

Managing Impacts to Water Quality in Production Agriculture

Nebraska Water Center Symposium

October 26-27, 2017

October 26

Thursday

8:00-8:45

Registration and continental breakfast

8:45-9:00

Introduction to the symposium, needs, etc. (C. Ray)

9:00-9:30

Speaker 1 Bruce Lindsey, US Geological Survey, Harrisburg, PA

Risk of Nitrate in Groundwaters of the United States: A National Perspective

9:30-10:00

Speaker 2 Steven Wolf, JEO Consulting Group, Lincoln, NE

Overcoming Communication Challenges for Nitrate Abatement

10:00-10:30

Break

10:30-12:00

Nebraska water quality concerns

Nitrate in ground water and municipal systems: Marty Stange, Hastings Utilities

Managing nitrogen at the NRD levels: Terry Jules, Lower Niobrara NRD and Dick Ehrman, Lower Platte South NRD

Water Quality in Nebraska: Marty Link, Nebraska DEQ

Nebraska Public Water Supplies: Howard Issacs, NDHHS

12:00-1:30

Lunch and poster session

Selection of three best student posters

1:30-3:00

Nitrogen transformation and other complications

Balancing N inputs and outputs: Tiffany Messer, UNL

Storage of nitrogen in the vadose zone: Daniel Snow, UNL

Co-contaminants and redox chemistry: Karrie weber, UNL

Source of N and age dating of sources: Troy Gilmore, UNL

3:00-3:30

Break

3:30-4:30

H₂O, H₂WHOA!, H₂Ohhh...: Science, regulation & culture of water quality in Nebraska. Facilitators: John Heaston, NEWBA, Meghan Sittler, UNL Extension.

Sam Radford, Wellhead Protection Program Coordinator, NDEQ

Marty Stange, Environmental Supervisor, Hastings Utilities

Jason Ripa, Water System Operator, City of Wilber

Mark Woldrick, Ag Advisory, West Point

Hannah Birge, Water & Agriculture Program Manager, The Nature Conservancy, Nebraska

Phil Steinkamp, Agronomist/Crop Consultant, Pillen Family Farms

Boone McAfee, Director of Market Development & Research, Nebraska Corn Board

4:30-6:00 Light reception and cash bar

October 27 Friday

8:30-10:00 **BMPs for N loss reduction**

Gross nitrogen budgets for landscapes: Daniel Miller, USDA-ARS

Cover crops and water quality: Humberto Blanco, UNL

Review - Project sense for nitrogen management: Richard Ferguson, UNL

BMPs for animal operations: Rick Koelsch, UNL

10:00-10:30 Break

10:30-12:00 **Moving forward and recommendations**

Economic returns (yield versus total input and dealing with ground water contamination: Shannon Bartelt-Hunt and Eric Thompson, UNL

Consideration of Triple bottom line (TBL) – economy, environment, and society – for nitrogen management: James Stone, South Dakota School of Mines and Technology, Rapid City, SD

4R Principles of Nutrient Stewardship: Bijesh Maharjan, UNL

Role of education, outreach, and extension in nitrogen management

12:00-1:30 Lunch with panel (Water Resources Advisory Panel of UNL)