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 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 reconstructed 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. 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.
Cost: FREE (registration required)

3:00 – 5:00 p.m. H2O Heroes: A Community Groundwater Protection Workshop – presented by The 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! Join us for this celebratory evening of fun as we look towards the future and the many opportunities it holds as we work together to protect groundwater.
Speaker: Mogens Bay, CEO, Valmont Industries
**WEDNESDAY, OCTOBER 21**

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

8:00 a.m. | Welcome | Gay Griffin, Groundwater Foundation President, Lincoln, NE

8:30 a.m. | Keynote Presentation | Jay Famiglietti, Hydroligist, University of California Irvine Professor and NASA Jet Propulsion Laboratory Senior Water Scientist, Pasadena, CA

9:30 a.m. | Networking Break | Exhibits open

10:00 a.m. | **CLIMATE CHANGE: IT’S HOT IN HERE!**

**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

**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

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

**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 Flute, Tim Freed, and Jennifer Schellpeper, NE Department of Natural Resources, Lincoln, NE

11:00 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. 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!

MANAGING A PRECIOUS RESOURCE

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

LET’S CLEAN IT UP!

1:00 p.m.
Air Stripping System for Municipal Groundwater Wells
Presentation will share TCE/PCE monitoring data, the operational pattern of the air stripping system, and the cost of operation and maintenance.
Percival Thomas, City of Orillia, Canada

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

Assessing and Managing Health Risks Associated with Exposure to Arsenic from Private Wells in New Hampshire
Summarization of work that enhanced state efforts to limit disease associated with private well use. Findings from local interventions and lessons from the development of a state-of-the-art web-application built to support private well owner treatment decisions will be shared.
Pierce Rigrod, NH Department of Environmental Services, Concord, NH

1:30 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

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

2:00 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

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

2:30 p.m. Networking Break  Exhibits Open

GROUNDWATER: TAKING CARE OF BUSINESS

3:00 p.m.
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. **Quartz Valley Tribe Groundwater Monitoring Program**
Collaboration between local agencies, landowners, and the Tribe has been critical to the implementation of the monitoring program and the development of a groundwater/surface water management plan.
Crystal Robinson – Quartz Valley Indian Reservation, Fort Jones, CA

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

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

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

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

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

6:00 p.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 Groundwater Foundation founder Susan Seacrest shares her enthusiasm and dedication!
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**
TBD

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**
Poster sessions 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 22.

**Integration of DC and TDEM Resistivity to Characterize Shallow Groundwater Aquifers in Western Saudi Arabia**
M.A. Al-Jadani

**Natural Resources District Governance System Resiliency**
Ann Bleed, Ann Bleed and Associates, 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

**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

**Stormwater Sleuth and Running Rain: Educating the Next Generation About Stormwater Runoff Issues and Green Infrastructure Solutions**
Kelly Feehan, Nebraska Extension, Columbus, NE

**Irrigation Optimization for Increased Yields and Water Use Efficiency**
Kylen Hunt, CropMetrics, North Bend, NE

**Interpretation of Helicopter Electromagnetic (HEM) Survey for Hydrogeologic Characterization and Groundwater Modeling**
Janet Mathews-Flynn, Burns & McDonnell, Kansas City, MO

**Deep Geological Investigation in Eocene and Cretaceous Age Formations, Miami-Dade County Florida**
Edward Rectenwald, MWH Americas, Inc., Miami-Dade County, FL
Coordinating Resources for Assessing Impacts to Groundwater Quality
Craig Romary, NE Department of Agriculture, Lincoln, NE
Marty Link, NE Department of Environmental Quality, Lincoln, NE
Ryan Chapman, NE Department of Environmental Quality, Lincoln, NE

Big Data? Open Data? What? And Case Study: NRDs and others
Mike Schwab, Beehive Industries, Lincoln, NE

Application of Matlab in Creation of Conceptual 3D Model of Hydrological Parameter and Skill Enhancement of Students
Arun Nihal Singh and Anupam Singhal, Dept of Civil Engineering, Rajasthan, India

The Nebraska Natural Resources Districts Oral History Project
Jesse Starita, Robert B. Daugherty Water for Food Institute, Lincoln, NE

Educating the Next Generation on Irrigation Management through Excellence in Ag Sciences Day
Brandy VanDeWalle, Nebraska Extension in Fillmore County, Geneva, NE

Water Resources Inventory Report
Caitlin Weaver, Olsson Associates, Lincoln, NE
Mike Sousek, Lower Elkhorn Natural Resources District, Norfolk, NE
Rick Wozniak, Lower Elkhorn Natural Resources District, Norfolk, NE
Curt Becker, Lower Elkhorn Natural Resources District, Norfolk, NE

Gaining Insight on Water Resources in Nebraska: Development of a Comprehensive Web Tool to Evaluate Basin Water Supplies and Demands
Jessie Wietjes, NE Department of Natural Resources, Lincoln, NE

Reinventing Your Outreach Strategy to Achieve Success in Watershed Management
Ellen Wright, City of Lincoln Watershed Management Division, Lincoln, NE
Willa Tharnish, Lincoln Lancaster County Health Department, Lincoln, NE

POST CONFERENCE TOURS

12:30 -- 3:30 p.m.
Pristine Prairie: Spring Creek Prairie Audubon Center Tour (optional - not included in registration)
Only 2% of tallgrass prairie remains in North America, making it one of North America’s most threatened ecosystems. Spring Creek Prairie Audubon Center manages 850 acres of tallgrass prairie that has never been turned by plow or bulldozer. This beautiful site showcases the unturned prairie, birds and wildlife of the prairie, and groundwater springs. Lunch and transportation are included in this tour. Walking shoes and clothing/jackets appropriate for the weather are highly recommended.
Cost: $45.00

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 the 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
Support for the 2015 Groundwater Foundation National Conference provided by:

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