PRESENTATION SUMMARIES & SPEAKER BIOGRAPHIES

Minnesota Ground Water Association Spring Conference 2023 – April 27, 2023

Online via Zoom



A Drinking Water Journey: an exploration of unique water supplies across Minnesota

Steve Robertson Minnesota Department of Health Steve.Robertson@state.mn.us

Minnesota Public Water Supplies: Generalized hydrogeologic framework & regulatory definitions

Steve Robertson has worked as a hydrogeologist in state government and environmental consulting in Minnesota for over 30 years. He likes the interplay between science and public policy. Long ago he received undergraduate and graduate degrees in geology but has found over the years that the learning never stops. Steve currently supervises the Source Water Protection Program at the Minnesota Department of Health.



Mankato Municipal Water Supply

Kyle Hinrichs has been the Water Superintendent for the City of Mankato for the past 9 years. In that position he oversees the operation and maintenance of the water treatment plant. Prior to that he was the operations tech in charge of both water and wastewater for the City.

Kyle holds an Associate's Degree in Water Environment Technology from Saint Cloud Tech.



Hastings Municipal Water Supply: Part 1

Ryan Stempski is a 2002 civil engineering graduate from the University of Wisconsin – Madison. He has spent his entire 20-year career in municipal engineering. His first 10 years was spent working at a large engineering firm, providing engineering services to several municipalities. In 2011, Ryan and his partners formed FOCUS Engineering to create a company specific to the needs of cities and townships. FOCUS continues to serve as a City or Town Engineer for a number of municipalities today. Currently, Ryan is the contracted Public Works Director/City Engineer for Hastings, MN. He has served in this capacity for nearly 8 years.

Ryan has a passion for serving the public and delivering infrastructure projects for the communities he serves. He has had direct involvement with mitigating drinking water systems from ever evolving PFAS contamination since 2005, and was a member of the 3M Settlement Priority 1 Technical Work Group from its inception. He lives in Woodbury, MN with his wife, Maranda, and chases his 4 kids around in hockey, baseball, and dance.



Ashley Gallagher Dakota County SWCD ashley.gallagher@co.dakota.mn.us

Hastings Municipal Water Supply: Part 2

Larry Gunderson is a Fertilizer Management Unit supervisor at the Minnesota Department of Agriculture. Larry and his team are responsible for implementing the Nitrogen Fertilizer Management Plan and Groundwater Protection Rule and agricultural practice inventories. He has been with the Minnesota Department of Agriculture since 2014. Prior to that he worked at the Minnesota Pollution Control Agency for almost 18 years. Larry has a BS degree in agricultural education and a MS degree in water resources science, both from the University of Minnesota.



Ashley Gallagher is a Senior Resource Conservationist at Dakota County SWCD. She is responsible for a variety of agricultural programs including the planning, design and installation of conservation practices, developing conservation plans, groundwater protection efforts and soil health initiatives. She also serves as the Administrator for the North Cannon River Watershed Management Organization and the Eagan-Inver Grove Heights Watershed Management Organization. Ashley joined the Dakota SWCD in 2015 after working at various local and state governments as well as non-profit organizations.



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Chris Parthun Minnesota Department of Health chris.parthun@state.mn.us

Andrew Johnson Minnesota Department of Transportation andrew.j.johnson@state.mn.us

Virginia Municipal Water Supply

John Woodside started his career as a Water Resource Technician at Capitol Region Watershed District, then worked as a Project Inspector Intern at Ramsey-Washington Metro Watershed District before spending several years as a Hydrogeologist with WSP USA. At WSP, he conducted a variety of environmental investigations around the United States.

In 2014, John joined the Source Water Protection Unit as a Hydrologist within the Minnesota Department of Health's Drinking Water Protection Section, where he has primarily focused on the development of Wellhead Protection Plans for Public Water Suppliers within the Central and Northeastern areas of Minnesota.

Education MS: Hydrogeology, Illinois State University BS: Geology – Environmental Science, Winona State University



Chris Parthun has two degrees from Bemidji State University – a B.S. in Environmental Studies, and a B.A. in Geography/GIS. He was the first of many graduates to earn the interdisciplinary degrees of Environmental Studies and applications of GIS.

Chris served as the Beltrami SWCD District Manager for 20 years, being responsible for all aspects of implementing the SWCD's administrative, financial, and technical operations, including supervising a staff of up to seven employees. Chris also served as the Beltrami County Comprehensive Local Water Planner, and Wetland Conservation Act program administrator.

Chris served Beltrami County as an Environmental Resources Specialist from 2010 – 2012, reviewing permit applications and making initial jurisdictional determinations for proposals to work in wetlands, shoreland, and public waters. Chris also coordinated the groundwater observation well and citizen precipitation monitoring programs.

Chris was hired by the Minnesota Department of Health as a Principal Planner in 2012. Chris provides planning expertise relating to the development and implementation of the Source Water Protection program for community public water supplies. Chris' work area contains twelve counties in northeast and northcentral Minnesota, requiring him to have expertise in mining, forestry, and recreation-related landuses as they relate to Minnesota's drinking water resources.



Andrew Johnson is a Civil Engineer with a background in Construction, Design and Maintenance. He has been at MnDOT 20 years and currently works as District 1's Assistant District Engineer for Program Delivery. He manages Design, Hydraulics, Materials, and Construction for Minnesota's state highway system in Northeast Minnesota. Andy was the Construction Project Manager on the Highway 53 Relocation Project between Eveleth and Virginia. He lives in Makinen (south of Eveleth) with his wife and two teenage sons. Their daughter is grown and expecting her first baby in August. The Johnsons like to fish, camp and ride snowmobile.



Bob Tipping Minnesota Department of Health Bob.Tipping@state.mn.us

Tony Runkel Minnesota Geological Survey runke001@umn.edu

Well, well, what do we have here? - Minnesota's strangest well videos!

Abstract

Collection of videos and images from borehole investigations over the past 35 years. Fracture flow in Paleozic aquifers is highlighted, focusing on hydrogeologic conditions leading to ambient borehole flow. Also included are things you don't want to find in your well. Special thanks to Pat Sarafolean at MDH, for these and many other videos he has provided over the years

Bob Tipping Education Ph.D. (water resources science), University of Minnesota, 2012 M.S. (geology), University of Minnesota, 1992 B.A. (history), Carleton College, 1981

Experience (most recent first):

2019-present, Minnesota Department of Health – Source Water Protection, Hydrologist Supervisor 1988-2019, Minnesota Geological Survey, Hydrogeologist

Affiliations

Minnesota Groundwater Association



Tony Runkel

Education

- Ph.D. (geology), University of Texas-Austin
- M.S. (geology), University of Montana
- B.A. (geology), University of Minnesota-Duluth

Experience (most recent first):

- Interim Director Minnesota Geological Survey
- State Geologist Minnesota Geological Survey

Affiliations

Minnesota Groundwater Association



Kevin Young SEH, Inc. kbyoung@sehinc.com

Melanie Niday SEH, Inc. mniday@sehinc.com

Onamia Municipal Water Supply

Melanie Niday, PG, is a Senior Hydrogeologist with Short Elliott Hendrickson, Inc (SEH). Melanie has more than 35 years of experience completing hydrogeologic investigations for landfills and water supply studies. Melanie graduated from North Dakota State University in 1986 with a BS in geology and graduate school at Southern Illinois University with a hydrogeology emphasis. She started her career in 1988 working on her first Landfill Siting EIS and learned a respected lesson from Bruce Bloomgren of the MGS on the value our research institutions provide to scientists in a consulting field. That lesson is even more relevant today, especially in the services she provides to local municipalities to address water supply and water quality concerns.



Kevin Young, PE, is a Senior Water Engineer with Short Elliott Hendrickson, Inc. (SEH). Kevin has 12 years of experience in operations and engineering related to municipal drinking water systems. In addition to being a professional engineer, Kevin is also a Class A water operator in Minnesota. Kevin earned his BS and MS degrees in Civil Engineering from North Dakota State University. In his time at SEH, Kevin has worked with treatment systems of all sizes ranging from a 25 gallon per minute school system to municipal systems larger than 20 million gallons per day.



Marc Pritchard, Water Plant Manager City of Moorhead <u>mpritchard@mpsutility.com</u>

A Tour of Moorhead's Drinking Water

Presentation

- Overview of Moorhead Public Service and operational strategy
- Red River utilization and blending groundwater
- Red River protection efforts
- Groundwater overview of Buffalo and Moorhead Aquifers
- Groundwater hydrology and aquifer characteristics
- Vulnerabilities and protection efforts
- Tying it all together resilient water supply

Education:

BA: (Biology and Chemistry) Concordia College Moorhead, 2009-2013

Experience:

Sunflower Genetic Laboratory, USDA-ARS, 2011-2013 Water Treatment Plant Operator, Moorhead Public Service, 2013-2016 Water Plant Supervisor/Interim Plant Manager, Moorhead Public Service, 2016-2022 Water Plant Manager, Moorhead Public Service, 2022 – Present



Laura DeBeer Minnesota Board of Water & Soil Resources laura.debeer@state.mn.us

Amanda Strommer Minnesota Department of Health amanda.strommer@state.mn.us

Edgerton Municipal Water Supply

Laura DeBeer is a Buffer and Soil Loss Specialist with the Board of Water and Soil Resources where she assists local governments with program implementation. Her most recent experience for source water protection was at Pipestone Soil and Water Conservation District where she was the Regional Water Resources Specialist. Laura worked with area water suppliers, private landowners and other partners on projects and practices that protect groundwater quality. Laura enjoys working toward sensible and creative solutions to water quality issues with a passion for soil health, sustainability and maintaining profitability where applicable.



Amanda Strommer is the source water protection planner for Minnesota Department of Health in the Southwest Region.

