

RIVERBANK WATER SUPPLY SYSTEMS MAXIMIZING ALLUVIAL AQUIFERS

Design, Construction, Operation, Maintenance and Treatment of Riverbank Filtration Water Supplies – Finding the Right Fit **AN IN-PERSON INFORMATION EXCHANGE CONFERENCE**



April 19, 2022 – 8:15am – 4:15pm
Robert J Mohart Center, 3200 Wayne Avenue, Kansas City, MO 64109

Convened by: American Ground Water Trust
[A (501)(c)(3) education non-profit organization] www.agwt.org

In cooperation with Kansas City Water



~ Tour WaterOne Riverbank Supply System ~

FREE pre-conference tour of the WaterOne Riverbank Supply System – April 18th 3:00pm-4:30pm
Tour limited to 20 people and only for conference attendees. [Details & Registration - www.agwt.org/events](http://www.agwt.org/events).



Continuing Education

Approved for **MO Drinking Water Treatment & Distribution Operators**—Course #2201037, 6.5 Training Hrs, [Blue Voucher Accepted](#)

Approved for **KS Water Treatment Operators – 5 CEHs**

Approved by Kansas Ground Water Association for **KS Water Well Contractors – 6.5 Hours**

The AGWT will issue Certificates of Attendance for engineers and other professions

“With changing climate likely to affect groundwater recharge, a riverbank location for dependable water supply seems like the best bet”

DESCRIPTION:

An intense one-day information-exchange program about science, engineering and economic issues related to extracting groundwater from unconsolidated alluvial aquifers. The program will showcase case studies from experts in design, construction and operation of vertical wells, slant wells, collector wells and galleries. Discussion will include:

- Characteristics of alluvial aquifer hydrogeology that influence design options
- How site conditions influence construction and installation costs of collector wells
- Treatment and system maintenance operation costs compared with direct surface water supply
- Regulatory issues for groundwater under the direct influence of surface water (GWI)
- Track record of operation and maintenance of riverbank water supply installations

BACKGROUND

Unconsolidated sand and gravel aquifers are typically developed utilizing vertical water wells. But what if the aquifer is relatively thin or large quantities of water are required and available space for a wellfield is limited? Many engineers and planners have turned to large diameter wells to develop water supply. This one-day program focuses on water supply strategies and engineering solutions that are designed to tap alluvial aquifers. This program is for water supply operators, groundwater consultants, engineers and designers, infrastructure planners, high-yield water users, government officials and decision makers involved in all aspects of water supply.



AGWT Corporate supporters and event sponsors.

7:30 – 8:15 REGISTRATION (coffee & pastries) - Sponsored by Reynolds Construction LLC

8:15 – 8:30

GLOBAL & HISTORICAL PERSPECTIVE ON RIVERBANK FILTRATION FOR WATER SUPPLY

Andrew Stone, American Ground Water Trust, Concord, NH

8:30 – 9:00

EVALUATING CAPACITY AND YIELD OF ALLUVIAL WATER SUPPLY SYSTEMS

D. Douglas Haney, PE, PG, Consulting Hydrogeologist, Olathe, KS

9:00 – 9:30

MIDWEST UTILITIES CHOOSE HORIZONTAL COLLECTOR WELLS TO SOLVE MANY CHALLENGES

Jeff Henson, PE, Associate Vice President and Director of Water Resources, Black & Veatch, Kansas City, MO

9:30 – 10:00

WATER QUALITY FOCUS ON RIVERBANK FILTRATION PROJECTS

Henry C Hunt, PG, Regional Director, Roscoe Moss Company, Charleston, SC

10:00 – 10:20 BREAK

10:20 – 10:50

FACTORS INFLUENCING CONSTRUCTABILITY AND COST OF HORIZONTAL COLLECTOR WELL SYSTEMS

Greg Slone, Vice President, Collector Well Group, Reynolds Construction, LLC, Orleans, IN

10:50 – 11:20

USING MODELING TO ESTIMATE ALLUVIAL WELLFIELD YIELDS

Luca DeAngelis, PE, PG, Senior Hydrogeologist, Ranney Collector Wells/Layne, Olathe, KS

11:20 – 11:50

OWNERS PERSPECTIVE ON RIVERBANK FILTRATION - ST. JOSEPH AND INDEPENDENCE, MO

Mark Griffin, PE, Senior Engineering Project Manager, McClure Engineering Company, Kansas City, MO

11:50 – 12:20

COMPARISON: TREATING SURFACE WATER VS RIVERBANK FILTRATION WELL WATER

Sarah Tuite, PE, Process Engineering Manager, WaterOne, Kansas City, MO

12:20 – 1:20 LUNCH - Sponsored by Reynolds Construction LLC

1:20 – 1:50

ADVANCES IN INSPECTION, MAINTENANCE, AND OPERATION OF RBF COLLECTOR WELLS

Luca DeAngelis, PE, PG, Senior Hydrogeologist, Ranney Collector Wells/Layne, Olathe, KS

1:50 – 2:20

DESIGN AND CONSTRUCTION OF REGIONAL (MULTI-STATE) RBF WELL SUPPLY

Jim Auen, Operations Manager, Lewis & Clark Rural Water, Tea, SD

2:20 – 2:35 BREAK

2:35 – 3:05

OMAHA METROPOLITAN UTILITIES DISTRICT WATER SYSTEM - ALLUVIAL SOURCES AND THE TRIANGLE OF RELIABILITY

Doug Whitfield, Director, Platte South Water Treatment Plant, Metropolitan Utilities District, Bellevue, NE and
Kevin Tobin, Director, Platte West Water Treatment Plant, Metropolitan Utilities District, Omaha, NE

3:05 – 3:35

INCREASING RAW WATER SUPPLY THROUGH REDEVELOPMENT OF A 50-YEAR-OLD WELLFIELD

Lorrie Hill, Water Production Operations Manager, City of Olathe, KS

3:35 – 4:05

ENSURING SUSTAINABLE DEVELOPMENT OF ALLUVIAL WATER SUPPLIES THROUGH BALANCED WATER POLICY

Daniel Clement, PG, Senior Hydrogeologist, Burns & McDonnell, Wichita, KS

4:05 – 4:15 CONFERENCE WRAP-UP and ADJOURN