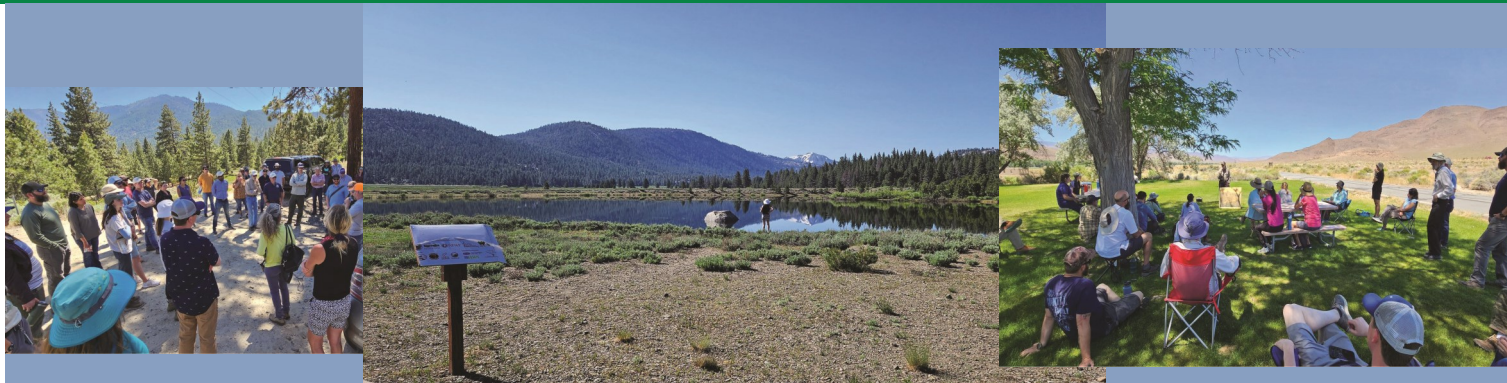


SUMMER/FALL 2024

Watershed Connections

Delivering News to the Carson River Watershed Community





CWSD held its annual "Get on the Bus" watershed tour June 11 and 12. See inside for the full story.

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*CWSD promotes cooperative action
with communities to protect the
Carson River Watershed.*

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NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

UPCOMING EVENTS

Alpine Watershed Group

[Events Calendar](#) | [Alpine Watershed Group](#)

Friends of Hope Valley

[Events Calendar](#) | [Friends of Hope Valley](#)

Carson City Open Space

[Parks, Recreation, and Open Space](#) | [Carson City](#)

Carson Valley Trails Association

[Events Calendar](#) | [CVTA](#)

Fallon Paiute-Shoshone Tribe

www.fpst.org/calendar/

Muscle Powered

[Events Calendar](#) | [Muscle Powered](#)

Nevada State Parks

parks.nv.gov/events

Washoe Tribe of Nevada and California

washoetribe.us



SCAN TO READ
US ONLINE!

Editor:

Brenda Hunt

Production:

Kelly Nicholas



*Cover: Winter shot? Nope! Red Lake's ice
sheet in June 2023. We thought it was a
good time for some refreshing views.
Photo courtesy of Kelly Nicholas.*

Washoe Tribe to Host TREX

By Kelly Nicholas, CWSD Watershed Program Tech - AmeriCorps

This fall, the Washoe Tribe of Nevada and California, in collaboration with University of Nevada Reno (UNR) Extension, The Nature Conservancy, and the U.S. Forest Service, will host its first-ever intentional fire TREX, or training exchange. This TREX offers an opportunity to learn about the Washoe Tribe's revitalization of cultural practices while supporting prescribed fire in the Tahoe basin for forest health.

"It is often easier to burn on private land than on Tribal land," said Rhiana Jones, Environmental Director for the Washoe Environmental Protection Department. "So we are partnering to find ways to remain stewards in our traditional homelands."

UNR Extension manages Nevada's wildfire consortium [Living With Fire](#), which comprises federal, state and local firefighting agencies as well as resource management agencies. Funding for the TREX was provided by the California Department of Forestry and Fire Protection Business and Workforce Development Grants, The Nature Conservancy, Tahoe Regional Planning Agency, the National Forest Foundation and the Tahoe Fund.



Trainings will be held throughout the Washoe homelands, with a significant portion at the Nevada 4H camp at Lake Tahoe. Instructors will discuss the differences and similarities between cultural fire and prescribed fire, as well as how cultural fire differs from Tribe to Tribe. "We used fire to manage certain cultural resources such as willow or elderberry," said Jones. "Areas were burned as a form of tending the cultural resource patch. Some historians say colonizers began burning after watching Natives do it and seeing the land come back restored the following season."

The idea of a training exchange isn't new. According to the website [firenetworks.org](#), the TREX model originated in the Great Plains in 2008 to address training gaps that limited the ability to conduct prescribed burns. Since then, the approach has grown, spread, and been adapted to a wide range of locales, landscape types, and local needs. By 2023, dozens of partners had organized more than 140 TREX events in the United States, Canada, Spain and Portugal, providing training and hands-on experience to nearly 4,000 people and putting more than 170,000 acres of beneficial fire on the ground.

Applications from Indigenous people were prioritized for this TREX, but applications from all who share a commitment to learning and collaboration in this field were considered. All participants meet

(See TREX, page 4)

Spring Watershed Forum Looks Ahead

By Kelly Nicholas, CWSD Watershed Program Tech - AmeriCorps

The Carson River Coalition (CRC), in conjunction with the Carson Water Subconservancy District (CWSD), held its 2024 Watershed Forum March 5 and 6 at the Governor's Mansion in Carson City. Water professionals, in keeping with the theme "Looking Ahead," discussed the Carson River Watershed's current and future water management needs.

This year's forum was a "collaboration celebration" of our CRC partners' accomplishments. Topics included stormwater management, the 30-year water plan, strategies to protect the upper watershed, soil health and water quality, invasive species, the weather for the new water year, and what's ahead for CRC stewardship. As keynote speaker, State Engineer Adam Sullivan reported on the state's water outlook.

The forum offered attendees the chance to provide input for the update of the CRC floodplain management plan and meet a private individual who implements soil health practices that benefit water quality in the watershed. Attendees surveyed about their favorite topic highlighted the panel of emergency managers from Carson City and Douglas, Lyon, and Storey Counties who provided new insights into



(See FORUM, page 7)

Second Annual Alpine County Arbor Day Brings Back the Trees

by Kaitlyn Garber, Wildfire Restoration and Forest Resiliency Fellow, Alpine Watershed Group

The second annual Alpine County Arbor Day, held April 26, was a resounding success. The planting event was hosted by the Forest Health Community Working Group, a collaborative of local groups and experts in forest management and wildfire-risk mitigation.

A total of 115 volunteers came out and planted 500 trees around the west shore of Curtz Lake. We were so thankful to have such a community turnout, as well as volunteers from California Conservation Corps, California Climate Action Corps, Minden Rotary Club, and students from Lake Tahoe High School. It's involvement like this that improves the health of our forests.



High-school students provide mulch for a planted seedling. All photos courtesy of AWG.

taking down hazardous trees and placing these felled trees perpendicular to the slope. This helps stabilize the burned hillsides to minimize erosion. One reason this site was chosen for planting is because seedlings survive well when integrated upslope of these horizontal logs. Our volunteers did a great job planting in these prime spots! The site experiences dry conditions and direct sunlight, so Jeffrey pine seedlings were chosen for their high survivability in this environment.

After the planting, my co-fellow Bella and I returned to Curtz Lake to tag 50 planted seedlings. We used ArcGIS Pro to generate 50 random points within the planting boundary, and we used ArcGIS Field Maps to walk to these generated points and log GPS locations of the seedlings we tagged there. We have a monitoring protocol in place to track the survivability of the seedlings in the



Students from a local school group carry their seedlings to the lake to be planted.



Volunteers gather before planting and are debriefed by Alpine County Wildfire Project Coordinator Clint Celio.

coming years, so stay tuned to hear how your seedlings are doing. As of now, the trees are surviving and thriving!

Thank you to all the inspiring and impactful volunteers who came out to support landscape reforestation in the Tamarack Fire burn scar. Thank you to the organizations that make up the Forest Health Community Working Group: Alpine Biomass Collaborative, Alpine County, Alpine Fire Safe Council, Alpine Watershed Group, CalFire, U.S. Bureau of Land Management, and U.S. Forest Service; to the Alpine Trails Association for lending tools; and to the Sugar Pine Foundation for donating seedlings.

Please consider joining us for next year's Alpine County Arbor Day event!



A successfully planted seedling is admired by local high-school students.



Find out more about the Forest Health Community Working Group by visiting <https://www.alpinecountyca.gov/699/Forest-Health-Community-Working-Group> or scanning this QR code.



"Get on the Bus" A Rolling Success

by Brenda Hunt, CWSD Watershed Program Manager

On June 11 and 12, CWSD and the Carson River Coalition hit the road for the "Get on the Bus" Watershed Tour. Attendees included federal, state, and municipal engineers and hydrologists, CWSD board members, private consultants, and residents who were eager to learn about



Dave Friedman from NDEP speaks to attendees at Dayton State Park about the Carson River Mercury Superfund site. Photo by Lindsay Marsh.

watershed and provided an overview for integrated watershed planning and management. Resource experts covered topics such as river rehabilitation and habitat improvements, water quality, water quantity, floodplain management, outreach & education, recreation, invasive species and the soil health-water quality connection.

Day One provided presentations at stops in the upper watershed, including California. We traveled through Carson Valley, up to Faith Valley, through Hope and Diamond Valleys and back into Nevada, where we stopped at two ranches in the Carson Valley, the Allerman Canal and upper Clear Creek.

Day Two we toured and heard presentations associated with the lower watershed starting in Carson City, through Dayton Valley, stopping at Dayton, Buckland's Station, Ft. Churchill and Lahontan

water resources and the Carson River.

The two-day tour covered both the upper and lower

State Parks, Lahontan Reservoir, and alluvial fan areas in Lyon County's Mark Twain development.

Despite the second day's scorching temperatures, passengers took the weather in stride. Positive comments from the post-trip survey included "Really illustrated how water issues touch every aspect of life," "Presenters were knowledgeable and friendly," and "Loved how you hit all areas of watershed issues."

Continuing education credits were earned by engineers (12), certified floodplain managers (5), planners (11), and water operators (11). So professionals, keep that in mind for next year!

The "Get on the Bus" tour of the Carson River Watershed is a great way for local residents and resource professionals to learn how programs and projects benefit our watershed and our water quality. It provides the opportunity to meet our partners and see what is happening on the ground. It opens the door for fresh ideas, perspectives, and collaboration. The Carson River Watershed is a lifeline connecting our communities. Please join us next year!

CWSD sends out a big thank you to our participants and our amazing speakers who shared their expertise with attendees. Many thanks to our bus tour sponsors, who supported our lunches and snacks during the tour: Vidler Water Company, Michael Baker International, HDR Inc., Kimley Horn, and Resource Concepts, Inc. Thank you also to the Nevada Division of Environmental Protection for partially funding, along with CWSD, this informative tour!

To see a copy of the "Get on the Bus" program, including speaker bios, visit <https://tinyurl.com/2dtazdue>

(TRES, from page 2)



LIVING WITH FIRE

and the values of cultural fire and prescribed fire on the landscape," she said. "We are always working to remain stewards of our traditional homelands and retain our cultural and spiritual connection with these places."

To inquire about future TRES events, please reach out to Rhiana Jones at Rhiana.jones@washoetribe.us

For further information or questions, contact Living With Fire Director Christina Restaino, Ph.D., at restainoc@unr.edu

current fire certifications outlined in the [National Interagency Incident Management System Wildland Fire Qualification System Guide PMS 310-1](#), have passed a pack test, and have demonstrated the ability to deploy a fire shelter.

As wildfire season continues within the Carson River Watershed, Jones emphasized the benefits of this collaboration. "The Washoe Tribe of Nevada and California values our partnerships with other agencies and appreciates the opportunity to work with others to restore and learn about this cultural practice

Carson City Updates River Master Plan by Marena Lovejoy, Senior Natural Resource Specialist, Carson City Parks, Recreation & Open Space

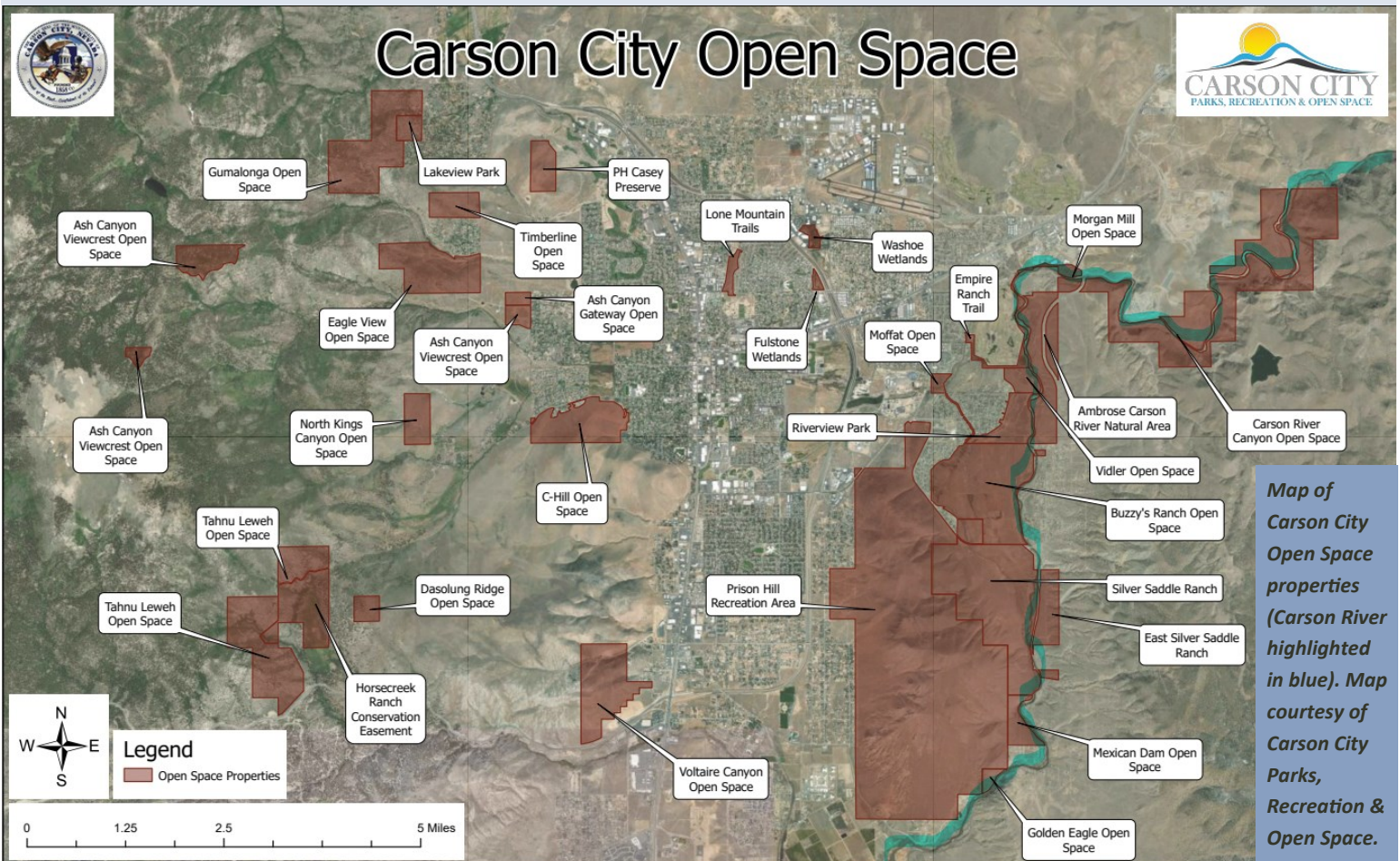
In 1993, a committee was formed to explore creating a “Carson River Corridor” to improve public access to the river in Carson City. Input from more than 100 members of the public was received, reflecting a strong consensus for respecting private property, minimizing impacts and protecting the Carson River’s integrity. The need to balance private land ownership with the ecological, cultural, and recreational benefits of the river led to the establishment of the Carson River Advisory Committee (CRAC). This group aimed to develop plans for safe recreation while protecting private lands, wildlife, natural and cultural resources.



With this goal in mind, the Carson River Master Plan (CRMP) was completed in 1996. One avenue to accomplish these goals and see the “Carson River Corridor” vision come to life was to acquire parcels along the river. This dovetailed with establishment of the City’s Open Space program, after voters passed the Quality of Life Initiative to increase sales tax by ¼ of 1 percent to support parks, trails and open space. Since then, Carson City has been able to preserve nearly 7,500 acres of undeveloped open space lands. Many of these parcels are adjacent to the Carson River, forming an 11-mile-long segment of protected river and preserving the ecological functionality from potential development pressure impacts.

Though the CRAC was dissolved after 17 years, consideration of the river now falls to the Open Space Advisory Committee and Open Space staff, and it is time to amend the original

CRMP. To aid this effort, staff received a technical assistance grant from the National Park Service through the River, Trails and Conservation Assistance Program. The first year of planning emphasized process development and organization. Presently, the team is focused on stakeholder engagement for a comprehensive and inclusive plan. The amended plan will include a current conditions analysis of the river; an assessment of current recreational uses and demand; and identification of restoration opportunities and management objectives. There will be opportunities for public input in the near future, and we hope to publish the amended CRMP by late 2025.



Water and Pollinators Are Bee-You-Ti-Ful Partners

by Lindsay Marsh, CWSD Water Resource Specialist 1

June was pollinator month, but we need pollinators the other months too, and they need us! So, let's deep dive into the importance of water for the creatures that ensure our plants and flowers are plentiful.

Many pollinators live in our watershed – all sorts of bees, bats, hummingbirds, butterflies, and many others. Just like humans, pollinators require water sources. However, each pollinator has preferences on where they get their water from. Hummingbirds enjoy running water to fly through and wash their wings. They also prefer moving water, which is often cleaner than stagnant.

In contrast, bees prefer shallow, unmoving water that contains organic matter so they can get the nutrients they can't get from nectar.


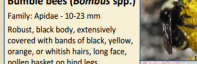
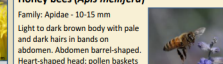
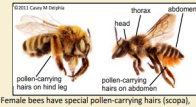
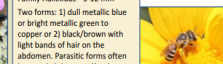
Other pollinators such as bats are vulnerable to dehydration and can be indicators of water quality and water sources. In countries where water is scarce, people tend to follow bats to find water for themselves!

Several studies have reviewed drought's impact on plant and pollinator functions. Keeping open space, floodplains, and rivers functioning naturally allows our pollinators to do what they do best and access what they need.

Reducing natural habitat can lead to the decline of pollinator species,

Nevada Bee Identification Guide

Devon Picklum¹, Cynthia Scholl², and Kevin Burfi³
¹ Ecology, Evolution, and Conservation Biology, University of Nevada, Reno, NV
² Nevada Bug and Butterfly
 In cooperation with Pollinator Partnership
 Photographs of Nevada bees by Joseph S. Wilson

 <p>Bumble bees (<i>Bombus</i> spp.) Family: Apidae - 10-23 mm Robust, black body, extensively covered with bands of black, yellow, orange, or whitish hairs, long face, pollen basket on hind legs. Why bees are important: Bees provide essential ecosystem services in natural and agricultural landscapes as pollinators of three-quarters of flowering plants. For people, this means every third bite of food is the result of pollination. Plants rely on pollinators to reproduce and set seed. Honey bees pollinate crops, but native bees also have a role in agriculture and they are essential for pollination in natural landscapes. There are 1,000 native species of ground-nesting, twig-nesting and parasitic bees found within Nevada. This guide gives information for identifying 10 major groups of bees commonly observed in Nevada including key characteristics, size (in mm), nesting habits, floral preferences, and distinctive behaviors.</p>	 <p>Honey bees (<i>Apis mellifera</i>) Family: Apidae - 10-15 mm Light to dark brown body with pale and dark hairs in bands on abdomen. Abdomen barrel-shaped. Heart-shaped head; pollen baskets on hind legs. Social colonies nest underground, usually in abandoned rodent nests. Bumble bees pollinate in cool, cloudy weather when most bees are at home. Bumble bees can buzz pollinate flowers, like tomatoes, that require vibration to release pollen.</p>	 <p>Sweat bees Family: Halictidae (Agapostemon, Augochlorella, Halictus spp. & others) Family Halictidae - 3-12 mm Two forms: 1) dull metallic blue or bright metallic green to copper or 2) black/brown with light bands of hair on the abdomen. Parasitic forms often have red abdomens. Slender body, pollen-carrying hairs on hind legs. Solitary to social, nest in the ground. Some are attracted to salt in your sweat.</p>
<p>Bee Identification: Bees have three body segments: a head, thorax, and abdomen. The head has compound eyes, a pair of segmented antennae, and mouthparts including mandibles for biting, and the tongue for drinking nectar. The thorax bears the legs and four wings. The abdomen contains digestive organs and the sting in females.</p>  <p>Female bees have special pollen-carrying hairs (scopa), usually on the legs, or in the case of leafcutters, under the abdomen. Honey bees and bumble bees carry pollen packed tightly into a ball on pollen baskets (corbiculae), compact areas on their hind legs.</p>	<p>Carpenter bees (<i>Xylocopa</i> & <i>Ceratina</i> spp.) Family: Apidae Xylocopa - 13-30 mm Shiny dark black to metallic blue-green body, sparse hairs on abdomen, robust with massive jaws. Pollen-carrying hairs on rear legs. Solitary to communal, nests are burrowed into wood, often in roof eaves. Ceratina - 3-15 mm Shiny dark metallic blue-green body, sparsely haired, cylindrical abdomen. Pale yellow marks on face. Pollen-carrying hairs on hind legs. Solitary or subsocial, nest in twigs and stems.</p>	

See <https://nevadabugs.org/nevada-bee-identification-guide/>

which in turn degrades the health of our ecosystem. To promote pollinator health in our own backyards,

- plant a pollinator garden with native plants.
- curb your chemical use.
- incorporate freshwater features and bird baths—with rocks in the bottom so bees and butterflies can access the water without drowning. Bees and butterflies are great at a lot of things, but not at swimming.

Water quality and quantity affects all. To have a more resilient watershed, let's give our pollinators a helping hand!



PROMOTE POLLINATORS

River Wranglers by the Numbers

By Rebecca Feldermann, RW Executive Director



how do we measure up?

Let's take a look at this last school year:

15,737 students and community members served!

105 high-school trainees developed!

23 schools reached!

Our program touches all five counties in the Nevada portion of the Carson River Watershed, but we couldn't do it without our many community partners and volunteers, including: CWSD, NDOW, High Sierra Fly Casters Club, NDEP, Nevada Division of Water Resources, Carson City Public Works, The Nature Conservancy of

Nevada, Lahontan Conservation District, Dayton Valley Conservation District, USACE, NV Silver Jackets, NV State Parks, Washoe Environmental Department, and Douglas County Public Works.

Thank you to my board of directors and their dedication to making RW so successful, including Rachel Leach, Ed DeCarlo, Sally Champion, Phyllis Atkinson, Kim Zuch, and Sydney Wirkus.

Snapshot Day, where students observe and water samples are taken for the entire Carson River, will be held Friday, Oct. 18, with required training on Tuesday, Oct. 15. If you'd like to be part of this team effort, contact me at rebecca@riverwranglers.org.

"I Am Carson River" Hits the Airwaves

By Kelly Nicholas, CWSD

Watershed residents have learned numerous simple ways they can protect our rivers, lakes, and streams. CWSD, with the help of local broadcasters, got the message out to a wider audience from last November to April. Each month, 30-second radio and TV public service announcements throughout Northern Nevada featured six easy "everyman" practices for improving water quality.

CWSD watershed program manager Brenda Hunt emphasized residents can make a difference every day. "We take our role to educate the public about their effect on our shared watershed seriously. These videos outline simple actions people can take to protect the health of the Carson River for decades to come," she said. "Although people create these problems, people are also the solution. Your actions matter!"

So what CAN you do?

- **Pitch In:** Put your litter in the garbage can and pick up trash when you see it.
- **Bag It:** Bag and properly dispose of pet waste.
- **Use a Car Wash:** Clean vehicles in a car wash so oils, tire dust, and detergents are not washed down our storm drains.
- **Recycle Your Motor Oil:** Properly recycle used motor oil.
- **Recreate Responsibly:** Pack out human waste, pet waste and trash when enjoying the outdoors.
- **Make Your Yard a Sponge:** Use thoughtful landscaping to capture and absorb runoff from your yard.



To see the PSAs, visit our YouTube channel at <https://www.youtube.com/@carsonriverwatershed5007>.

For more actions, longer clips and to take our watershed pledge, visit iamcarsonriver.org.

(FORUM, from page 2)

the intersection between emergency management and floodplain management.

The Forum continually offers a great opportunity to earn low-cost continuing education credits; this year's event provided engineers, floodplain managers, water operators and planners up to 12 professional development hours. As a bonus, two attendees won free spots on CWSD's June watershed bus tour.

We are so thankful to all our speakers and participants. Your extraordinary work inspired future collaborations as we conserve, and protect our watershed, its floodplains, and its natural resources. That's what the CRC Forum is all about!

To access this year's Watershed Forum presentations, please visit <https://www.cwsd.org/crc-meetings/> or scan the QR code below:



Looking for more summer fun? Join Carson City's Trails Challenge! Anyone can participate, and it's free! Scan the QR code below to get started.



The Nature Conservancy
Nevada



SCIENCE & NATURE SPEAKER SERIES

Join us for our spring Science & Nature Speaker Series at River Fork Ranch Preserve! Experts from The Nature Conservancy in Nevada and partner organizations will share their expertise on a variety of topics. We hope to see you there!

The fourth Thursday of every month

6 p.m. - 7 p.m.

\$10 suggested donation

381 Genoa Lane, Minden, NV 89423

Questions? Please contact Lori Leonard:

lori.leonard@tnc.org