

IT'S JUST THE BEGINNING: LET'S GET STARTED

The Groundwater Foundation's 2015 National Conference

DRAFT Agenda

TUESDAY, OCTOBER 20

12:00 p.m. Conference registration desk opens Exhibit area opens for display setup

12:00 – 3:00 p.m. Designing with Water in Mind: Urban Redevelopment Tour (optional – not included in registration)

Two major urban redevelopment projects will be the focus of this three-hour tour. The West Haymarket area of
Lincoln transformed 400 acres of blighted and underutilized floodplain ground west of the Haymarket Business

District into a signature destination complete with 16,000 seat arena, hotels, a community plaza, retail and office
space, and upscale residential units. The Antelope Valley project addressed flood control, transportation
improvements, and community enhancement. It reconfigured the 100-year flood plain by creating a new aesthetic
open waterway to convey the floodwaters, which in turn generated new private development and reinvestment
opportunities. A three-block long segment of the new waterway is the home of Union Plaza, an urban park designed
as a place for people to gather, discover, learn, and celebrate. Lunch and transportation is included with this tour.
Walking shoes and clothing/jackets appropriate for the weather are highly recommended. Tour co-sponsored by
Olsson Associates, Lincoln, NE.

Cost: \$35.00

1:00 – 3:00 p.m. Soak It All Up: Utilizing Groundwater Education Activities in Extracurricular Settings – presented by

The Groundwater Foundation

Learn how exciting, interactive groundwater education activities can be used in extracurricular settings. Co-led by a Girl Scout troop, this workshop will give leaders the knowledge and tools they need to engage youth in fun and educational activities to learn about groundwater. Participants will receive an education kit with tools such as a groundwater modeling kit, activity suggestions and step-by-step instructions, educational games, and links to online tutorials and free downloadable apps.

Cost: FREE (registration required)

1:00 – 3:00 p.m. A Wellspring of Water Activities: An Educator's Workshop — presented by The Groundwater Foundation This workshop will introduce classroom and non-classroom educators to a variety of tools and activities that bring fun to groundwater education while challenging students to apply critical thinking skills. Participants will learn to use a hands-on groundwater modeling kit, computer groundwater modeling software, an interactive educational app, and many more youth-centered activities, all of which are correlated to Next Generation Science Standards. Participants will receive the tools and resources necessary to replicate the activities in their communities. Workshop cosponsored by Nebraska Environmental Trust/Nebraska Academy of Sciences and the Lincoln Community Foundation.

Cost: FREE (registration required)

3:00 –

H₂O Heroes: A Community Groundwater Protection Workshop – presented by The

5:00 p.m. Groundwater Foundation

There's no need to reinvent the wheel. Come network and share with others from around the country working to protect groundwater in their community. This interactive workshop will connect participants as each shares challenges and successes, allowing for further discussion. Information about The Groundwater Foundation's Groundwater Guardian program will also be shared.

Cost: FREE (registration required)

6:00 p.m.

It's Just the Beginning: A 30th Anniversary Celebration Dinner

The Groundwater Foundation has been educating people about groundwater for 30 years! This celebratory evening of fun will look towards the future and the many opportunities it holds as we work together to protect groundwater. Speaker: Mogens Bay, Chairman and CEO, Valmont Industries

WEDNESDAY, OCTOBER 21

7:30 a.m. Conference registration desk opens Exhibits open

8:00 a.m. Welcome

Groundwater issues and concerns vary greatly from place to place, but the need to protect it now and into the future applies globally.

Jane Griffin, Groundwater Foundation President, Lincoln, NE

8:30 a.m. **Keynote Presentation**

Jay Famiglietti, Hydrologist, University of California Irvine Professor and NASA Jet Propulsion Laboratory Senior

Water Scientist, Pasadena, CA

9:30 a.m. Networking Break Exhibits open

CLIMATE CHANGE: IT'S HOT IN HERE!

10:00 a.m. Sea Level Rise and Climate Change Impact on Water Resources and Utility Infrastructure and Facilities

Southeast Florida is one of the most vulnerable regions to the impacts of climate change and sea level rise. In planning for the next 50 years, Miami-Dade County is developing modeling that will include climate change

scenarios and their potential impacts on existing and future facilities and infrastructure.

Virginia Walsh – Miami-Dade Water and Sewer

Department, Florida

10:30 a.m. Integrated Water Management Modeling for Climate Variability Study in Niobrara Basin

Explore the mechanics of the Integrated Water Management Model as used to assess the impacts of climate variability in the Niobrara River Basin and discuss results of the technical analysis.

Mahesh Pun, Nebraska Department of Natural

Resources, Lincoln, NE

PARTNERSHIPS MAKE A DIFFERENCE

The Nebraska MEDS Disposal Coalition: A Prescription to Protect People and Water in Nebraska

Learn how strategic partnerships and coalitions moved this important project forward. Thousands of pounds of medications have been kept out of our waterways due to the hard work of this coalition.

Dan King, Lincoln-Lancaster County Health Department; Elizabeth Esseks, Nebraska Department of Health and Human Services; Marcia Mueting, Nebraska Pharmacists Association; Joan McVoy, Nebraska Regional Poison Center, Nebraska

Collaborative Management of Nebraska's Surface Water and Groundwater Supplies

Learn how integrated management plan development and implementation processes have worked over the past 10 years in Nebraska, showing that working with partners and stakeholders on hydrologically connected surface water and groundwater issues can be beneficial. The development of practical solutions through integrated management planning turned water management challenges into success stories.

Carol Flaute, Tim Freed, and Jennifer Schellpeper, NE Department of Natural Resources, Lincoln, NE

I I :00 a.m. Influence of Climate Change on the Fate of Trace Organic Compounds in Groundwater

Impacts of agriculture on groundwater quality will differ in the future as three key influences are currently undergoing rapid transformation. These include climate change, greater diversity of contaminant compounds, and spatial distribution of animal agriculture.

Shannon Bartelt-Hunt, University of Nebraska, Lincoln, NE

A Call to Action: Effective Partnerships to Protect Sources of Drinking Water

The nation faces a host of water quality and quantity challenges. The Source Water Collaborative has made a call to action to ensure drinking water sources are adequately protected.

Jennifer Wemhoff, The Groundwater Foundation representing the Source Water Collaborative, Lincoln, NE

11:30 a.m. Networking Break Exhibits open

11:45 a.m. Groundwater Guardian and Green Site Celebration Luncheon

Be inspired and celebrate Groundwater Guardian Communities and Green Sites for their proactive efforts to protect groundwater in their communities!

Speaker: Catherine Chertudi, Boise City, Idaho Groundwater Guardian Team

1:00 p.m. A Comprehensive Approach to Water Challenges – The Case of Israel

A coordinated water policy was adopted to achieve a sustainable water economy and society, including a clear legal framework, integrated water management, technology and innovation.

Naty Barak, Netafim, Israel

MANAGING A PRECIOUS RESOURCE

1:30 p.m. Regional Cooperation to Increase Dry Year Groundwater Supplies

Three water agencies and the Public Utilities
Commission partnered on the development of a
conjunctive use project to increase groundwater
supplies for drought years. Learn about the challenges
they faced including mitigating impacts to other
groundwater pumpers, multi-agency agreement, and
well access agreements.

Greg Bartow, San Francisco Public Utilities Commission, San Francisco, CA

2:00 p.m. America's Dependence on Groundwater: Market Segment Trends in a Changing Marketplace

Examines the national trends in groundwater use, implications for groundwater use from shifting populations and competing demands for water.

Kevin McCray, National Ground Water Association, Westerville. OH

2:30 p.m. **Networking Break** Exhibits Open

GROUNDWATER: TAKING CARE OF BUSINESS

3:00 p.m. Focused Nitrate Management for Aquifers and Communities in the Lower Platte South Natural Resource District, Eastern Nebraska

Increased management actions based on increasing nitrate concentrations include education, restrictions on fertilizer applications, and increased cost-share on best management practices.

Dick Ehrman, Lower Platte South Natural Resources District, Lincoln, NE

LET'S CLEAN IT UP!

Understanding and Breaking Down Barriers to Private Well Testing and Treatment

Highlights from a CDC-funded two-year project to enhance New Hampshire's efforts to reduce disease associated with private well use. Findings from a statewide survey of private well owners, community-based interventions and development of a web-based tool to support private well owner treatment decisions will be shared. Learn about the methods employed to better understand private well owners' testing and treatment decisions and how that information was used in the design of new outreach and online resources. Pierce Rigrod, NH Department of Environmental Services, Concord, NH

We've Got A Problem, What's Being Done?

Learn what the Interstate Technology Regulatory Council and the Department of Defense Strategic Environmental Research and Development Program are doing to remediate contaminated groundwater.

Joe Francis, NE Department of Environmental Quality, Lincoln, NE

THE DATA THAT BRINGS IT ALL TOGETHER

Regional Water Policy Gap Analysis

A regional water policy gap analysis has been conducted to achieve a better understanding of the current local policies and programs that affect groundwater, surface water, storm water, and wastewater. Learn more about the process and results.

Christine Spitzley, Tri-County Regional Planning Commission, Lansing, MI

3:30 p.m. Technical and Management Practice Approaches to Agricultural Water Management

As a progressive Nebraska farmer, Roric will share agricultural water management and water conservation practices, water budgets, and his experiences with the Nebraska Water Balance Alliance.

Roric Paulman, Agribusiness and Nebraska Water Balance Alliance, Sutherland, NE

4:00 p.m. **"200-12" Reduced Irrigation on Corn**Demonstration Project

On-farm demonstrations show how water conservation technologies and irrigation management practice adjustments can reduce on-farm groundwater use allowing irrigated agriculture to remain financially viable.

Harold Grall, North Plains Groundwater Conservation District, Dumas, TX

4:30 p.m. Balancing the Protection and Preservation of a Precious Regional Resource with Economic Development

Learn about the enhanced protective strategies
Dayton used to strengthen its source water protection
program and ensure continued risk reduction.
Gayle Galbraith, Department of Water, Division of
Environmental Management, Dayton, OH

Regional Aquifer Mapping Using Airborne Surveys – Eastern Nebraska Water Resources Assessment Project

Learn how Eastern Nebraska is using advanced geophysical airborne electromagnetic surveys as an effective tool for hydrostratigraphic characterization of the subsurface.

Katie Cameron, Conservation & Survey Division, University of Nebraska, Lincoln, NE

Tools and Data for Identifying Areas with a High Potential for Private Well Contamination

See the results and maps resulting from a nationwide assessment of private wells and strategies for using the data to address private well water quality problems. James VanDerslice, University of Utah, Salt Lake City, UT

USGS Groundwater Watch Custom Networks Deliver Information for Multiple Missions

Groundwater Watch delivers data from more than 850,000 wells spanning 100 years to water resource managers and the public through a common Web interface. Learn how the USGS can create custom networks of these existing wells to answer your management questions.

Robert Swanson, USGS Nebraska Water Science Center, Lincoln, NE

6:00p.m. Let's Get Started: A Networking Dinner

Speaker: John Heaston, Platte River Program Director, The Nature Conservancy, Lincoln, NE

THURSDAY, OCTOBER 22

8:00 a.m. **Networking Opportunities** Exhibits Open

8:30 a.m. Sparkplug Breakfast

Get energized and recharged for action as Seacrest shares her enthusiasm and dedication! Speaker: Susan Seacrest, Groundwater Foundation President Emeritus

9:30 a.m. **Networking Break** Exhibits Open

9:45 a.m. Recharging Groundwater Education

Educating the public about groundwater is the mainstay of The Groundwater Foundation's mission. Learn about the latest in groundwater education tools to help you raise awareness in your community.

TBD, The Groundwater Foundation, Lincoln, NE

10:15 a.m. Challenges in Communicating Groundwater Science

Out of sight and out of mind, it is always a challenge to communicate about groundwater to the public. This presentation will place particular emphasis on how knowledge of groundwater systems can be applied to sustainability and good governance.

William M. Alley, National Ground Water Association, Westerville, OH

10:45 a.m. Putting "Water System Managers" into the Aquifer Management Business

Holistic management of water is based on a vertical integration of all steps of water system management, from selecting well sites, to managing the source water aquifer, to safe delivery to customers. Learn how sound science, planning, and engineering products and principles are important to this approach.

Adam Rupe & Marc Rosso, JEO Consulting Group, Inc., Lincoln, NE

11:15 a.m. Optimism for the Future of Water Management

Taking into consideration the presentations of the conference and current global initiatives, Karen and Jim will provide a glimpse into the future of water management and how the work of each of us over the next 30 years will impact groundwater resources.

James W. Goeke, Hydrogeologist, Professor Emeritus, University of Nebraska, Lincoln, NE

Karen Amen, Board Member, Lower Platte South Natural Resource District and Commissioner, Nebraska

Natural Resources Commission, Lincoln, NE

11:45 a.m. Conference Wrap Up and Prize Drawings

Were you able to chat with and visit all the exhibitors? If so, you will be eligible to win a variety of prizes!

12:00 p.m. Conference Adjourns

POSTER SESSIONS/EXHIBITS

Poster sessions and exhibits will be up throughout the conference. Be sure to visit each one and get your prize postcard initialed to be eligible for the prize drawings on October 22nd.

Don't Know What to Do With Your "Leftovers?" We Can Help!

Jessica Wheeler, The Groundwater Foundation, representing the Nebraska Medication Education on Disposal Strategies (MEDS) Coalition, Lincoln, NE

Educating the Next Generation on Irrigation Management through Excellence in Ag Sciences Day

Brandy VanDeWalle, University of Nebraska Extension in Fillmore County, Geneva, NE

Gaining Insight on Water Resources in Nebraska: Development of a Comprehensive Web Tool to Evaluate Basin Water Supplies and Demands

Jessie Winter, Nebraska Department of Natural Resources, Lincoln, NE

Hydrogeology, Helicopters, and Headaches: Dealing with Large Scale, Rapid In-Season Water Declines in the Lower Platte South Natural Resources District, Eastern Nebraska

Dick Ehrman, Lower Platte South Natural Resources District, Lincoln, NE

Interpretation of Helicopter Electromagnetic (HEM) Survey for Hydrogeologic Characterization and Groundwater Modeling

Janet Mathews-Flynn, Burns & McDonnell, Kansas City, MO

Irrigation Optimization for Increased Yields and Water Use Efficiency

Kylen Hunt, CropMetrics, North Bend, NE

Let's Keep It Clean!

Anthony Lowndes, The Groundwater Foundation, Lincoln, NE

Natural Resources District Governance System Resiliency

Ann Bleed, Ann Bleed and Associates, Lincoln, NE

Netafim Drip Irrigation Solutions

Netafim USA, Fresno, CA

The Nebraska Natural Resources Districts Oral History Project

Jesse Starita, Robert B. Daugherty Water for Food Institute, Lincoln, NE

Of Mandates and Miracles: Maximizing Opportunities for Partnership Building

Janet Bonet, Spring Lake Park Habitat Restoration and Preservation Team/Spring Lake Neighborhood Association, Omaha, NE

Reinventing Your Outreach Strategy to Achieve Success in Watershed Management

Willa Tharnish, Lincoln Lancaster County Health Department, Lincoln, NE Ellen Wright, City of Lincoln Watershed Management Division, Lincoln, NE

Senninger Irrigation

James Burks, Senninger Irrigation, Clermont, FL

Stormwater Sleuth and Running Rain: Educating the Next Generation About Stormwater Runoff Issues and Green Infrastructure Solutions

Kelly Feehan, University of Nebraska Extension, Columbus, NE David Shelton, Professor Emeritus, University of Nebraska Biological Systems Engineering, Concord, NE

Water Resources Inventory Report

Curt Becker, Lower Elkhorn Natural Resources District, Norfolk, NE Karen Griffin, Olsson Associates, Lincoln, NE Mike Sousek, Lower Elkhorn Natural Resources District, Norfolk, NE Caitlin Thomas, Olsson Associates, Lincoln, NE Rick Wozniak, Lower Elkhorn Natural Resources District, Norfolk, NE

Well Cap Groundwater Monitoring Station

John Humphreys, Sutron Corporation, Sterling, VA

What's in my Groundwater and is it OK? The Quality-Assessed Agricultural Contaminant Database for Nebraska Groundwater

Ryan Chapman, NE Department of Environmental Quality, Lincoln, NE Marty Link, NE Department of Environmental Quality, Lincoln, NE Craig Romary, NE Department of Agriculture, Lincoln, NE

POST CONFERENCE TOUR

12:30 – 3:30 p.m.

Old Salt Brings New Life: Nebraska's Eastern Saline Wetlands (optional – not included in registration)

Visit sites near Lincoln that are the last remains of a large salt basin. European settlers speculated on mining salt for the westward expansion. These salt water springs support a rare and unique environment for halophytes and invertebrates. The tour will focus on preservation and restoration of the saline wetlands and the biota, research being conducted to better understand he groundwater system sustaining the saline wetlands, Federal and State endangered species, and the conservation challenges of the Saline Wetland Conservation Partnership in a growing urban landscape. Lunch and transportation are included in this tour. Walking shoes and clothing/jackets appropriate for the weather are highly recommended. Tour co-sponsored by Lower Platte South Natural Resources District, Lincoln, NE.

Cost: \$37.50

NATIONAL CONFERENCE CO-SPONSOR

Nebraska Department of Environmental Quality

CONFERENCE PARTNERS

Netafim USA Senninger Irrigation Valmont Industries

SUPPORTING SPONSORS

Southern Nevada Water Authority

ADDITIONAL CONFERENCE SUPPORT

Central Nebraska Public Power and Irrigation District
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Lincoln Community Foundation
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Lower Platte South Natural Resources District
Nebraska Association of Resources Districts
Nebraska Environmental Trust/Nebraska Academy of Sciences.
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