

Carson Water Subconservancy District 2023 Activities & Accomplishments



Our Vision

**A healthy watershed
that meets the water needs of all users.**

Our Mission

**To promote cooperative action with communities to
protect the Carson River Watershed.**

Carson Water Subconservancy District (CWSD) strives to balance the municipal, agricultural, and environmental water needs of our watershed. We work with our watershed partners using an integrated watershed planning process to reach our goals of a sustainable, healthy watershed. To achieve this balance, CWSD integrates planning, coordinating, and management activities to support projects associated with floodplain management, river projects, water quality, water supply, invasive species, outreach and education, and recreation.

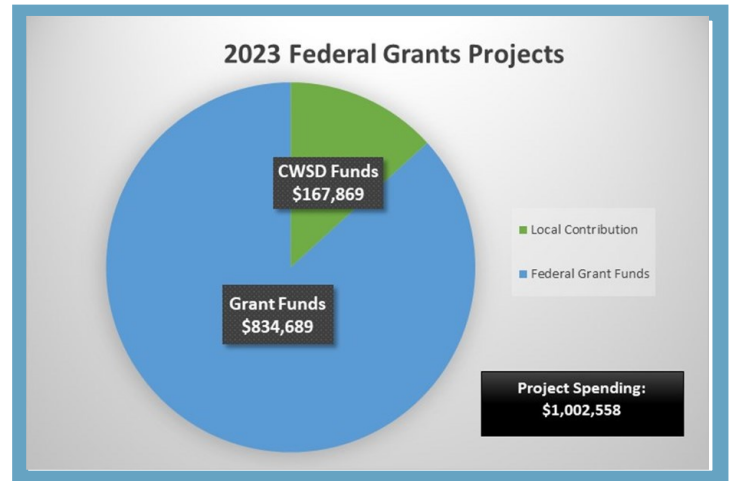


2023 Activities & Accomplishments are summarized as follows:

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Grant Administration

CWSD leveraged local funding over 5:1 with federal dollars. In FY 2023 staff administered grant implementation of the following regional projects totaling \$1,002,558.



Grantor	CWSD Match Contribution	Federal Grant Funds	Total Grant Funds	Total Spent 2023	Task
Nevada Division of Environmental Protection (NDEP)	\$160,448	\$147,000	\$307,448	\$120,744	Carson River Watershed Coordinator Program 2023-2024
Nevada Division of Environmental Protection (NDEP)	\$0	\$40,000	\$40,000	\$19,454	Clean Water Act Section 208 Planning Agency Funding
Nevada Department of Conservation & Natural Resources (DCNR) Division of State Parks	\$15,290	\$46,535	\$61,825	\$6,717	Growing the Carson River Aquatic Trail Improvements Grant
Nevada Division of Emergency Management (NDEM)	\$25,307	\$240,419	\$265,726	\$61,834	30-Year Regional Drought Water Sustainability Plan
Federal Emergency Management Agency (FEMA)	\$0	\$870,000	\$870,000	\$572,358	Mapping Activity Statement (MAS), Round 12
Federal Emergency Management Agency (FEMA)	\$0	\$755,000	\$755,000	\$221,451	Community Outreach & Mitigation Strategy (COMS), Round 1
TOTALS:	\$201,045	\$2,098,954	\$2,299,999	\$1,002,558	

Carson River Coalition Watershed Coordination Program

The Carson River Coalition (CRC) Watershed Coordination Program, partially funded through a Nevada Division of Environmental Protection Clean Water Act Section 319(h) grant continued through 2023. The Watershed Program coordinates the CRC efforts relating to river rehabilitation, water quality, floodplain management, invasive species, recreation, and environmental education and outreach outlined throughout this document. Our Watershed Technician, an AmeriCorps member, is integral to our team.

Accomplishments include:

- Managed grants for Clean Water Act Section 319 Watershed Coordination Program, Clean Water Act Section 208 Water Quality Planning, and the Nevada State Parks Recreational Trails Program (RTP). (Two RTP funding rounds have been awarded.) Work has started on the design aspects of a portage around the Mexican Dam.
- Organized quarterly CRC Working Group meetings addressing environmental outreach and education, river and floodplain management, invasive species, and our Agricultural Producers Group.
- Worked with our partners track and update projects for the [Carson River Watershed Adaptive Stewardship Plan](#) and our [2017 Supplemental Update](#). Trained partner's new staff when needed.
- Worked with our contractor and our CRC partners to edit six of the main non-point source Watershed Moment messages into 30-sec PSAs for TV and Radio. Launched Pitch In and Use a Car Wash PSAs at the end of 2023.
- Coordinated and published bi-annual [Watershed Connections newsletter](#).
- Sent Eblasts to over 1100+ CRC members providing our newsletter and information on events, grant funding, training, and other relevant watershed information.
- Coordinated social media outreach [Facebook](#), [Instagram](#) and our [YouTube](#) channel.
- Maintained our office as an AmeriCorps Host Site with Truckee Meadows Parks Foundation's State AmeriCorps Program, hosting one AmeriCorps member during 2023 as a Watershed Technician.
- Continued work on the Carson River Adaptive Stewardship Plan GIS Web viewer and partner portal with our contractor, NCE.
- Worked with River Wranglers and our CRC partners in October to conduct Snap Shot Water Quality Day at various sites along the Carson River and also assisted with Agricultural Outreach Days at local schools.



Lindsay Marsh, CWSD
Water Resource Specialist II

Water Supply

Activities conducted by CWSD in 2023 to facilitate a reliable water supply include:

- CWSD funded 10 United States Geological Survey (USGS) Streamflow Gages on the Carson River.
- CWSD funded USGS Water Level Data Collection throughout the watershed.
- CWSD staff assisted Alpine County with its Groundwater Elevation Water Level Data Collection Monitoring Program (CASGEM).
- CWSD Staff created an advisory report of water and sewer rates of the 13 major water purveyors in the Carson River Watershed.
- CWSD Staff reviewed and corrected State Engineers Groundwater Pumping Reports and Federal Water Diversion Records.



Water Quality

Activities conducted by CWSD in 2023 to facilitate effective water quality management :

- CWSD funded USGS Churchill County Groundwater Level and Water Quality Study.
- CWSD continued our Clean Water Act Section 208 Planning Grant: Agricultural Best Management (Conservation/Regenerative) Practices to connect soil health and water quality.
- CWSD continues to promote the use of Low Impact Development (LID) methods and the adoption of LID ordinances to address polluted runoff issues in our urban environment.
- CWSD worked with NCE to create a GIS Web Access Viewer for the Carson River Adaptive Stewardship Plan Projects. Phase II of the GIS Web viewer is a partner portal which will be finalized in late 2024.
- Provided comments to Lahontan Regional Water Quality Control Board on the completion of the West Fork Vision Plan in Alpine County.



Floodplain Management

2023 MAJOR FLOOD MANAGEMENT ACHEIVEMENTS TO CELEBRATE

- Preliminary Carson Valley Physical Map Revision in Douglas County released November 8, 2023, 11+ years in the making!
- Effective Carson Valley Physical Map Revision in Alpine County released November 16, 2023.
- Issued Smelter Creek Letter of Map Revision September 2023; map effective date is January 18, 2024.
- Issued Clear Creek Letter of Map Revision Letter of Map Revision December 2023; map effective date is May 6, 2024.
- Continuing work with US Bureau of Reclamation, Truckee-Carson Irrigation District, and Churchill County to complete the new floodplain mapping in Churchill County.

Other activities conducted by CWSD in 2023 to facilitate effective floodplain management:

- CWSD staff facilitated CRC Floodplain Management Working Group meetings.
- FEMA MAS #11 funding for floodplain and hazard mitigation projects was completed in 2023. Completed grant projects included: Phase 2 of Ruhenstroth Area Drainage Master Plan (ADMP) and Smelter Creek Letter of Map Revision (LOMR). Clear Creek LOMR; Web Access System; and Public Outreach and

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Education are currently in the final phases and are expected to be completed soon.

- FEMA MAS #12 funding for floodplain and hazard mitigation projects. Projects in this grant include Southeast Carson City Area Drainage Study, Buckeye Creek Detention Mitigation, Virginia City & Six Mile Canyon Drainage Study, East Carson City Area Drainage Plan, Flood Risk Communication & Community Outreach (includes Flood Awareness, Project Outreach and School Outreach program), Douglas County Carson Valley PMR, and Ramsey Canyon LOMR. Work on all projects associated with this grant has begun.
- Obtained FEMA COMS #1 funding for floodplain and hazard mitigation projects. Projects in this grant include Stagecoach Area Drainage Master Plan; Silver Springs Area Drainage Master Plan; Outreach and High-Water Mark Installation; Fish Springs/Pinenut Creek Culvert Study; and Flood Risk Analysis for Walker River, and an update to the Carson River Watershed Floodplain Management Plan
- Assisted with coordination of the annual Nevada Flood Awareness (FAW) Week, Nov. 12-18, 2023. Designed and funded newspaper ads for FAW and NevadaFloods.org campaign.
- CWSD staff coordinated and executed Alpine County Physical Map Revision outreach for Bear Valley and Carson Valley. Presentation tables provided information by FEMA, National Weather Service, US Army Corps of Engineers, California Department of Water Resources, Alpine County, River Wranglers, Alpine Watershed Group and CWSD.
- CWSD staff demonstrated floodplain model and discussed floodplain management plan update and the Douglas County Physical Map Revision at their Flood Awareness outreach event in November.
- Provided Storey County, Carson City, and Douglas County with National Flood Insurance Program (NFIP) Community Rating System Reports.
- Assisted Douglas County with Stormwater Management Activity Reporting.



Activities conducted by CWSD in 2023 to facilitate effective invasive species management:

- Distributed \$80,000 to CWMA's (Cooperative Weed Management Areas), Conservation Districts and Counties.
- Coordinated with Cooperative Weed Management Areas to support invasive species management throughout the watershed.
- Held a CRC Invasive Species Working Group meeting with federal, state, and local partners to coordinate invasive species management efforts.
- Applied for US Department of Agriculture weed management grant to conduct seeding and restoration post weed treatment in riparian areas along the river. Will learn if we were funded in early to mid-2024.



River Rehabilitation & Stabilization

Activities funded by CWSD in 2023 to facilitate river restoration & stabilization included:

- Provided funding for the Carson Valley Stream Bank Restoration Projects.
- Provided funding for River Restoration Projects in Dayton Valley.
- Provided funding for Lahontan Conservation District to conduct channel clearance projects in Churchill County.
- Provided funding for emergency repairs along the Carson River near the Highway 88 Bridge in Minden and levee near the Carson Valley golf course.
- Staff continued coordination with Alpine Watershed Group (AWG) on the Carson River Stewardship Plan project planning and implementation updates, the West Fork Carson River Vision planning process which included CA Lahontan Water Quality Board (CALWQB), submit grant for 319 funding from CALWQB to conduct a geomorphology and sediment transport model for the East and West Forks of the Carson River.
- Staff coordinated with American Rivers, USFS, AWG and others on the Valley Beaver Analog project.
- Provided funding to The Nature Conservancy for Stream Bank Restoration along the River Fork Ranch in Douglas County.
- Staff continued UAS/Drone program to document riverine damage and monitor projects.



Outreach and Education

Activities conducted by CWSD in 2023 to provide outreach and education included:

- CWSD staff planned, coordinated & hosted the annual CRC 2023 Watershed Forum April 18-19 in Ruvo Hall at the Governors Mansion. The event highlighted a variety of integrated watershed management projects and programs in the Carson River Watershed. The program included 43 speakers with 60+ people attending each day.
[View schedule and presentations here.](#)
- CWSD staff planned, coordinated & hosted 2-day **Get on the Bus!** Watershed Tour June 13-14, featuring 35 speakers and 12 site visits.
[See program here.](#)
- Sent 43 e-blasts containing watershed relevant information to 1100+ subscribers.



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- Published biannual [Watershed Connections](#) digital newsletter sent to 1100+ subscribers watershed wide. Hardcopies provided to libraries throughout the watershed.
- Conducted multiple watershed education and outreach events including Snap Shot Day, Ag in the Classroom, and Washoe and Fallon Paiute Shoshone Tribal Earth Days.
- Monitored watershed boundary signs in the Nevada portion of the watershed.
- Increased CWSD digital and social media presence on [Instagram](#), [Facebook](#), [YouTube](#), [cwsd.org](#), and [iamcarsonriver.org](#).
- Conducted multiple FEMA outreach events for Flood Awareness and Risk Communication throughout the year. CWSD staff demonstrated the floodplain model to watershed residents at project outreach meetings, community events, and River Wrangler school events like Conserve Carson River Workdays, Trout in the Classroom, and similar events. Over 1,000 adults and approximately 3,000 children learned about watersheds, floodplains, flood risk, flood preparedness, and flood safety.

Activities conducted to support AWG Environmental Education Program in 2023 included:

- CWSD provided \$30,000 in funding assistance to Alpine Watershed Group (AWG) to support their programs.
- CWSD staff assisted in weed pulling at Grover's State park and removed T-posts in Hope Valley at Markleeville Creek Day. CWSD's Watershed Tech, funded by AmeriCorps, planted trees at Turtle Rock Park.
- Provided support through videos, staff time and social media for AWG programs.

Activities conducted to support RW Environmental Education Program in 2023 included:

- CWSD provided \$30,000 in funding to River Wranglers (RW) to conduct Conserve Carson River Workdays. The RW Director maintained partnerships with local schools and offered opportunities for students to increase their knowledge and understanding of water quality, environmental, and flooding issues in the watershed.
- CWSD staff assisted as needed throughout the year at many River Wrangler events.



- In 2023 CWSD received grant award from Nevada State Parks Regional Trails Program (RTP) (non-motorized) to create portage around the Mexican Dam. CWSD has received additional RTP funding to improve signage, maps, and access to the Carson River Aquatic Trail. CWSD is working with both RTP and NDOT to complete compliance.
- CWSD staff planned, coordinated and hosted a 5-hour East Fork Raft Tour with our watershed partners in June. Nine boats were put in at Hangman's Bridge in Markleeville and floated to Gardnerville! The event included 4 speakers focused on Hot Springs management during a lunch stop at the Hot Springs. There were 31 attendees.



CWSD will continue to work with federal, state, tribal, and local entities to leverage time and money through cooperative projects and programs. CWSD will continue to pursue federal and state grants to assist counties and local districts. As a regional district, our integrated watershed approach will continue to assist entities to maximize project benefits, mitigate challenges, and avoid duplication of efforts for the benefit of the Carson River Watershed.

CWSD will continue to coordinate the Carson River Coalition (CRC), a large stakeholder group

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comprised of staff members of federal, tribal, state, local government organizations, and the general public, that acts as a steering committee for the Integrated Watershed Planning Process. This stakeholder model continues to be successful as it provides the unique opportunity to work across multiple jurisdictions and share perspectives, as issues within the watershed often do not end at jurisdictional boundaries.

CWSD will continue to work with the CRC to update and implement regional plans to ensure ongoing federal and state funding is funneled to regional programs and projects. We look forward to continuing these efforts to complete the tasks ahead and promote cooperative action for the health of the Carson River Watershed. Less available funding in 2024 may impact our ability to complete the following anticipated work:

Watershed Coordination

- Continue to work with the CRC to track and implement the Carson River Adaptive Stewardship Plan (funding dependent). Coordinate the Carson River Coalition and facilitate working groups.
- Host a Carson River Watershed Management Forum and Get on the Bus Tour.
- Implement grant deliverables for Expansion of Carson River Aquatic Trail, Regional Trails Program project.

Water Quality

- Improve water quality and watershed health by sharing assets of the “I Am Carson River Watershed” Campaign with a focus on targeted social media and traditional media (funding dependent).
- Promote Soils Health/Regenerative Agriculture to improve water quality with a pilot project funded by NDEP CWA Section 208 Water Quality Planning grant.
- Assist Douglas County with 2nd Douglas HS LID project, and a Douglas County Middle School LID project.

River Rehabilitation, Stabilization & Invasive Species

- Fund Stream Bank Rehabilitation Projects throughout the watershed.
- Pursue funding for Geomorphology study of the Carson River.
- Provide funding to Counties, Conservation Districts and Cooperative Weed Management Areas to combat invasive species.

Floodplain Management

- Track floodplain management activities to maximize points for community rating system (CRS).
- Manage FEMA Community Outreach and Mitigation Strategies (COMS) grant. Pursue another CTP grant with FEMA.
- Finalize the 2024 Carson River Watershed Floodplain Management Plan; this plan includes CRS crosswalk to maximize points for CRS.
- Finalize the 2024 Walker River Risk Analysis Plan.
- Work with CRC to implement suggested actions outlined in the Regional Floodplain Management Plan as adopted by each County.

Water Supply

- Work with the USGS, Lumos, and the water purveyors on developing a 30-Year Regional Drought and Water Sustainability Plan for the entire Carson River Watershed.
- CWSD will continue to work with Alpine County to maintain CASGEM (California Statewide Groundwater Elevation Monitoring).
- Develop the 2024 Water and Wastewater Rate Report.

We look forward to another wonderful year of working toward a healthy Carson River Watershed!

*Ed James, Catrina Schambra, Brenda Hunt,
Debbie Neddenriep, Lindsay Marsh & Kelly Nicholas*