

WINTER '23/SPRING '24

Watershed Connections

Delivering News to the Carson River Watershed Community





Carson Valley flooding, January 2017. Photo by Courtney Walker

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CWSD's mission is to promote cooperative action with communities to protect the Carson River Watershed.

*Our vision:
A healthy watershed that meets the needs of all users*

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This newsletter has been developed in part with Clean Water Act 319(h) funds from the Nevada Division of Environmental Protection.



UPCOMING EVENTS

Alpine Watershed Group

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

Carson City Open Space

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

Carson Valley Trails Association

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

Fallon Paiute Shoshone Tribe

[Website](#) | [FPST](#)

Friends of Hope Valley

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

Muscle Powered

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

Nevada State Parks

parks.nv.gov/events

Washoe Tribe of Nevada and California

[Website](#) | [WTNC](#)



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scan the QR code to visit
our Newsletters page.

Cover: Photo of Dangberg Home Ranch
Historic Park at sunrise courtesy of
Kippy S. Spilker, Nevada Magazine

WATERSHED CONNECTIONS

It's Flood Season! Nevada Floods—Are You Prepared?

by Brenda Hunt, CWSD Watershed Program Manager

Flooding in the Carson River Watershed is a natural, regularly occurring process. Serious flooding can happen approximately every 10-20 years and often occurs after rain-on-snow events or summer thunderstorms. On January 1-3, 1997, Western Nevada saw one of its most devastating rain-on-snow floods along the Carson River. Since then, there have been several floods of note in 2006 and 2017.



The Carson River, with its extremely limited upstream water-storage capacity or capability, is unique, and there are no flood-control structures within the river. We have something better—open floodplains—that provide our watershed with the best riverine flood-control mechanisms available! Open floodplain lands protect us from serious flooding by allowing water to slow down,

(See FLOODS, page 4)

Watershed Map Celebrates 20 Years by Kelly Nicholas, CWSD AmeriCorps Service Member

Greg Brady didn't start out as a native Nevadan, but one of the graphic designer's works has become an instantly recognized piece of Silver State lore for thousands of schoolchildren and adults alike: The Carson River Watershed Map. The map will celebrate its 20th anniversary in 2024, and it has been a valuable teaching aid for learning about the Carson River, "A Lifeline Connecting Our Communities." Even Brady, who lived in Gardnerville at the time, learned something from it and counts it among his more enjoyable projects.



"I remember that before I did the research for this map, I never really thought about where the Carson River went. I had never been out to Stillwater," said the life-long artist, who counts drawing and oil painting as his favorite media.

Brady also needed to create a map that encompassed the entire watershed while keeping it engaging; this resulted in a cartoon-style drawing. His outdoor hobbies and having animals as a favorite drawing subject solidified his choice. "At the time I did the map, I was into skiing and fly fishing," said Brady. "I would ski out at Kirkwood and fish the Carson River near Markleeville and Hope Valley."

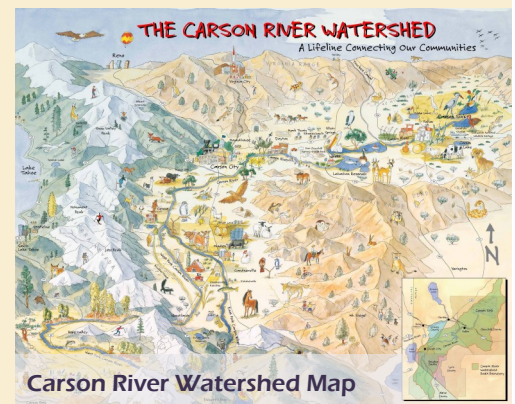
Personal experiences and memories also made their mark. "My kids saw a little garter snake while I was fishing Indian Creek Reservoir, so that is where I put one in," Brady said. "The first wild beaver I saw was while fishing on the East Fork of the Carson River, so that's where he went."

These days, Brady lives in south Reno and spends his free time walking, plein-air painting, and hiking with a sketchbook in hand. He reflected fondly about his role in making the watershed come alive.

"I just wanted it to be fun and informative. It was fun to make, and I am proud of it."

Want your own copy of the Carson Watershed Map? Stop by the CWSD offices, or [print one out here](#).

[Visit here for a historical timeline of the Carson River Watershed.](#)



Board Spotlight

For the first time in many years, CWSD has a full 15-member board. Here's an introduction to a few of our newest members:

Sharla Hales was elected in 2022 to the Douglas County Board of Commissioners and was appointed to the CWSD Board in February 2023. She has lived in Minden, NV for 35 years. She spent 12 years as a school board trustee, during which she served on various statewide education committees and as President of the Nevada Association of School Boards. By vocation, Sharla is an attorney currently serving as General Counsel for Churchill County School District.



Sharla Hales

Sharla and her husband of 40 years, Jim, raised their children in Carson Valley and love living near the Sierra Nevada mountains. Sharla and Jim enjoy skiing, biking, kayaking, boating, and rafting. Sharla

appreciates the opportunity to be part of a group dedicated to preserving the health of the Carson River Watershed and to protecting the environmental health of Carson Valley.

Harry "Bus" Scharmann was first elected as a Churchill County Commissioner in 2013, and currently serves as Chair of the Board. He was appointed to the CWSD Board of Directors in January 2023.

Born in Modesto, CA, Bus grew up on a Central Valley dairy farm. In 1970, Bus graduated with an associates of arts degree from San Joaquin Delta Junior College in Stockton, CA. He went on to receive his bachelor's degree in education with a minor in sociology from Brigham Young University in 1973.

In 1975, Bus received his master's degree in education, with an emphasis in community education. He later was offered a full-time position working jointly



Bus Scharmann

(See BOARD, page 5)



BAG IT

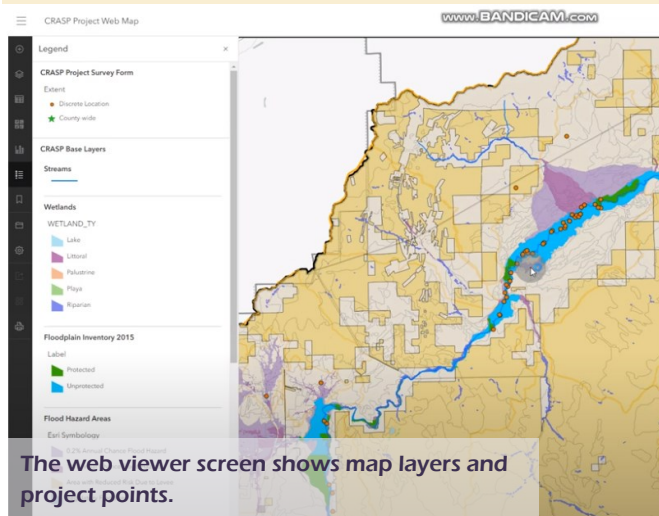
New year, new focus for January: Do you know how much pet waste dogs generate in the Carson River Watershed EACH DAY? Visit iamcarsonriver.org to find out, [take our pledge](#) and look through this issue to find out ways you can help protect the watershed we all love all year long.

CWSD to Release New Project Tracker

by Brenda Hunt, CWSD

Watershed Program Manager

In 2024, CWSD will launch its new Carson River Watershed Adaptive Stewardship Plan (CRASP) Geographic Information Systems (GIS) web-map viewer and project tracker to the public and our partners. Over the past 30 years, CWSD's partners have completed multiple on-the-ground water-quality improvement projects throughout the Carson River Watershed. These projects not only improve water quality but also stabilize riverbanks, improve habitat, reduce invasive species, protect and manage floodplain



The web viewer screen shows map layers and project points.

lands, create river access and trails, and improve our water supply. Through our work with NCE, our contractor, access to those projects will be at the fingertips of the public, and tracking them will be as easy as the Survey123 app associated with the web viewer.

More than just a historical project database, the partner portal will allow current and future projects to be uploaded and viewed using the ArcGIS Survey123 app. CWSD will be training partners to upload recent projects and conduct quality control to ensure the database is complete. Currently, CWSD tracks projects throughout the watershed manually using maps and spreadsheets to update project tables

(See WEB VIEWER, page 5)

WATERSHED CONNECTIONS

Climate Action Fellows Join AWG contributed by Alpine Watershed Group

Alpine Watershed Group (AWG) is honored to have two California Climate Action Corps Fellows for the 2023/2024 term. Through August 2024, Bella Kurtz and Kaitlyn Garber, Wildfire Restoration and Forest Resiliency Fellows, will help Alpine County address climate change effects and improve wildfire resiliency. They jumped right in on completing meadow assessments in the Tamarack Fire

burn scar; launching seedling survivability surveys at Turtle Rock Park after an October tree planting; and surveying aspen regeneration around Hope Valley.

Kaitlyn recently relocated from San Diego, where she attended college and served as San Diego River Park Foundation's copywriter intern. She has a B.A. in English from San Diego State University, and

with her background in watershed habitat restoration, volunteer & community engagement, and digital communications hopes to form a career sharing stories of environmental protection successes. She has immensely enjoyed meeting the Alpine County community and the Alpine Watershed Group family and can't wait to learn more about the area's forests, lakes, and rivers from all of you. In her free time, Kaitlyn likes kayaking, backpacking, and running agility drills with her Scotch Collie, Denna.

Bella is originally from Pennsylvania, where she grew up on her family's fish hatchery. She graduated from University of California, Irvine, with a B.S. in pharmaceutical sciences. During Bella's travels to multiple states and national forests the

(See FELLOWS, page 7)



Kaitlyn Garber



Bella Kurtz

CRC on floodplains: "Protect the floodplain from future development. Once the floodplain and especially the river's meander belt corridor are impacted by development, the river loses the ability to re-establish its natural functions. Agricultural fields near the channel are critical for floodwater attenuation, ground water recharge, non-point source pollution buffering, and providing habitat for wildlife."

(FLOODS, from page 2)

spread out, and sink in. If floodplain lands are developed, it puts more people and structures in harm's way. The 1997 flood cost \$29M in damages within four counties on the Carson River, compared with \$540M in the Truckee Meadows alone. This illustrates conserving the Carson River floodplain limits the costly devastation flooding causes.

The benefits of open floodplains don't stop with flood protection. Floodplains also improve water quality, recharge groundwater, provide great habitat for wildlife, and are wonderful places to recreate. These natural and beneficial functions of an open floodplain are promoted by CWSD and the Carson River Coalition (CRC). CWSD's Regional Floodplain Management Plan affirms the CRC's main floodplain management message and has been adopted by all six counties in the Carson River Watershed.

Flood Resources

[NevadaFloods.org](https://nevadafloods.org)—Learn if you live in a flood zone and what to do before, during and after a flood. Tools for flood scenarios, home or workplace flood risk, and flood damage costs

[Flood Fighter: Nevada](#)—Kids emergency-planning game

[National Weather Service Reno](#)—Local weather information: official warnings, watches, forecasts, and hazards. Also see their [Facebook page](#).

[Ready.gov](https://ready.gov)—Federal website for disasters and emergencies

[Floodsmart.gov](https://floodsmart.gov)—Flood insurance options

[American Red Cross of Northern Nevada](#)—24-hour disaster hotline: (800) 733-2767

In February, we shift gears to focus on keeping our cars running AND protecting our waterways by [Recycling Motor Oil](#). Your Actions Matter!



RECYCLE MOTOR OIL

(WEB VIEWER, from page 3)

in the CRASP. This new CRASP GIS web viewer will make this manual process a thing of the past, creating efficiencies while providing public access to this data in real time.

The CRASP GIS web viewer and project tracker has multiple base layers, including water-quality concerns, soils, county boundaries, roads, and hydrological units, that

will help partners to determine project locations and concerns to be addressed. Better project tracking will also benefit our partners, NDEP, and CWSD for grant-writing and reporting purposes.

The project tracker is jointly funded through CWSD and NDEP/USEPA Clean Water Act Section 319(h) funds. Be on the lookout for the public-version launch summer 2024!

Save the Date: March 5 & 6



CRC Watershed Forum

(BOARD, from page 3)

with WNCC and Mineral County School District developing dawn-to-dusk education and recreation programs utilizing school, county, and military base facilities. Two years later, Bus accepted a position with the WNCC Fallon Campus, where he worked as a Career Counselor, and in 1981 was promoted to Assistant Dean.

In 1993, Bus was given new responsibilities as the Dean for Off-campus Programs. He then served for a brief time as the Interim Vice President of Academic Affairs, and before the year's end returned to his home campus of WNC Fallon as Dean. After serving a rewarding career with more than 12 years as Dean, Bus retired from WNC in June 2011.

After retirement, he and wife began serving as Adoption Specialists for the Church of Jesus Christ of Latter-Day Saints through their Family Services Department in Reno. Bus also served as Churchill County School District Superintendent of Schools for the 2012-2013 school year.

Bus and his high-school sweetheart, Lana, have been married for 50 years. They enjoy living in Fallon, traveling, and spending time with their five children and 18 grandchildren.

Lee Sterrett is a Storey County Planning Commissioner and was appointed to the CWSD Board in December 2023. He grew up in a lumber-mill town on the Washington State side of the Columbia River Gorge, living less than 500 feet from the river. After moving to Seattle, he missed the forest and joined

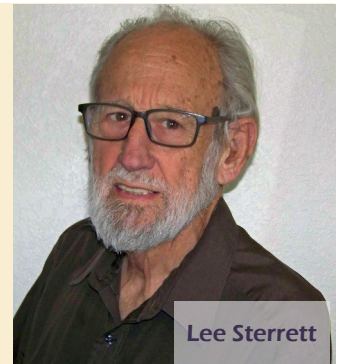
the Seattle Mountaineers as an active backpacker and mountain climber. The rivers and their watersheds he encountered provided beautiful access to the mountains and glaciers, in addition to prime fishing.

He worked five years with Boeing while attending the University of Washington. He was invited to join the U.S. military and his tenure as a Navy Seabee was the start of his career in heavy-construction management.

He worked on a large variety of projects, mostly in management positions that included project manager. He was employed for 10 years by Crowley Maritime Corporation's Marine Construction Division on projects that included dredging, piers, underwater pipelines, shoreline protection, salvage, environmental protection and environmental cleanup.

He moved to Nevada in late 1997 to work on the original Las Vegas Spaghetti Bowl Interchange and has been a Nevada resident ever since.

Lee moved from project to project and resided in Washington, Idaho, California, Alaska, Hawaii, Nevada, New York, Colorado and Texas. Usually, his family moved with him. However, while relocating for the I-580 Galena Creek project in November 2003, Lee's wife informed him that this was her last move, and he has maintained his residence in Virginia City ever since.



Lee Sterrett



March marks not only the start of spring but also a perfect time for practicing ways to **Recreate Responsibly!** Listen for our radio and television spots, and visit iamcarsonriver.org to [take the pledge](#) and learn how you can help keep our watershed healthy.

Meet Lindsay Marsh Water Resource Specialist 1

Hello!
My name is Lindsay Marsh, and I come to you with excitement and drive. I have always had a love for nature, which led me to obtain a B.S. in Environmental Engineering from the University of Nevada, Reno. I most recently worked in the residential water-treatment industry. My passion for the community steered me toward a career that supports the region's well-being.



Lindsay Marsh

Water is the lifeblood of all my favorite things: people, plants, and bugs. My favorite bugs are honeybees, but I also enjoy praying mantises. I used to maintain beehives in my backyard, and my parents had an extensive garden that made it easy to admire the creatures. Outside of work, I volunteer as an assistant coach for a high-school girls wrestling team and am a board member for one of Reno's most historic cemeteries. I am the proud mom of



Lindsay Marsh

a plethora of plants. I like to get out on local trails or watch new sci-fi movies with my family or my partner, Marco. I also love to visit historic cemeteries when I can, to remember all those who have laid the foundation for where we are now.

I am a seventh-generation Nevadan and appreciate Northern Nevada for all it

has to offer. I am delighted to live here and work at a place that values protecting our watershed's health for the enjoyment of the people who call it home. I look forward to all the new projects, lessons, scenery, and faces that this position brings.

Thank you for welcoming me.

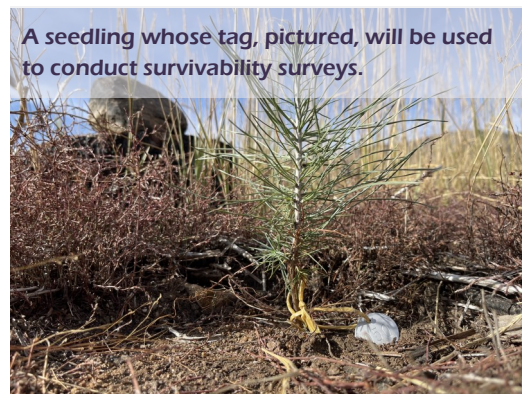
Tree Planting Spawns Survey contributed by Alpine Watershed Group

Thanks to our amazing volunteers and terrific partners, our October 21 community tree-planting event was a great success! The day started with a presentation by Sugar Pine Foundation Executive Director Maria Mircheva, who generously provided more than 700 Jeffrey pine seedlings for the event. Alpine County Wildfire Project Coordinator Clint Celio followed with an overview of the Turtle Rock Park landscape, including impacts from the Tamarack Fire and various treatment and restoration efforts.

After a planting demonstration by Alpine Trails Association President Andy Lovell, the hard work of shovels to soil began.

Volunteers were instructed to first pick the right spot.

Because these seedlings were all Jeffrey pine, which prefers cool summers and can have distorted growth due to heavy winds, planters were encouraged to seek north-facing spots for shade and shelter. The next step was to dig a hole big enough so the plug wouldn't "J-root," or have its roots bent and forced into the planting hole. Volunteers then finished the job by watering in the seedling, creating a shallow bowl to collect rain and snowmelt, and providing it with a ring of mulch.



A seedling whose tag, pictured, will be used to conduct survivability surveys.

More than 40 volunteers worked diligently for three hours, planting and watering in along 600 yards on both sides of Millberry Creek. Although the planting site ended up being on Alpine County land, we are indebted to Forester Annabelle Monti of the U.S. Forest Service for working closely with Alpine Watershed Group to make this tree-planting opportunity a reality this fall.

Ten days later, AWG Forest Health Coordinator Wes Mosley and California Climate Action Corps Fellows Bella Kurtz and Kaitlyn Garber tagged and mapped a subset of the planted seedlings to monitor their success and survivability into the future. The survey, in addition to tracking the seedlings' mortality, includes factors such as distance from the stream and the presence of invasive species, with the intention of identifying potential causes of seedling failure. This long-term monitoring project will inform successful techniques and timing for future planting projects.

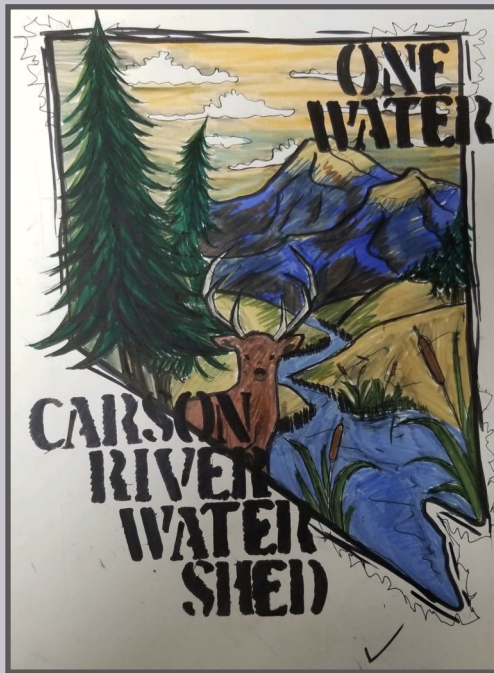
Churchill Youth Earn Poster Contest Honors



Students from Oasis, Churchill County High School and the Churchill County School District-Title VI program took top honors in the Lahontan and Stillwater Conservation District's poster contest this fall. This year's theme, "One Water" invited artists in grades K-12 to examine how water moves and connects within a watershed as one water.

The nationwide annual contest, organized by the National Association of Conservation Districts and the NACD Auxiliary, supports and highlights national conservation efforts. The top local spots earned cash prizes and advanced to state-level competition.

Poster artist credits, clockwise from top left: Nateya Wiggins, Second Place for Grades 10-12; Elayne Ernst, First Place for Grades 10-12 (Second Place in state competition); Haley Bowman (Flick), First Place for Grades 7-9; Zane Conway, First Place for Grades 2-3.



(FELLOWS, from page 4)

following year, she developed a new hobby—finding and identifying wildflowers. These experiences, along with her life-long interest in environmentalism, kindled a desire to work in conservation. She's very excited to gain new knowledge and experience related to the environment and climate change, such as observing ecological succession by comparing photographs taken over time throughout a project. Bella has enjoyed exploring Markleeville and getting to know the kind-hearted community. She hopes to become involved with local native plant nurseries during her service term. Outside of work, Bella enjoys hiking, finding and identifying wildflowers, reading, and crafting with pressed flowers.

Look for Kaitlyn and Bella's take on climate resilience in "Climate Corner," a new section in the AWG newsletter! Thank you so much to Bella and Kaitlyn for choosing to serve our community.

This April, join CWSD and [One Truckee River](#) in protecting our waters, lakes, and streams by [Making Your Yard A Sponge](#)! Are there hard surfaces in your landscaping where instead you can create a small rain garden to absorb storm runoff? Does your sprinkler system water the lawn—or your sidewalk? Visit iamcarsonriver.org, [take the pledge](#) and watch our video, and keep an eye on our [social media](#) for "sponge-y" ideas! Remember: Although we're focusing on one action each month, you can do any or all of these any time of the year. Your Actions Matter!

