

RIVERBANK WATER SUPPLY SYSTEMS MAXIMIZING AMERICA'S ALLUVIAL AQUIFERS

DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE
OF RIVERBANK WATER SUPPLY SYSTEMS

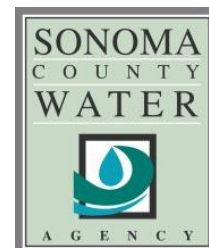
AN INFORMATION EXCHANGE CONFERENCE



Wednesday, August 8th, 2018 (9:00am – 5:00pm)
[Field tour – Tuesday, August 7th, 2018 (2:00pm – 5:00pm)]

Hosted by Sonoma County Water Agency
Conference venue: Westside Water Education Facility
9703 Wohler Road, Healdsburg, CA 95448

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



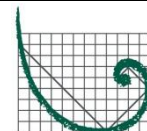
Field tour

The Sonoma County Water Agency operates six radial Collector wells located adjacent to the Russian River which can provide an estimated average day peak month capacity of 92 million gallons per day. The tour will include the Wohler & Mirabel diversion facilities, inflatable dam, state of the art fish ladder and viewing chamber, infiltration ponds, and a tour inside Collector Well 6 which is capable of pumping 35 mgd.

Continuing Education

The AGWT will issue Certificates of Attendance:
Approved for CA Drinking Water Operators – 7 contact hours – Aug. 8th
Approved for CA Drinking Water Operators – 3 contact hours – Aug. 7th Field Tour

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DESCRIPTION:

An intense one-day information-exchange program about science, design, engineering and operational issues related to extracting groundwater from unconsolidated aquifers using riverbed and riverbank alluvial aquifers to naturally filter the source water. The program will showcase case studies from experts in design, construction and operation of riverbank filtration facilities in the Western United States. Discussion will include the characteristics of alluvial aquifer hydrogeology and variable hydrology in the west that influences design and operation of riverbank filtration facilities. Presentations will include examples of current research and studies regarding the effectiveness of riverbank filtration to remove pathogens and other contaminants of concern and the rehabilitation of aging infrastructure.

WHO SHOULD ATTEND

This program is for water resources managers and water supply consultants, engineers, designers and planners. In addition to those interested in the state-of-the-art technical aspects of Riverbank Filtration, the program is of direct relevance to, local & state government officials involved in all aspects of water supply decisions and long-term planning. With increasing hydrological uncertainty, particularly with regard to surface water turbidity, the role of developing aquifers adjacent to rivers and lakes can provide great benefits in treatment costs and supply dependability.

8:00 – 9:00 REGISTRATION (Coffee, pastries)

9:00 – 9:15

BACKGROUND TO THE PROGRAM

Andrew Stone, American Ground Water Trust, Concord, NH

9:15 – 9:50

SONOMA COUNTY WATER AGENCY'S RESOURCE PLANNING AND WATER MANAGEMENT INITIATIVES

Jay Jasperse, Chief Engineer, Director of Groundwater Management, Sonoma County Water Agency, Santa Rosa, CA

9:50 – 10:25

CLASSIFICATION OF RIVERBANK FILTRATION WELLS AS GROUNDWATER

Dale Davidsen, Superintendent, Humboldt Bay Municipal Water District, Eureka, CA and
Craig Thompson, Senior Engineer, West Yost Associates, Davis, CA

10:25 – 11:00

RIVERBANK FILTRATION IMPROVING SOURCE WATER QUALITY: A REGULATORY PERSPECTIVE

Dr. Chittanranjan Ray, Director, Nebraska Water Center, Lincoln, NE

11:00 – 11:15 BREAK

11:15 – 11:50

WATER QUALITY FOCUS ON RBF CASE STUDIES IN THE PACIFIC NORTHWEST

Henry C. Hunt, Sr. Project Manager, Ranney Collector Wells, Layne, Columbus, OH

11:50 – 12:25

USING A MODIFIED RIVERBANK FILTRATION METHOD TO PURIFY STORM WATER TO INCREASE MANAGED AQUIFER RECHARGE RATES

Adam Hutchinson, Recharge Planning Manager, Orange County Water District, Fountain Valley, CA

12:25 – 1:00

CARMICHAEL'S GRAVITY BASED RBF TUNNEL SYSTEM FOR SUPPLY FROM THE AMERICAN RIVER

Chris Nelson, Public Information Officer, Carmichael Water District, Carmichael, CA

1:00 – 1:50 LUNCH (Included)

1:50 – 2:25

RBF RUSSIAN RIVER COLLABORATIVE RESEARCH PROGRAMS WITH US GEOLOGICAL SURVEY & LAWRENCE BERKELEY NATIONAL LABORATORY (Geophysics, flow modeling, pathogen studies, riverbed clogging and aquifer recharge)

Marcus Trotta, Hydrogeologist, Sonoma County Water Agency, Santa Rosa, CA

2:25 – 3:00

SONOMA COUNTY COLLECTOR WELL CAPACITY EVALUATION PROGRAM

Jim Warner, Senior Partner, ERM West, Walnut Creek, CA

3:00 – 3:35

BENEFITS OF USING ANGLED WELLS FOR RIVERBANK FILTRATION

Brian A. Villalobos, Principal Geohydrologist, Geoscience Support Services Inc., La Verne, CA

3:35 – 4:10

LAKE HAVASU CITY, AZ - RIVER BANK FILTRATION

Kevin Bral, Senior Principal Technologist, CH2M/Jacobs Engineering, Englewood, CO

4:10 – 4:45

HYDROGEOLOGIC AND SURFACE WATER/GROUNDWATER CHARACTERIZATION OF THE RUSSIAN RIVER FOR SONOMA COUNTY AND THE PLANNED SCOPE OF WORK FOR AN RBF SYSTEM FOR THE CITY OF SANTA CRUZ

Nick Pogoncheff, Principal, PES Environmental, Novato, CA

4:45 – 5:00 WRAP-UP and ADJOURN



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- ~ Increase citizen, community and decision-maker awareness
- ~ Facilitate stakeholder participation in water resource decisions