (UNL) Extension specialists and educators, and industry leaders on water issues that may affect their operations.

In January 2007, UNL purchased a 1,280 acre farm in Keith County, now referred to as the "West Central Water Resources Field Laboratory" (WRFL). The WRFL was purchased to research, demonstrate and teach water conserving methods in cropping and livestock systems in western Nebraska. Field tours and demonstrations will help us educate about cropping and livestock systems with limited water resources.

There is no cost to attend the Field Day and a complimentary meal will be served. Participants are asked to register by Friday August 15th 2014 so appropriate plans can be made for meals, resources, and meeting space.

# West Central Crops & Water Field Day Thursday August 21st 2014 Brule, Nebraska

All Times MDT 8:00 a.m. Registration Location: WRFL near Brule, NE

8:30 a.m. Welcome Don Adams, District Director, UNL WCREC

8:45a.m. Stream/Groundwater Interaction in the South Platte River Doug Hallum, UNL Survey Hydrogeologist, WCREC

9:30 a.m. Performance Based Water Conservation John Heaston, Nature Conservancy

10:15 a.m. Break – Courtesy of Sponsors & Exhibitors – View Exhibits

10:30 a.m. Nebraska Cooperative Republican and Platte Enhancement Project Benefits and Costs Jasper Fanning, URNRD

11:15 a.m. Deficit Irrigation: Impact on Productivity & Consumptive Use
Tom Trout, USDA-Water Management
Unit, Fort Collins, CO

12:00 p.m. Lunch – Water resources engineering research in UNL's Biological Systems Engineering Department Mark Riley, Department Head UNL Biological Systems Engineering 1:00 p.m. Field Tours

## ◆ Tour 1 – Nitrogen Use Efficiency and Variable Rate Irrigation

Tim Shaver

Increasing crop use efficiency of agronomic inputs is important for the sustainability of natural resources and overall food production. This is especially true for inputs such as nitrogen fertilizers as the over-application of nitrogen can lead to environmental contamination of streams and groundwater. By using practices such as management zones and technology such as remote sensing and crop canopy sensors producers can increase crop nitrogen use efficiency and reduce the potential for environmental degradation. This tour stop will allow participants to observe research by UNL that has the goal of increasing nitrogen use efficiency in irrigated corn production. This research also addresses irrigation inputs and how producers can most effectively use new technologies such as variable rate irrigation to increase water use efficiency in corn production.

### ◆ Tour 2 – UNL Baling/Grazing Research Project

Aaron Stalker & Humburto Blanco Crop residue has long been utilized for cattle grazing during the winter months. More recently crop residue has been removed by baling and utilized by cows and finishing cattle with wet distiller's grains in a feedlot. At this tour stop the results of a 5 year project where corn residue was baled, grazed, at two stocking rates, or remained in the field will be reviewed. Cattle performance, yield and soil physical properties will be compared under the removal methods and three different irrigation levels.

2:15 p.m. Adjourn

Thanks for Attending

# West Central Water & Crops Field Day!

#### REGISTER TODAY

While there is no cost to attend this year's West Central Crops & Water Field Day, registrations are needed by Friday August 15<sup>th</sup> 2014, for planning. Please complete the registration form and mail or FAX to:

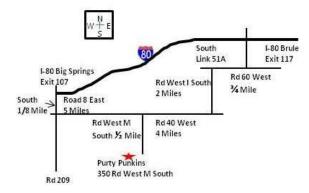
#### **WCREC**

Attn: Phyllis Carney 402 West State Farm Road North Platte, NE 69101 FAX: 308-696-6780

Or you may send the necessary information in an e-mail to: <a href="mailto:phyllis.carney@unl.edu">phyllis.carney@unl.edu</a> or call her at 308-696-6740

Name:	
Address:	
Affiliation or Business:	

# Directions to the UNL-WRFL South Farm Directions from I-80



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Know how. Know now.

# West Central Crops & Water Field Day

Presented by the
University of Nebraska–Lincoln
Institute of Agriculture
and Natural Resources
West Central Research and
Extension Center

Thursday August 21st 2014 Brule, Nebraska

CCA Credits have been applied for in Soil and Water

**Lunch Provided by...** 

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West Central Research & Extension Center