



SPRING LUNCHEON AGENDA

LOCATION: Denver Water Administration Bldg.
1600 W. 12th Ave. Denver, CO 80204
DATE: April 16, 2024
TIME: 10:00 am - 2:30 pm
Please arrive ~15 minutes early for parking and building security checks

This event is free for students!

10:00 - 10:15

Welcome!

Suresh Niraula, PhD, CLM - President of CLRMA; City of Arvada

10:15 - 10:45

Sloan's Lake Environmental Assessment

Jessica Andersen | Urban Ecology Supervisor | City and County of Denver
Sydney Shell, PLA, ENV SP, SITES AP | Landscape Architecture Technical
Group Manager | Pinyon Environmental, Inc.
Jeff Henderson | Pinyon Environmental, Inc.

10:45 - 11:15

Restoring Lake Arbor - Key takeaways in shoreline stabilization and water quality improvements for a shallow, nutrient-rich lake

Sam Rogers, PE | Civil Engineer - Drainage and Floodplain | City of Arvada

11:15- 11:30

Raffle | CLRMA Committee Q & A

11:30 - 12:30

Lunch

12:30 - 13:15

Denver Water's Holistic Watershed Program Overview including Reservoir Tools and Sediment Management

Alison Witheridge | Watershed Scientist, Denver Water

13:15 - 13:45

An analysis of the Application of Hydrogen Peroxide and Aluminum Sulfate (Alum) in Quincy Reservoir during the Fall of 2020.

Sherry Scaggiari | Environmental Services Manager, City of Aurora

13:45 - 14:15

Arctic Lake Sediments as a Window Into Past Climates

David Harning, PhD | Postdoctoral Associate, Institute of Arctic and Alpine Research (INSTAAR), University of Colorado Boulder

14:15 - 14:30

Bluff Lake Nature Center- Managing a Lake in the City

Rachel Hutchens | Executive Director, Bluff Lake Nature Center

[Register For the Spring Conference!](#)



Talk Summaries and Speaker Profiles

10:15 – 10:45 am | Sloan’s Lake Environmental Assessment

Summary: Denver Parks and Recreation along with our lead consultant, Pinyon Environmental, will provide an overview of the Sloan’s Lake Environmental Assessment, which is the first step in long-term restoration planning for the lake. Jessica will kick-off with the background on the “what” and “why” of the Sloan’s Lake Environmental Assessment and review the planning context, stakeholders, and project goals. Then Jeremy will review the lake existing conditions, explain the data collection process, and then walk through the environmental assessment results including water quality monitoring analysis and sediment sample characterization and analysis. Then the team will wrap up with an exploration of the restoration intervention options and discuss next steps.

Jessica Andersen has centered her career on connecting people with nature through the built environment. As an Urban Ecology Planner and a Landscape Architect with Denver Parks and Recreation she understands that urban public spaces need to be valued by humans and also must serve a variety of ecosystem services in order to keep Denver a livable city. Jessica was the lead project manager for Denver Parks and Rec during the Sloan’s Lake Environmental Assessment.

Sydney Shell, PLA, ENV SP, SITES AP is the Landscape Architecture Technical Group Manager at Pinyon. She leads design and planning ecological restoration projects by incorporating diverse technical expertise to develop data-driven solutions. As a SITES accredited professional and Envision sustainability professional, she is passionate about improving the health, vibrancy, and resilience of our environments and communities. Sydney played a key role in developing restoration alternatives for the Sloan’s Lake Environmental Assessment project.

10:45 – 11:15 am | Restoring Lake Arbor - Key takeaways in shoreline stabilization and water quality improvements for a shallow, nutrient-rich lake

Summary: Lake Arbor is a shallow, 40-acre lake surrounded by residential neighborhoods in Arvada, CO. Over many years, direct urban runoff had led to a decline in the lake’s water quality, and wave action had severely eroded many of the banks, posing safety concerns to the public. The City partnered with the Mile High Flood District and a great team of engineers and contractors to develop and construct a cost-effective solution to improve the lake’s water quality and stabilize the degraded embankments. This presentation will cover the process, challenges, and results of the project.

Sam Rogers is a civil engineer and project manager who has worked for the City for nearly 2 years in the stormwater and floodplain department. Sam’s design background specializes in natural stream restoration and floodplain modeling. As a Colorado native and Arvada resident, most of his favorite activities involve being near water, whether it’s hiking and camping near rivers, or paddleboarding on some of Colorado’s pristine lakes.

12:30 – 13:15 | Denver Water’s Holistic Watershed Program Overview including Reservoir Tools and Sediment Management

Summary: Denver Water’s first holistic Watershed Plan was completed in 2023 and it’s not a 200-page pdf report! While the details of the plan are currently only available for viewing on Denver Water’s internal GIS Hub, this presentation will share the framework and snapshots of the geospatial and water quality assessments and tools created as part of the plan. In addition, this presentation will focus on reservoir data visualization tools and a new watershed sediment management program focused on managing sediment to a critical reservoir.

Alison Witheridge is a Watershed Scientist with Denver Water. Building on the success of the From Forests to Faucets Program addressing wildfire risks, Alison has developed a holistic, long-term, and adaptive approach to prioritize and address the many other threats to Denver Water’s source water watersheds. Alison has 20 years of experience in watershed assessments, planning, and project management with public, private, and research organizations in stormwater, source water protection, and watershed resilience.

13:15 – 13:45 | An analysis of the Application of Hydrogen Peroxide and Aluminum Sulfate (Alum) in Quincy Reservoir during the Fall of 2020

Summary: Aurora’s Quincy reservoir was suffering from significant blue-green algae, cyanotoxin, blooms. The presentation will focus on the path the city took to start to heal the reservoir. The main solution was to add alum but that wasn’t a straightforward process. A permit had to be obtained from CDPHE which had several requirements associated with it. A discussion of how the data looked before and after as well as now will be included.

Sherry Scaggiari is an Environmental Services Manager responsible for the Water Quality Laboratory and Environmental Compliance for City of Aurora. Sherry has a BS in Chemistry from CSU. She has 16 years in water and wastewater treatment regulations, and 33 years in environmental analyses. Sherry holds Water Treatment D, Distribution I, and RMWQAA Level 3 Analyst Certifications. At her current role, she is responsible for regulatory requirements of three drinking water treatment facilities and one wastewater reuse facility, various discharge permits, stormwater compliance and regulatory development.

13:45 – 14:15 | Arctic Lake Sediments as a Window Into Past Climates

Summary: The continuous accumulation of sediments in lakes derive from living and non-living material present throughout the lake's watershed. In the Arctic, this can include glaciers, plants, microbes, and soil. By studying the physical, chemical, and biological properties of lake sediment, we can therefore generate continuous records of glacier history, the evolution of plant ecosystems, and understand how climate and has influenced those changes. Ultimately, these records provide key insight into our understanding of the natural climate system and allow us to make informed predictions about how the climate and environment in the Arctic may change in our near future.

Dr. David Harning is a research scientist at the Institute of Arctic and Alpine Research at the University of Colorado Boulder. His work relies on the use of lake, as well as marine, sediment records to reconstruct the climate and environment of the Arctic during times in Earth's history when temperatures were warmer than today. So far, his work has brought him to Iceland, Greenland, and Svalbard.

14:15 – 14:30 | Wildlife Refuge ~ Outdoor Classroom BLNC Improvement Project

Summary: Bluff Lake Nature Center is a nonprofit organization that owns and manages a unique 123-acre urban wildlife refuge and outdoor classroom on the site of the former Stapleton airport. It's home to an abundance of animals and native plants which thrive in a variety of habitats (riparian, prairie, and wetland). Over 90,000 visitors come to Bluff Lake each year to connect with nature including over 10,000 program participants. Bluff Lake Executive Director Rachel Hutchens will share the management challenges associated with maintaining habitat health in the middle of the city, and how Bluff Lake embraces their opportunity to provide access to nature to so many.

Rachel Hutchens has been the Executive Director of Bluff Lake since 2018. She has played a vital role in Bluff Lake's growth, focusing efforts on strengthening internal structures and systems and diversifying and maximizing revenue sources. Through these efforts, Bluff Lake has significantly grown its education programs, site sustainability, and accessibility to diverse communities. Rachel also serves on the Board of Directors with the Friends of the Front Range Wildlife Refuges. Rachel was a part of the University of Denver Institute for Leaders in Development 2021-22 cohort, and in 2023 completed the Women's Leadership Program through the Yale School of Management.

DISCLAIMER:

Any mention of trade names, manufacturers, or products, in any CLRMA events, does not imply an endorsement by the Colorado Lakes and Reservoir Management Association and its board do not endorse any commercial products, services, or enterprises.



PARKING AT DENVER WATER

CARPPOOL IF YOU CAN!



VISITOR(MAIN)PARKING LOT LOCATED BETWEEN 13TH AND 12TH AVENUES ALONG SHOSHONE STREET FOR THE CLRMA EVENT. THE 4-HOUR LIMIT WILL NOT BE ENFORCED.

ADDITIONAL PARKING IS AVAILABLE IN THE EMPLOYEE LOT LOCATED ON SEMINOLE ROAD. THE LOT IS JUST TO THE SOUTH OF METER SHOP (BUILDING F). SOMEONE WILL BE AT THE NORTHEAST GATE BETWEEN 9:30 AM AND 10:30 AM TO LET FOLKS IN

REGISTRATION FOR THE CLRMA SPRING LUNCHEON WILL BE IN THE LOBBY OF THE THREE STONES BUILDING

NOTE: DENVER WATER HAS A SMOKE/TOBACCO FREE CAMPUS, NO SMOKING, VAPING OR OTHER TOBACCO USE IS ALLOWED ON SITE, INCLUDING SIDEWALKS AND PARKING LOTS.

AFTER 10:30, YOU CAN EMAIL CYNTHIA.BRADY@DENVERWATER.ORG OR WALK AROUND TO THE FRONT OF THE ADMIN BLDG.

