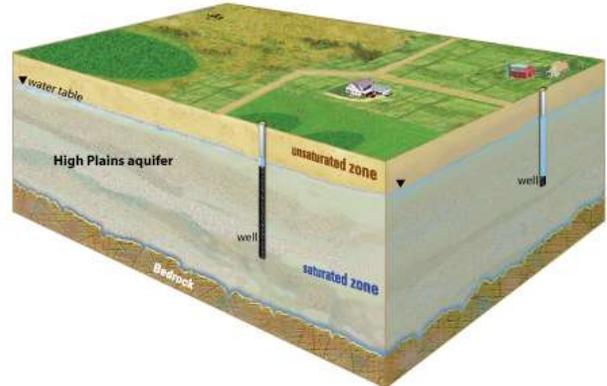


**Connecting groundwater quality to the surface:  
models, monitoring and more  
Holiday Inn Conference Center, Kearney, Nebraska  
March 7, 2018 8:30-noon**

*Cosponsored by the Lower Platte South Natural Resources District, the Nebraska Water Center and with support from a grant from the Nebraska Department of Environmental Quality*



*Generalized cross section of the High Plains aquifer. Credit: USGS.gov.*

**Agenda - March 7, 2018**

**8:00-8:30 am – Welcome and Introductions – Dan Snow**

**8:30-9:20 am - “Vadose zone modeling with HYDRUS” Derek Heeren**

**9:30--10:20 am – “Surface and ground water models, their applications and limitations” Aaron Mittlestet**

**10:20-10:40 am- Morning Break – Refreshments provided**

**10:40-11:30 am – Pesticide leaching potential in Nebraska: TIER-I model applications" Mohana Shanmugam**

**11:30-12:00 – “Nitrate and wellhead protection areas in Nebraska” Dan Snow**

*The Nebraska Water Center will apply for 4 Continuing Education Units (CEUs) for appropriate categories of NDHHS water well licenses and certificates. To qualify you must attend the entire session, and make sure to include your license information, and email address to ensure that you get credit.*

**Presenters**

**Derek Heeren** is an Assistant Professor of Irrigation Engineering and Water for Food Global Institute Faculty Fellow at the University of Nebraska. Derek obtained his doctorate while working as a Research Engineer in the Biosystems and Agricultural Engineering Department at Oklahoma State University. He received his bachelor’s and master’s degrees in agricultural and biosystems engineering from South Dakota State University. Before graduate school, Derek spent two years working at a geotechnical engineering firm in the St. Louis, Missouri, area. Derek grew up in southeastern South Dakota on a farm that included corn, soybean, alfalfa, dairy, and beef production. During high school he developed an interest in conserving natural resources while participating in FFA land judging and natural resources competitions.

**Aaron Mittlestet** is an Assistant Professor of Watershed Hydrology and Robert B. Daugherty Water for Food Institute Fellow at the University of Nebraska. Aaron’s areas of research include watershed modeling, surface/ground water interaction, water quality and streambank erosion. Aaron obtained his doctorate while working as a Research Engineer in the Biosystems and Agricultural Engineering Department at Oklahoma State University. Before graduate school, Aaron spent two years in the Peace Corps and three years teaching Spanish and English as a Second Language for the Enid, Oklahoma Public Schools.

**Mohana Sundaram Shanmugam**, joined the Nebraska Water Center as a postdoctoral researcher in June 2016. His research is related to groundwater level modelling and groundwater recharge estimation, with a focus on understanding and precisely estimating hydrological components such as evapotranspiration and groundwater recharge in the agro-hydrological zone using numerical, remote sensing and GIS tools. His current project work includes modelling the transport of chemicals and pesticides in soil and developing the spatial leachability index mapping for the state of Nebraska.

**Daniel Snow** is the Director of the University of Nebraska Water Sciences Laboratory, a part of the Nebraska Water Center, and a Research Associate Professor in the School of Natural Resources at the University of Nebraska-Lincoln. He holds a PhD from the University of Nebraska, a master's degree from Louisiana State University, and bachelor degree from Missouri State. Over the past 25 years, his research interests and experience has focused on the environmental fate of agrichemicals in ground and surface water. His primary responsibility is development of new methods in support of water research.

### **Registration Details**

There is no charge for the course but to please preregister if you plan to attend. Coffee, fruit and rolls will be provided. The workshop ends before lunch.

Please send your registration details to [nwcdirector@unl.edu](mailto:nwcdirector@unl.edu), including

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

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

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

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

NDHHS License Number (If applying for CEU credit) \_\_\_\_\_