

Water Resources Issues in North Dakota: Challenges and Opportunities

1st ND WRRRI Special Water Resources Seminar

November 9, 2018 (Friday)

Hidatsa, Memorial Union, North Dakota State University

Major Activities

- 11:00-12:30 PM Social Luncheon
- 01:00-01:20 PM Keynote Speaker - **Steven Robinson:** Hydrology Monitoring for the Future
- 01:20-01:40 PM Keynote Speaker - **Joel Galloway:** USGS Science in North Dakota
- 01:40-02:00 PM Keynote Speaker - **Andrew Nygren:** North Dakota State Water Commission
Water Resource Challenges and Opportunities
- 02:00-02:20 PM Keynote Speaker - **Mike Hargiss:** North Dakota Department of Health
Water Quality Challenges and Opportunities
- 02:20-02:35 PM Combined Q&A for Keynote Speakers
- 02:35-02:45 PM Break
- 02:45-02:59 PM NDWRRRI Fellows Lightning Presentations – *Hydrologic Modeling*
Afshin Shabani: Water Quality Conservation in Mitigating Devils Lake
Flooding
Mohsen Tahmasebi Nasab: Development of the Macro-Scale Hydrologic
Processes Simulator (Macro-HyProS) and Applications in the Red River
Basin and North Dakota
- 03:00-03:07 PM NDWRRRI Fellows Lightning Presentations – *Water Quality*
Nick Peterson: Removal of Heavy Metals from Stormwater Runoff
- 03:08-03:29 PM NDWRRRI Fellows Lightning Presentations – *Aquatic Science and Ecological
Processes*
Justin Waraniak: Landscape Genomics: Assessing Environmental Health
through Local Adaptation and Connectivity
Alec Lackmann: Bigmouth Buffalo in the Red River of the North Basin:
endemic, underappreciated, and unexpected
Kui Hu: A long-term Investigation of Salinity Change under a Highly
Variable Climate in North Dakota
- 03:30-03:37 PM NDWRRRI Fellows Lightning Presentations – *Energy and Water Resources
Management*
Tong Lin: Water Resources Impacts and Management in the Bakken
Region of Western North Dakota
- 03:38-03:45 PM NDWRRRI Fellows Lightning Presentations – *Agricultural Water
Management*

Ali Rashid Niaghi: Assessing various evapotranspiration measurement methods for crop water management
03:46-03:53 PM NDWRRRI Fellows Lightning Presentations – *Geomorphology and Erosion*
Zachary Phillips: Holocene River Planform Changes in the Red River Basin
03:53-04:05 PM Combined Q&A for All Fellow Speakers
04:05-04:35 PM Laboratory Visit

Keynote Speakers for the 1st ND WRRRI Special Water Resources Seminar

Steven Robinson

Deputy Director for Data
U.S. Geological Survey, Dakota Water Science Center
Bismarck, North Dakota
Email: smrobins@usgs.gov



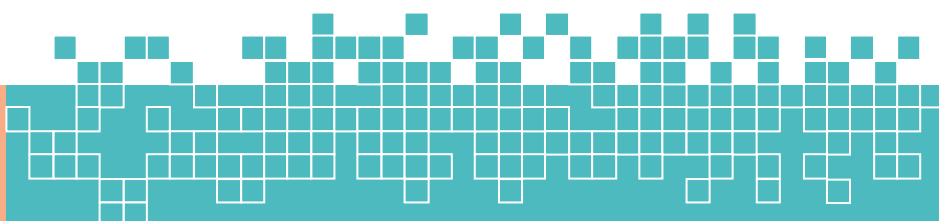
Steve Robinson has worked for the U.S. Geological Survey for over 33 years in North Dakota and Illinois and is currently the Deputy Director for Data in the USGS Dakota Water Science Center. Steve has spent those 33+ years working in the hydrologic data collection unit and has been involved in all aspects of that work. He started his career with the USGS as a student running routine field data collection duties to currently supervising over 35 staff and managing a two-state data collection unit with over 350 data collection locations. Steve has been participated in the data collection efforts for many extreme flood events as well as numerous studies during his time with the USGS.

Joel Galloway

Section Chief
U.S. Geological Survey, Dakota Water Science Center
Bismarck, North Dakota
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Joel Galloway has worked for the U.S. Geological Survey for 25 years in North Dakota, Arkansas, South Dakota, Iowa, and Wyoming and is currently a Hydrologic Studies Chief for the USGS Dakota Water Science Center. He has a Master of Science degree in environmental/civil engineering from the South Dakota School of Mines and Technology and a Bachelor of Science degree in geology from the University of North Dakota. Joel has authored or coauthored over 40 scientific reports and journal articles on different water-quality, ground-water, and surface-water topics.



Andrew Nygren

Hydrologist

Water Appropriations, North Dakota State Water Commission

Bismarck, North Dakota

Email: anygren@nd.gov



Andrew Nygren has worked for the North Dakota State Water Commission (NDSWC) for 13 years initially as a Water Resource Engineer with the NDSWC Development Division Investigations Section, and for the past 12 years as a Hydrologist with the NDSWC Water Appropriation Division Groundwater Section. He has a Master of Science and Bachelor of Science in Geological Engineering from University of North Dakota.

Mike Hargiss

Red River Basin Coordinator

North Dakota Department of Health, Division of Water Quality

Fargo, North Dakota

Email: mhargiss@nd.gov



Mike Hargiss has worked for the North Dakota Department of Health for 13 years as the Red River Basin Coordinator in the Division of Water Quality. He has a Master of Science degree in Natural Resource Management from North Dakota State University.