



## Carson Water Subconservancy District Finance Committee

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

### NOTICE OF PUBLIC MEETING

**DATE:** February 9, 2026  
**TIME:** 8:30 am – 2 pm  
**LOCATION:** CWSD Conference Room  
777 E. William Street, Suite 209, Carson City, 89701

Committee Members are encouraged to attend in person for this meeting.

Lunch will be provided. Virtual attendance will be available via Zoom.

[Join Zoom Meeting](#) Or Call (253) 205-0468 and use Meeting ID: 847 2754 5096  
and Passcode: 263995

### AGENDA

**Please Note:** The Carson Water Subconservancy District (CWSD) Board may: 1) take agenda items out of order; 2) combine two or more items for consideration; and/or 3) remove an item from the agenda or delay discussion related to an item at any time. All votes will be conducted by CWSD Board of Directors. Reasonable efforts will be made to assist and accommodate individuals with limited ability to speak, write, or understand English or to those with disabilities who wish to join the meeting. Please contact Catrina Schambra at (775)887-7450 or email: [catrina@cwsd.org](mailto:catrina@cwsd.org) at least 3 business days in advance so that arrangements can be made.

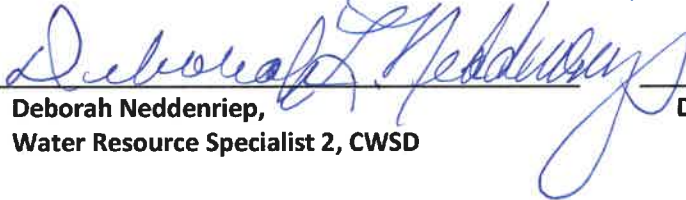
1. Call to Order the CWSD Finance Committee
2. Roll Call
3. For Discussion Only: Public Comment - Action may not be taken on any matter brought up under public comment until scheduled on an agenda for action at a later meeting.
4. For Possible Action: Approval of the Finance Committee Meeting Minutes of February 27, 2025
5. For Discussion Only: Review the Tentative General Fund FY 2026-27 Budget and Hear Presentations for Proposed Projects; Review the Tentative Acquisition/Construction Fund FY 2026-27 Budget; and Review the Tentative Floodplain Management Fund FY 2026-27 Budget
6. For Possible Action: Make Recommendations for the Tentative General Fund, Acquisition/Construction Fund, and Floodplain Management Fund FY 2026-27 Budgets
7. For Discussion Only: Public Comment - Action may not be taken on any matter brought up under public comment until scheduled on an agenda for action at a later meeting.
8. For Possible Action: Adjournment

*Supporting material for this meeting may be requested from Deborah Neddenriep at 775-887-7450 ([debbie@cwsd.org](mailto:debbie@cwsd.org)) and is available on the CWSD website at <https://www.cwsd.org>*

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

**AFFIDAVIT OF POSTING**

The undersigned affirms that on or before 10 am on February 4, 2026, a copy of the *Notice of Public Meeting and Agenda* for the February 9, 2026 meeting of the Carson Water Subconservancy District Finance Committee, in accordance with NRS 241.020 was posted at the following locations: CWSD, 777 E. William St., Ste. 209, Carson City, NV 89701; the CWSD website: <https://www.cwsd.org> and the Nevada Public Notice Website: <https://notice.nv.gov/>

 2/2/2026  
Deborah Neddenriep, Date & Time of Posting  
Water Resource Specialist 2, CWSD

**AGENDA ITEM #3**

**PUBLIC COMMENT**

## **AGENDA ITEM #4**

### **MINUTES OF LAST FINANCE COMMITTEE MEETING**



**CARSON WATER SUBCONSERVANCY DISTRICT**  
**FINANCE COMMITTEE MEETING**  
**February 27, 2025, 8:30 am – 2 pm**  
***DRAFT* Meeting Minutes**

**Committee Members' Present:**

David Griffith, Alpine County  
Jim Hindle, Storey County  
Doug Johnson, Douglas County  
Ernie Schank, Churchill County  
Lisa Schuette, Carson City  
Mike Workman, Lyon County

**Staff Present:**

Edwin James, General Manager  
Catrina Schambra, Secretary to the Board

**Guests:**

Lyndsey Boyer, Carson City Parks, Rec & Open Space  
Julie Fair, American Rivers  
Rebecca Feldermann, River Wranglers (ZOOM)

Mike Hayes, Carson Valley Conservation District (ZOOM)  
Jena Huntington, USGS  
Austin Lemons, Dayton Valley Conservation District  
Mareena Lovejoy, Carson City Parks, Rec & Open Space  
Chris Mahannah, Churchill County  
Kimra McAfee, Alpine Watershed Group  
Karin Peternel, Carson City Public Works  
Joseph Sanford, Churchill County District Attorney  
Kurtiss Schmidt, USGS  
Rachel Schmidt, Dayton Valley Conservation District  
Ben Shawcroft, Truckee-Carson Irrigation District  
Amanda Singleton, Carson City Parks, Rec & Open Space  
Christy Sullivan, Lahontan Conservation District  
Rich Wilkinson, Carson Valley Conservation District (ZOOM)

The meeting was called to order at 8:30 am by Committee Member Schuette. The meeting was held in the Conference Room of the Carson Water Subconservancy District, 777 E. William St., #209, Carson City, Nevada with a Zoom option available. Roll call determined the quorum of the committee present.

**Item #3 - Public comment:** None

**Item #4 – For Possible Action: Approval of Finance Committee Meeting Minutes of May 14, 2024**

*Committee Member Griffith made a motion to approve the minutes of the Finance Committee meeting on May 14, 2024. The motion was seconded by Committee Member Workman and unanimously approved by the Finance Committee.*

**Item #5 - For Discussion Only - Review the Tentative General Fund FY 2025-26 Budget and Hear Presentations for Proposed Projects; Review the Tentative Acquisition/Construction Fund FY 2025-26 Budget; and Review the Tentative Floodplain Management Fund FY 2025-26 Budget**

Mr. James announced that due to a doctor's appointment Rich Wilkinson requested to move up his presentation and participate via Zoom. Mr. James explained we would start with the CVCD presentations and afterwards he will give his budget and staffing overview.

**Carson Valley Conservation District (1)– Upper Carson River Flood Damage Repairs & Restoration**

Rich Wilkinson, District Manager

This project is directly upstream of four previous restoration projects that were completed between 2020 and 2024. The location experienced flooding damage in 2017 and more recently in 2023. CVCD staff noted that the head cut has expanded 18 feet to the west resulting in severe erosion, impacts to water quality, and loss of vegetation and large Cottonwoods. In addition to the environmental impacts the landowner has lost property, trees, and a fence to the most recent flood damage. CVCD will cut back and fill the vertical bank and shape it to a 3 to 1 slope. Although the project will utilize bioengineering techniques, CVCD also intends to use rock riprap to protect the toe of the bank and to slow flows through this project reach. Once the bank is reconstructed and prepared for planting, CVCD will install COIR fabric, willow mats, willow poles, and willow fascines. All areas where materials or equipment have been staged will be reseeded. If funding allows, CVCD would like to plant several large cottonwood trees and shrubs along the upland areas. This project will serve to benefit the Carson River Watershed through the stabilization of riverbanks and concurrent reduction of erosion at the two proposed project

sites. This will also result in a reduction in sedimentation and turbidity of the river in these areas. Rock stream barbs and rock ripraps placed on the toe of the bank encourage sediment deposition and riverbank vegetation benefit from the trapped soil and nutrients. The stabilization of the bank will create a gradual slope connecting the river to the floodplain which allows for establishment of riparian vegetation and wildlife access to the river. This stable connection of river to floodplain also allows for gradual flooding and groundwater recharge in the floodplain. Riverbank stabilization is a project type identified as needed in the Carson River Adaptive Stewardship Plan (CRASP). **Funding request: \$150,000**

#### **Carson Valley Conservation District (2) – CVCD Staff Salary Support & Vegetation Management**

Rich Wilkinson, District Manager

CVCD would like to request funding assistance with Staff salaries and operational costs that do not fall directly within the river restoration project's scope of work. In addition to these costs, we would like to ask for your financial support with our Vegetation Management program which helps protect our vital Cottonwood Gallery. Each year, the Carson Valley Conservation District provides significant staff time and support for consulting services to multiple agencies and landowners working in the Carson River Watershed. In the past, district staff have not been able to bill for these services since they do not fall within a particular project scope. As a result, the district has had to volunteer time or the CVCD board has had to pay for staff time without the ability to get reimbursed. The CVCD is a partner with many Federal, State, County and Municipalities and we are considered an excellent source for consulting on matters concerning the health and function of the watershed. CVCD will assist local landowners and agency partners with events/plans/projects that do not directly affect our contracted projects. These tasks include 1) assisting Douglas County with all erosion and stormwater related concerns, 2) assisting CWSD with Carson River Coalition functions, Education Outreach and staff projects, 3) assisting Carson City Open Space with river and tributary erosion and water quality issues, 4) working with local agricultural producers and NRCS on improving irrigation efficiency, crop management and issues with water conveyance, 5) assisting state agencies with water related issues that may arise following high water events or land use concerns, and 6) providing technical assistance for all agencies and landowners with permitting requirements. **Funding request: \$60,000**

### **Budget & Staffing Overview**

Mr. James noted the committee will need to cut \$295,500 from the proposed budgets to reach the 4% required ending balance. He went over the proposed budgets with the committee describing each category of income and expense.

## **Presentations of Proposed Projects**

### **Carson River Projects:**

#### **Dayton Valley Conservation District – Middle Carson River Hazard Removal**

Austin Lemons, District Manager

The Middle Carson River has faced significant erosion in the past few years. As a result, a significant accumulation of woody debris as well as other waste materials have found their way into the stream channel. This debris disrupts the natural flow of the water, harms aquatic ecosystems, and creates hazardous conditions for local wildlife and communities. This project aims to remove debris from the river to restore proper function, enhance water quality, prevent further debris accumulation downstream, and improve the safety and aesthetic value of the surrounding areas. DVCD holds a current grant from the Nevada Department of Environmental Protection (NDEP 22-019) for river monitoring; the data collection for this grant will be completed by August 2025. We will use this river monitoring data to prioritize stretches of the Middle Carson River that are most laden with debris and require critical attention. Currently, we have 2 areas selected: 1) An approx. 1-mile stretch spanning from Minor Ranch

to Kinkel properties in the Dayton Valley 2) An approximately 2-mile stretch spanning from Weeks Bridge to Scout Camp by Fort Churchill State Historic Park. More projects will be added or reprioritized as the river monitoring is completed, for a total of 5 project areas. This project is easily scalable up or down depending on funding. Project goals and benefits:

- Debris removal: safely and effectively remove large woody debris from the stream bed and water surface to increase aesthetic value and safety for recreation.
- Water quality improvements: reducing pollution and turbidity in the water surface therefore reducing the potential for superfund mercury to travel downstream.
- Restoration of the aquatic ecosystem: The removal of debris helps to prevent further erosion of the stream bank, helping to protect and restore habitat for the entire aquatic ecosystem.
- Prevention of future blockages: removal of the debris from the riverbed prevents any blockages of the river, bridges, or irrigation structures downstream. This helps prevent future flood events and mitigates flood damage by letting the river efficiently manage its own stream flows.
- Protection of cultural and historical resources: Fort Churchill and Buckland Station state historic parks are downstream of the project area. Removing debris from the river will help prevent future flooding events, therefore protecting the cultural and historical resources at these sites..

**Funding request: \$100,000**

**Lahontan Conservation District –Clearing & Snagging Carson River**

Christy Sullivan, District Clerk

The project is an ongoing effort to create a river channel that is clear of obstructions and provides a free flow at natural choke points. For example, Highway 50, Highway 95 and Bafford Bridges has historically been clogged by debris during high water flooding events. Obstructions in these locations causes back up and overflow that moves into residential housing areas in both the county and city of Fallon. Locations where sediment caused islands that changed the flow, eroded banks, or blocked flows under bridge. Removal of sediment will provide debris obstructions to flow downstream more freely. It takes a combination of debris, foliage, beaver dam and sediment removal to maintain a clear channel. This work effort provides the following benefits on an annual basis and must also be maintained and continued to overcome the normal foliage growth, discarding of manmade debris and natural obstructions that enter the channel repeatedly. Downstream benefits to improve the Carson River Watershed:

- Minimize stream bank erosion, improve water quality, and re-establish native vegetation.
- Reduce flooding risk along the Carson River, particularly to residential and commercial development.
- Reduce flood damage risk to water and sewage infrastructure installed in Churchill County.
- Improve the administration and management of the river and stream system.
- Improve the opportunities for citizens to use the river for recreational purposes.
- Maintaining a clean/clear river channel will improve water quality and aid the overall stewardship plan.

**Funding request: \$32,700**

**Churchill County - Dixie Valley Water Level Measurement & Precip Gage Monitoring**

Chris Mahannah, PE, WRS

This ongoing project has regional benefits since most of the surface supply for the Newlands project and hence recharge come from the Carson River which are augmented by the Truckee River. The Churchill County Water Resource Plan Update has identified the local intermediate aquifer as the near term quasi-municipal supply and the length of time it can sustain development is contingent upon recharge from the surface water system and downward gradients from the Shallow aquifer to the Intermediate aquifer in the western portion of the basin. Due to the relative slow movement of groundwater, impacts

to the Intermediate aquifer due to reductions in recharge from the Shallow aquifer were thought to take years or decades to fully manifest, however recovery of water levels in 2016 - 2017 seem to contradict this. Ongoing monitoring is critical to further understand the rate of decline in water levels during drought years and subsequent recovery during wetter years. Furthermore, the State Engineer relies on water level data when making many water resource and water rights decisions. At such a time that the intermediate aquifer can no longer support the demand, other resources will need to be developed which are identified in Chapter 12 of the Updated Water Resource Plan. Some of these alternatives such as the Wildgoose Farm or Dixie Valley importation may be regional in nature and others involve conjunctive use and artificial recharge of surface waters. This program will provide an early warning as to when some of these other regional types of alternatives will need to be pursued.

**Funding request: \$81,000 (3 Years – FY 25/26 \$26,000; FY 26/27 \$27,000; FY 27/28 \$28,000)**

**River Wranglers- Conserve the Carson River Workdays/Field Days**

Rebecca Feldermann, Executive Director

River Wranglers continues to host Conserve the Carson River Workdays (CCRWD) throughout the Carson River watershed, as well as hosting multiple field days and events at the river or within the watershed. In the past year, we have continued to commit to expanding our program to include various field days and events aligned with NGSS with different grades and age groups, including Washoe Tribal students, adult special needs groups, Home School Groups, and younger elementary school classes. Additionally, we have expanded our workdays and field days in an effort to include schools who have never participated in these events or have not been able to in years. For CCRWDs, as allowed, we continue to go into high school FFA and science classrooms to teach high school students the necessary information and skills so that they in turn can teach elementary students at the river in a combined workday. The high school students are trained in activities that teach children about our watershed, the importance of clean water, the water cycle, and nonpoint source pollution. At the river, they become “mentors” to the younger students, spending the day with them, leading them through the activities. For the past three years, this has been our model for students in Churchill County, as the teachers are incredibly supportive and receptive. If high school students are unable to participate, we still provide an enriching workday with the assistance of professional volunteers from many of our partners including CWSD, NOER, NDEP, CCP&ROS, NDOW, UNR, TNC, RCI, HSFC, as well as trained community volunteers. In addition to the educational stations, we partner with conservation districts, Parks & Recreation, and Nevada State Parks to include river work projects that the students complete together. This year, students helped to line trails, plant native plants, paint trees to protect against beaver predation, remove trash from Nevada State Parks sites, and assist in fertilizing plants at Dayton State Park. After workdays, elementary students are visited by River Wranglers staff to do a “wrap-up,” which reinforces the messages they learned at the river. We once again discuss nonpoint source pollution, the geography and features of the watershed with the utilization of the Carson River watershed map, and the importance of the river and watershed to their own lives, while also reinforcing the concept of stewardship. We do a pre- and post-test with all students involved to track their increase in knowledge about the watershed and nonpoint source pollution to gauge the effectiveness of our programs. River Wranglers continues to be passionate about and committed to providing environmental education to students in our watershed and looks to find new ways to interact with students who might face a multitude of barriers to receiving the education we provide. This past year we worked with new first grade classes in our Seasonal Changes program and were able to provide work/field days for 3 schools who had not participated in these opportunities within the last 3 years. This year, we look forward to co-hosting a water quality event for students of the Washoe Tribe, as well as providing continued interactive educational opportunities for all students within the Carson River watershed. **Funding request: \$30,000**

**Alpine County Watershed Group (1) - Upper Carson River Watershed Programs**

Kimra McAfee, Executive Director

Alpine Watershed Group (AWG) seeks funding for the fiscal year 2025-26 from CWSD for the coordination of its Upper Carson River watershed programs. AWG's mission is to protect, conserve, and restore the watersheds of Alpine County by promoting sustainable community and science-based collaborative solutions. For 24 years, AWG has organized volunteers and inspired widespread participation to address water quality monitoring and restoration needs in Alpine County. To further the stewardship of our county's natural resources, our organization has developed diverse partnerships around watershed issues. As the nonprofit environmental organization for the Carson River headwaters, our positive impacts extend downstream, where the Carson River flows into Northern Nevada. Through this project, AWG staff will: 1) involve local citizens in watershed stewardship; 2) plan and implement priority watershed monitoring and restoration activities; 3) recruit diverse stakeholders and strengthen community partnerships; and 4) support local watershed education and community outreach.

**Funding request: \$30,000**

**Alpine County Watershed Group (2) – East Fork Carson Prioritization Project**

Kimra McAfee, Executive Director

AWG seeks funding for the fiscal years 2025-27 from CWSD to support completion of a geomorphological assessment and sediment budget analysis and development of a project prioritization plan for the upper East Fork Carson River watershed. This project has been approved by the State Water Resources Control Board for funding through the 2024 Clean Water Act 319(h) Nonpoint Source Grant Program from the US Environmental Protection Agency (EPA) and requires a 25% match. The purpose of this project is to identify sediment inputs and prioritize future projects to address such impairments. Addressing sediment concerns will also address other nonpoint source pollutants as other pollutants often travel through watersheds along with sediment. Prioritized projects will restore aquatic ecosystems of the Carson River and its tributaries. These projects have the potential to reduce sediment and other nonpoint source pollutants; have positive impacts on water temperature, pH, and dissolved oxygen; and reduce flood risk. AWG is currently completing the same project on the Upper West Fork of the Carson River, to build towards the shared goal with CWSD of completing this analysis and planning throughout the entire Carson River watershed. The East Fork Carson River carries a lot of sediment that collectively leads to many issues downstream. The river navigates through public lands that are used for camping, fishing, and river rafting. There are several known problem areas such as the East Fork Carson River hot springs and the Leviathan Mine EPA Superfund Site. For a majority of the watershed, assessments are not robust, and assessment coverage is spotty. Vegetation on the banks has been denuded due to erosion and incision causing water quality concerns, habitat and property loss, and risks to infrastructure. Further incision increases the velocity during high-flow and flooding events causing even more erosion and cyclical damage. This planning project will provide information on where to begin the geomorphological assessment and what follow-up data is needed to design solutions for water quality impairments. The analysis will lead the way to development of a 9-element plan for the East Fork and help us make informed decisions. We will better understand how future actions will impact upstream and downstream areas in relation to nonpoint source pollutant reduction and ecosystem impacts. The goals of this project are to:

- Identify knowledge gaps and summarize existing data and research
- Provide a scientific geomorphological assessment
- Provide a scientific sediment budget analysis
- Provide information to augment the *Carson River Adaptive Stewardship Plan (CRASP)* and/or for development of a 9-element plan
- Prioritize locations and best ecosystem restoration methods to address nonpoint source pollutants for bank, riverbed, and riverine habitat improvements, and associated floodplain protection/conservation
- Identify and prioritize infrastructure maintenance and upgrades (roads, bridges, driveways, and irrigation) to reduce nonpoint source pollutants, protect ecosystems, and reduce flooding



- Determine a logical rating/ranking prioritization system based on the geomorphology/ sediment budget information **Funding request: \$83,350 (2 Years)**

## New Projects:

### American Rivers – Faith Valley Restoration Project

Julie Fair, Program Director, CA Headwaters Conservation

American Rivers is working with the Humboldt-Toiyabe National Forest, Alpine Watershed Group, and others to restore Faith Valley meadow, a 200-acre meadow located along the West Fork Carson River. Faith Valley emerged as a priority during a watershed-wide assessment of meadows in the Carson watershed because of its degraded hydrologic condition and potential benefits for special status species, including the California endangered Willow Flycatcher. The meadow supports active beaver whose dams are raising the water table locally, aggrading the channel and helping restore the meadow, but their dams are frequently blown out during high flow events due to channel incision. To address degraded conditions, in 2022-2023 the project team installed 40 features that mimic natural beaver dams called beaver dam analogs (BDAs). They were built to better persist under high flows to help reverse channel incision and reconnect the stream with the meadow floodplain, restoring the meadow's hydrologic function. The project also installed a rocked grade control structure at the downstream end to help upstream BDA features persist and repaired the dirt road adjacent to the meadow to protect the meadow and improve recreational access. The project also included robust monitoring to quantify the effects of restoration toward project goals and objectives, which included mapping and measuring beaver dams and BDA structures, groundwater, greenhouse gas emissions, photo points, and streamflow monitoring, which was also used to evaluate the effect of the project on the CWSD water release that flows through the project reach. The project is one of the first BDA projects in the Sierra implemented on a high-energy mainstem river and the robust monitoring associated with the project will provide a valuable case study to inform subsequent restoration projects. The project included \$1.6 million in funding from the California Department of Fish and Wildlife, National Fish and Wildlife Foundation, California Wildlife Conservation Board, and California State Parks Off-Highway Motor Vehicle Recreation Division. However, the last implementation funding source is ending in March 2025. We request CWSD funds to: 1) extend the duration of streamflow and beaver structures monitoring in Faith Valley by one season (2025 field season) to better quantify the effects of the project toward project goals and evaluate the effects of the project on the CWSD water right release; and 2) provide funding for small-scale adaptive management that may be warranted at the conclusion of the high-flow 2025 winter/spring season to ensure the project's durability and ability to provide lasting ecological benefits for the Carson watershed over the long term. This work will include partnering with Alpine Watershed Group to engage local volunteers to contribute to adaptive management. Project deliverables will include updated streamflow monitoring and beaver monitoring reports, a summary of adaptive management actions, and updated as-built drawings. **Funding request: \$45,629**

### Carson City Parks, Recreation & Open Space – Empire Ranch Trail Ecological Restoration

Mareena Lovejoy, Senior Natural Resource Specialist

The objective of this project is to determine the best restoration strategy for combating noxious and nuisance weeds within a segment of river corridor using a combination of herbicide application and planting, taking into account the specific soil types found. The long-term goal is to reduce dependence on herbicide, reduce nonpoint source pollution, and improve water quality as it relates to invasive species control and improved health, structure, and composition of desirable riparian vegetation. This project will take the form of a pilot study that will be used to inform future management actions within CCPROS and the larger Carson River Watershed, where applicable. Funding will be used to purchase approximately 1,000 plants and two educational signs and will formulate the revegetation and education/outreach components of a larger restoration project along the Empire Ranch Trail, which abut the Carson River and Eagle Creek in Carson City, NV.

Funding request: \$15,000

## USGS Projects:

### United States Geological Survey (1) – Surface Water Monitoring Program in West-Central Nevada

Kurtiss Schmidt, USGS

Surface-water O&M costs include maintaining the stream gaging equipment at 10 gaging stations, real-time monitoring and display of water information, making streamflow measurements, computing streamflow, quality assurance, and data publication and archival in the USGS Water Data for the Nation database. The stream gaging stations include:

1. E FORK CARSON RV BLW MARKLEEVILLE CK NR MARKLEEVILLE
2. W FORK CARSON RV AT WOODFORDS, CA
3. DAGGETT CK NR GENOA, NV
4. CARSON RV NR GENOA, NV
5. CLEAR CK NR CARSON CITY, NV
6. CARSON RV NR CARSON CITY, NV
7. CARSON RV AT DEER RUN RD NR CARSON CITY, NV
8. CARSON RV AT DAYTON, NV
9. CARSON RV NR FORT CHURCHILL, NV
10. FRANKTOWN CK NR CARSON CITY, NV

The following tasks are included in the funding request for the above stations:

- Operation and maintenance of the streamflow gaging stations. Two gages are seasonal: Carson River at Dayton operates from Dec. 1 to Mar. 31, and Franktown Creek is operated from May 1 - Oct. 31.
- Streamflow measurements on a 6-week schedule or as conditions warrant. Additional (approx. 5) measurements on a biweekly schedule at West Fork Carson River at Woodfords and Carson River near Carson City during the summer when flows are lower than other periods of the year.
- Evaluation and analysis of stage data.
- Input of stage and measurement data to the Water Data for the Nation database.
- Development of stage/discharge relations (ratings).
- Computation of continuous streamflow, quality assurance, and final approval.
- Publication of the approved data. Data will be reviewed, compiled, and disseminated throughout the year and annually as water year summaries on the USGS Water Data for the Nation web interface. Real time (updated every hour) provisional data from the streamflow gaging stations will continue to be provided through NWIS web, except the two Genoa gages, where only daily values will be available.

Streamflow information and flow measurements provided at real-time and non-real-time gages in the Carson River Basin define hydro logic conditions throughout the basin, such as sources, sinks, and fluxes of water. Accurate flow data from stream gages provide critical information for water accounting for legal agreements, river and project operations, hazard forecasts, water-quality assessments, and research (such as interaction of water systems; groundwater/surface-water interactions).

**Funding request: \$195,703 (2 Years: FY 25-26 \$95,629; FY 26-27 \$100,074)**

### United States Geological Survey (2) – Carson River Watershed Groundwater Monitoring Program

Jena Huntington, USGS

In 2023, several long-term groundwater monitoring networks within the Carson River watershed were combined into one. Data generated from this collaboration have been crucial for developing groundwater resource models, used to manage water resources within the watershed. The monitoring network has been divided into four subnetworks: Douglas County, Middle Carson, Newlands, and Bulk Precipitation. Currently, each subnetwork is monitored for groundwater levels and select wells within two subnetworks (Douglas County and Newlands) are sampled for water quality (temperature, dissolved oxygen, pH, specific conductance, major ions, nutrients, arsenic). Funding the Carson River Basin

Groundwater Monitoring Program will maintain the long-term monitoring of groundwater resources within the Carson River watershed. Monitoring bulk precipitation, water levels, and water quality provides data needed to evaluate any effects of increased demand on aquifers within Carson River watershed. Data generated from the proposed monitoring furthers the understanding of the influences of changes in land-use, pumping, and water-resources management practices on groundwater resources. Data collected as part of this monitoring effort will provide useful information for the CRASP update.

**Funding request: \$82,450**

## **CWSD Projects:**

### **CWSD – Flood Hazard Web Viewer in the Carson River Watershed (1)**

Debbie Neddenriep, Water Resource Specialist 2

At the request of watershed county staff, CWSD was applied for and was awarded \$174,000 in 2020 by FEMA to create a Flood Hazard Viewer digital system to view Area Drainage Master Plans. Michael Baker International was contracted to create the flood hazard viewer and has housed it and maintained it for the past 3 years. CWSD held a series of meetings to gather county input about the usefulness of this system. As a result, of their input and support, CWSD is requesting money to keep this information available to county staff and watershed residents. These funds will be used to migrate this system to CWSD and renew the contract to maintain it.

**Funding request: \$144,084 (3 Years – FY 25/26 \$83,404; FY 26/27 \$30,340; FY 27/28 \$30,340)**

### **CWSD – Carson River Watershed Telephone Survey of Residents (2)**

Kelly Nicholas, Senior Watershed Clerk

CWSD Staff proposes to conduct a follow-up telephone survey and response analysis of the watershed to determine how our "I am Carson River Watershed" campaign is changing knowledge and behavior. CWSD spent significant resources on the campaign. The survey/analysis will determine our success level and provide the next steps. The key to refining marketing and communications strategies is to evaluate efforts by determining their outcomes. Evaluation should be considered a general rule for any and all marketing and communications efforts undertaken. **Funding request: \$50,000**

### **CWSD – Carson River Watershed Web Viewer & Partner Portal Maintenance (3)**

Kelly Nicholas, Senior Watershed Clerk

CWSD recently created the CRASP Web Viewer and Partner Portal. This request allows the hiring of a contractor to maintain ESRI licensing, keep map layers current and fix any unforeseen glitches. The web viewer/partner portal was funded by NDEP 319 grant. It is a requirement to track 319 funded and other water quality projects. These funds will be used to maintain the CRASP Web Viewer & Partner Portal. The map viewer tracks project implementation in the CR watershed and allows project implementers to directly input their projects via the Survey123 app on their phone at the project site. The public viewer is available on the CWSD website. [Click here to view.](#)

**Funding request: \$33,163 (3 Years – FY 25/26 \$16,560; FY 26/27 \$8,129; FY 27/28 \$8,474)**

## **Acquisition/Construction & Floodplain Management Funded Projects:**

### **Truckee-Carson Irrigation District – Carson River Diversion Dam**

Benjamin Shawcroft, General Manager

This project consists of the application of a product, Aqualastic to the concrete surfaces of the Carson River Diversion Dam (Dam). The Dam is located approximately five (5) miles downstream of Lahontan Dam in Churchill County, Nevada. Aqualastic™ is a polyurea elastomeric coating that when applied to concrete serves to seal cracks preventing damage to facilities, check undesired flows, and prevent water loss. We have used this product extensively in the Newlands Project and with particular success on the Truckee Canal. The Dam is a United States Bureau of Reclamation facility constructed in 1906. It serves



to divert water released from Lahontan Dam, flowing in the Carson River channel, in one of three (3) ways: 1. Through a series of gates directing continuing flow in the Carson River Channel; 2. Through the head-works of the V-Line Canal; and, 3. Through the head-works of the T-Line Canal. The Dam is 24 feet long with a 225-foot long, 31-foot high concrete control section. In flood operations conducted in 2017, it diverted approximately 3,320 cfs of flow from Lahontan Dam. Then, at the Carson Diversion Dam, TCID diverted as much as 1,700 cfs. into the V-Line Canal, 1,200 cfs. in the Carson River Channel (the Carson River gates are capable of 1,950 cfs), and approximately 200 cfs in the T-Line Canal. Pivotal to continuing water management of water on the Carson River, is our ability to make diversions through the Diversion Dam. In this application we seek to apply Aqualastic™ to cracks in the concrete of the dam thus encapsulating degraded sections of concrete. As stated previously, the Diversion Dam is very old; and, the useful life of its concrete was exceeded long-long ago. While our hope is to replace the Diversion Dam in the future, its use in both regular operations and in flood operations remains absolutely essential. Application of Aqualastic™ will serve to prolong the life of the Diversion Dam-protecting it against potential failure particularly amidst flood operations. Protecting the dam from failure serves, ultimately, to protect all property owners on the Carson River below it from flood waters that could not be controlled. This proposed project is consistent with the Carson River Regional Floodplain Management Plan in that it improves aging infrastructure which if left undone would increase the threat of uncontrolled flooding along the Carson River. Preserving the life of this important concrete structure will ensure many more years of valuable flow controls below Lahontan Dam. The benefits resulting from this project similarly satisfy the qualification criteria required in this funding application by reducing the risk of flooding along the Carson River and improving the management of the river.

**Funding request: \$50,000**

**Carson City Public Works – HWY 50 Floodway Capacity & Conveyance Restoration**

Darren Anderson, City Engineer

The objective of this project is to remove accumulated sediment and debris from the floodway adjacent to Highway 50. The storm drain infrastructure begins near the Eagle Valley Golf Course, carrying very high sediment loads in a 7-foot culverts under Highway 50 and then south along the highway until it enters private property and is no longer in the NDOT right-of-way. The entire reach is completely full of accumulated sediment to depths of 7 feet, with these culverts barely visible due to the high sediment, water and vegetation content. NDOT would like to restore the channel along Highway 50 and Akron Way in order for it to operate as flood conveyance, to maintain safety of the traveling public and pedestrians. There is currently no capacity for runoff in the channels, it will all back up onto the highway in this area. However, without also restoring the conveyance capacity of the downstream section, the efforts by NDOT are in vain, as sediment and water will be blocked due to the infrastructure. Removing the sediment and debris from the channel will also prevent this material from being transported to the Carson River located directly downstream. The coordination between NDOT and Carson City is essential to maintain safety of the traveling public and prevent flooding. The project will consist of removing vegetation and sediment from the 54" culvert outlet on Parcel APN 008-37-150 for approximately 250 feet in the channel downstream as shown in Attachment A. Work will include re-grading the channel flowline, contractor mobilization, demobilization, any preparatory work, cleanup, temporary erosion BMPs, permit coordination, traffic control, and all other work associated with removing vegetation and sediment from the channel. This drainage is relatively large receiving storm runoff from multiple sources including large offsite watersheds on BLM Land, private properties and developments, Parks, State right of ways, and other City properties. This drainage acts as a regional conveyance passing through these many jurisdictions from where the flows originate in the hills to the north to where the flows terminate into the Carson River to the south. The solution in this particular area needs a big picture solution and a cohesive holistic approach that will address all the interconnected parts so the system will function as a whole again. It doesn't work to piece-meal or part out independent fixes on different portions of the drainage at different times, as the system as a whole will fail if any one part is not functioning properly.

**Funding request: \$39,375**

**Michael Baker International – Web Access System – Web Access System Additional Studies Update**

This proposal is for Michael Baker International, Inc. to prepare, format, and upload data for six additional studies into the Web Access System, a GIS-based application created by Michael Baker for CWSD and its affiliated counties. There was no presentation given on this proposal.

**Funding request: \$30,021**

**Item #6 - For Possible Action – Make Recommendations for the Tentative General Fund, Acquisition/Construction Fund, and Floodplain Management Fund FY 2025-26 Budgets**

During a working lunch, Mr. James reviewed the General, Acquisition/Construction and Floodplain Management Funds with the committee and announced they need to cut \$295,500 from the General Fund to have a balanced budget for FY 2025-26. This assumes that CWSD will transfer \$75,000 to the Flood Account and \$75,000 to the Acquisition/Construction Account. The projected income from Ad Valorem assumes a 4% increase over FY 2024-25. The actual projected tax figures from the State will not be available until March 25. The proposed Cost of Living Adjustment for FY 2025-26 is 2.8% less an offset for the increase in PERS costs. The offsets for Employer/Employer and Employee/Employer are 0.875 and 0.25, respectively. This follows Carson City PERS reduction policy. The proposed budget included an increase in monthly legal retainer of \$500 as requested by Steve King. Based on further discussion, the committee proposed the following adjustments to reach that goal:

- Do not transfer any funds to the Acquisition/Construction Fund
- Do not transfer any funds to the Flood Fund
- Do not fund Alpine Watershed Group East Fork Geomorphological Study
- Do not fund American Rivers Faith Valley
- Fund CWSD Watershed Campaign Survey \$50,000 from Outside Professional Services Account
- Fund CWSD Flood Hazard Web Viewer Project from the Flood Fund

*Committee Member Schank made a motion that the Finance Committee recommend that the Tentative Budgets for the Fiscal Year 2025-26 General Fund be approved as adjusted above. Director Hindle seconded the motion which was unanimously approved by the Finance Committee.*

*Committee Member Schank made a motion that the Finance Committee recommend that the Tentative Budgets for the Fiscal Year 2025-26 Floodplain Management and Acquisition/Construction Funds be approved as modified. Committee Member Griffith seconded the motion which was unanimously approved by the Finance Committee.*

**Item #7 - Public comment:** None

The meeting adjourned at 2:16 pm.

Respectfully submitted,

*Catrina Schambra*

Secretary to the Board

## **AGENDA ITEM #5**

## CARSON WATER SUBCONSERVANCY DISTRICT

**TO:** FINANCE COMMITTEE MEMBERS

**FROM:** EDWIN D. JAMES

**DATE:** FEBRUARY 9, 2026

**SUBJECT:** Agenda Item #5 - For Discussion Only - Review the Tentative General Fund FY 2026-27 Budget and hear presentations for proposed projects; review the Tentative Acquisition/Construction Fund FY 2026-27 Budget; and review the Tentative Floodplain Management Fund FY 2026-27 Budget

---

**DISCUSSION:** Attached are the Tentative FY 2026-27 budgets for the General Fund, Acquisition/Construction Fund, Floodplain Management Fund, and the proposed funding requests. For the Tentative General Fund, the total grant requests add up to \$992,152. CWSD will need to reduce the expenses by approximately \$325,000.

For the attached General Fund budget, items shown in blue are grant incomes and expenses. These are estimates based on program schedules. Actual costs are based on invoices. The expenditures are offset by grants funds. Items shown in black are generally fixed costs.

The projected income from Ad Valorem taxes is staff's best guess and assumes a 3.5 % increase over the FY 2025-26. The actual projected tax figures from the State will not be available until March 25. The proposed Cost of Living Adjustment for FY 2026-27 is 2.7%.

Attached is a pie chart that shows the percentage of expenses in the General Fund by categories of Administration, Projects, Studies, Programs, Projects Funded by Grants, Programs Funded by Grants, and Studies Funded by Grants.

**STAFF RECOMMENDATION:** Provide direction to staff on developing a balanced budget to be submitted to the full CWSD Board.

# CWSD FINANCE COMMITTEE

February 9, 2026

## Approximate Time Schedule

**8:30** Budget and Staffing Overview

**8:50** **Carson River Projects**

1. Alpine Watershed Group Upper Carson River Watershed Programs
2. Carson Valley Conservation District Administration & Vegetation Management
3. Carson Valley Conservation District Flood Damage Repairs & Restoration
4. Dayton Valley Conservation District Administration / Management
5. Dayton Valley Conservation District Weed Crew
6. Lahontan Conservation District Clearing & Snagging
7. River Wranglers – Conserve the Carson River Workdays/Field Days
8. Carson City Bowers Lane Project

**10:10** **New Projects**

9. Douglas County River Bend Floodplain Revitalization and Recreation Project
10. DRI – Supporting Conjunctive Management in Carson Valley
11. DRI – Pilot Program for Domestic Well Water Quality Sampling in Douglas County

---

**10:40 – 11:00 BREAK**

---

**11:00** **New Projects, continued**

12. NDWR Carson Desert Water Availability Study
13. TCID Carson River Diversion Dam Log Boom Installation

**11:20** **USGS Projects**

14. USGS Carson River Watershed Groundwater Monitoring Program

---

**12:30 Working Lunch**

---

**12:40** **Multi-Year, On-going Projects, or Grants (CWSD staff)**

- 7114-00 ..... Outside Professional Services
- 7117 & 7118 ..... Lost Lakes and Mud Lake Expenses
- 7120-00 ..... Integrated Watershed Projects
- 7120-07 ..... Watershed Tour
- 7126-01 ..... NDEM 30-Year Regional Water Plan (Grant)
- 7127-00 ..... State Parks Aquatic Trail (Grant)
- 7337-51 ..... TNC River Fork Ranch
- 7337-60 ..... DVCD Administration
- 7337-61 ..... DVCD Weed Crew
- 7404-00 ..... Noxious Weeds Control
- 7443-00 ..... FEMA Floodplain Mapping Program COMS 2 (Grant)
- 7600-09 ..... Alpine County - CASGEM (Grant)
- 7600-16 ..... AWG West Fork Geomorphology Study (LGIP Flood Fund)
- 7610-10 ..... Regional Pipeline Payment to Douglas County
- 7620-11 ..... Regional Pipeline Payment to Carson City
- 7640-20 ..... Lahontan Valley Water Level Study

**Acquisition/Construction & Floodplain Management Funds Projects**

**12:50** **Review Budgets & Make Recommendations to the Board**

# CARSON WATER SUBCONSERVANCY DISTRICT

## Tentative General Fund

		Proposed Tentative Budget	Approved Final Budget	Projected Actual	
		Jul '26 - Jun '27	Jul '25 - Jun '26	Jul '25 - Jun '26	Notes
Income					
	5007-00 · Storey County General Tax	\$22,653	\$21,887	\$21,887	3.5 Percent
	5008-00 · Alpine County	\$15,875	\$15,338	\$15,338	3.5 Percent
	5009-00 · Churchill County Ad Valorem	\$299,222	\$289,103	\$289,103	3.5 Percent
	5010-00 · Lyon County Ad Valorem	\$302,701	\$292,465	\$292,465	3.5 Percent
	5011-00 · Douglas County Ad Valorem	\$904,059	\$873,487	\$873,487	3.5 Percent
	5012-00 · Carson City Ad Valorem	\$651,696	\$629,658	\$629,658	3.5 Percent
	5022-00 · Mud Lake Water Lease	\$65,000	\$60,000	\$60,000	
	5023-00 · Lost Lake Water Lease	\$780	\$880	\$780	
	5031-00 · Interest Income - St Pool Reg	\$19,538	\$22,972	\$37,500	3.00%
	5050-07 · CRC Donation	\$0	\$0	\$0	
	5101-00 · State Park Aquatic Trails Grant	\$0	\$142,244	\$138,270	Grants
	NDEP WQP Grant	\$14,750	\$21,927	\$17,045	Grants
	NDEP Regen Ag grant	\$130,950	\$0	\$78,778	Grants
	5406-00 · NDEM 30-Yr Regional Water Plan	\$0	\$51,104	\$52,650	Grants
	5407-00 · NDEM North Dalley BCA Study	\$0	\$62,538	\$84,550	Grants
	5060-00 · Misc. Income / Watershed Tour	\$0	\$5,000	\$5,000	
	5082-00 · CASGEM	\$500	\$500	\$500	
	208 Planning Grant	\$55,000	\$0	\$5,000	New Grant
	6009-00 · FEMA - COMS 2	\$14,825	\$357,430	\$393,363	New Grant
		\$2,497,550	\$2,846,533	\$2,995,374	
Total Income	ADMINISTRATIVE EXPENSES:				Notes
Expense	7015-00 · Salaries & Wages	\$635,500	\$630,100	\$ 697,882	
	7020-00 · Employee Benefits	\$321,400	\$300,400	\$ 300,491	
	7021-00 · Workers Comp Ins.	\$1,500	\$1,500	\$1,600	
	7101-00 · Director's Fees	\$21,000	\$21,000	\$16,500	
	7102-00 · Insurance	\$7,000	\$6,203	\$6,203	
	7103-00 · Office Supplies	\$4,000	\$4,600	\$3,500	
	7104-00 · Postage	\$1,800	\$1,700	\$1,700	
	7105-00 · Rent	\$44,800	\$43,521	\$43,521	
	7106-00 · Telephone	\$6,600	\$6,400	\$6,400	
	7107-00 · Travel-transport/meals/lodging	\$25,000	\$30,500	\$30,500	
	7108-00 · Dues & Publications	\$1,800	\$1,800	\$1,800	
	7109-00 · Miscellaneous Expense	\$500	\$500	\$500	
	7110-00 · Conferences & Education	\$4,600	\$4,600	\$4,600	
	7111-00 · Office Equipment	\$7,000	\$7,000	\$7,000	
	7112-00 · Bank Charges	\$540	\$60	\$400	
	7115-00 · Accounting	\$25,000	\$25,000	\$19,500	
	7116-00 · Legal	\$30,000	\$30,000	\$30,000	
	Subtotal-Administrative Expenses	\$1,138,040	\$1,114,884	\$1,172,097	

# CARSON WATER SUBCONSERVANCY DISTRICT

## General Fund

Multi Year, Studies, and Grants	Proposed	Revised	Projected	Notes
	Tentative	Final	Actual	
	Budget	Budget		
PROGRAMS:	Jul '26 - Jun '27	Jul '25 - Jun '26	Jul '25 - Jun '26	
7114-00 · Professional Outside Services	\$50,000	\$23,500	\$23,500	
7117-00 · Lost Lakes Expenses	\$20,000	\$18,000	\$18,000	
7118-00 · Mud Lake O & M	\$2,100	\$1,900	\$1,900	
7120-00 · Integrated Watershed Plan				
7120-07 · Watershed Tour & Watershed Forum	\$1,200	\$7,500	\$7,500	
I am Carson River Survey	\$0	\$45,000	\$45,000	
NDEP WQP Grant	\$14,750	\$19,250	\$10,084	
NDEP Regen Ag grant	\$121,592	\$0	\$65,865	
NDEP Regen Ag grant Match	\$250	\$0	\$250	
7126-01 · NDEM 30-Year Drought Plan	\$0	\$25,442	\$27,852	
7126-02 · NDEM North Dayton Valley BAC	\$0	\$40,839	\$75,500	
7126-02 · NDEM North Dayton Valley BAC Match	\$0	\$11,489	\$18,500	
208 Planning	\$10,000	\$0	\$0	
7332-00 · River Wranglers Flood Awareness	\$0	\$5,000	\$5,000	
7332-00 · River Wranglers	New	\$30,000	\$30,000	
7427-00 · State Park Aquatic Trail	\$0	\$136,194	\$130,875	
7427-01 · State Park Aquatic Trail Match	\$0	\$43,915	\$32,104	
7404-00 · Noxious Weeds Control	\$90,000	\$90,000	\$90,000	
7443-00 · FEMA COMS #2	\$1,175	\$327,566	\$357,890	
7500-00 · USGS Stream Gage Contracts	\$100,074	\$95,629	\$95,629	
7508-03 · USGS Water Quality & GW Collection	New	\$82,450	\$82,450	
7600-05 · Alpine Co. Watershed Group.	New	\$30,000	\$30,000	
7600-09 · CASGEM	\$5	\$5	\$5	
7610-10 · Douglas Co Regional Pipeline	\$125,000	\$125,000	\$125,000	
7620-11 · Regional Pipeline Payment to CC	\$125,000	\$125,000	\$125,000	
7640-20 · Lahontan Valley WTR Level 2024-2026	\$16,000	\$16,000	\$16,000	
7640-18 · Dixie Valley WTR Level measurement	\$27,000	\$26,000	\$25,000	
Carson watershed Web system	\$11,066	\$16,560	\$16,560	
Carson City Ranch Trails	\$0	\$15,000	\$15,000	
<b>Subtotal Multi Year &amp; On-going Projects</b>	<b>\$715,212</b>	<b>\$1,357,239</b>	<b>\$1,470,464</b>	

## Counties and River Projects

				Notes
7337-70 · CVCD River Repair	\$0	\$112,500	\$112,500	
7337-70 · CVCD River Repair	\$0	\$165,000	\$165,000	
7337-70 · CVCD River Repair Admin	\$0	\$60,000	\$60,000	
7337-39 · DVCD Bank Stab & Dayton Bridge 1	\$0	\$61,800	\$61,800	
7337-40 · DVCD Bank Stab & Dayton Bridge 2	\$0	\$55,000	\$55,000	
7337-40 · DVCD Bank Stab & Dayton Bridge 2	\$0	\$57,000	\$57,000	
7337-40 · DVCD River Monitoring Project	\$0	\$100,000	\$100,000	
7337-46 · LCD Clearing & Sand Bar Removal	\$0	\$32,700	\$32,700	
7337-51 TNC - River Fork Ranch	\$11,337	\$32,089	\$20,752	carryover request
7337-60 · DVCD Administration	\$0	\$50,000	\$50,000	
7337-61 · DVCD Weed Crew	\$0	\$30,000	\$30,000	
<b>Subtotal Carson River Projects</b>	<b>\$11,337</b>	<b>\$756,089</b>	<b>\$744,752</b>	

\*\*\*

## CARSON WATER SUBCONSERVANCY DISTRICT

### New Projects

	FY 2026-27	FY 2027-28	Notes
Alpine Watershed Group	\$35,000		
CVCD Administration	\$60,000		
CVCD River Project	\$175,000		
DVCD Administration	\$50,000	\$50,000	
DVCD Weed	\$30,000	\$30,000	
LCD	\$25,000		
River Wranglers	\$40,000		
Carson City Bowers Lane	\$50,000		
River Bend Floodplain	\$100,000		
DRI Irrigation	\$133,300	\$66,700	
DRI Douglas County Water quality	\$99,752		
NDWR - Churchill County Groundwater Study	\$100,000	\$100,000	
USGS GW Monitoring	\$77,400	\$82,900	
TCID Log Boom	\$50,000		
<b>Total Expenses for New Projects</b>	<b>\$1,025,452</b>	<b>\$0</b>	<b>\$0</b>
8008-00 - Contingency Fund	\$400,000	\$400,000	\$0
<b>Total Expenditures</b>	<b>\$3,290,041</b>	<b>\$3,628,212</b>	<b>\$3,387,313</b>
<b>Net Ordinary Income</b>	<b>-\$792,492</b>	<b>-\$781,679</b>	<b>-\$391,938</b>
<b>Other Income and Expenses</b>			
Other Income			
Beginning Equity	\$651,274	\$882,522	\$947,323
CTWCD Income	\$95,000	\$95,889	\$95,889
<b>Total Other Income</b>	<b>\$746,274</b>	<b>\$978,411</b>	<b>\$1,043,212</b>
Other Expenses			
Transfer from Gen. Fd. to Floodplain Fd.	\$75,000	\$0	\$0
Transfer from Gen. Fd. to Acqu./Const. Fd.	\$75,000	\$0	\$0
<b>Total Other Expenses</b>	<b>\$150,000</b>	<b>\$0</b>	<b>\$0</b>
<b>Net Other Income and Expenses</b>	<b>\$596,274</b>	<b>\$978,411</b>	<b>\$1,043,212</b>
<b>Ordinary Income</b>	<b>-\$196,218</b>	<b>\$196,732</b>	<b>\$651,274</b>
4 Percent	\$131,602	\$145,128	

Based on the 2024-25 audit  
Funds TBD

### LGIP Transfer Expenses

	Proposed Tentative Budget	Revised Final Budget	Projected Actual	Notes
<b>Expenses From Floodplain and Acqu/Const Fds</b>	<b>Jul '26 - Jun '27</b>	<b>Jul '25 - Jun '26</b>	<b>Jul '25 - Jun '26</b>	
7630-12 - HWY 50 ROW (Cap)	\$0	\$0	\$0	From Acqu/Const
Projected Water Project	\$1,500,000	\$1,300,000	\$0	From Acqu/Const
Web Access Hosting Data	\$0	\$0	\$5,500	From Flood Acc't
TCID Diversion Dam	\$0	\$50,000	\$50,000	From Flood Acc't
AWG Geomorphological Study WF	\$0	\$43,350	\$57,386	From Flood Acc't
Flood Hazard Web Site development & ADMP Uploads	\$24,100	\$71,954	\$84,506	From Flood Acc't
Carson City Eagle Valley Flood Project	\$0	\$0	\$39,350	
Projected Flood Project	\$100,000	\$100,000	\$0	From Flood Acc't
<b>Total Other Fund Accounts Expenses</b>	<b>\$1,624,100</b>	<b>\$1,565,304</b>	<b>\$236,742</b>	
<b>Income From Floodplain and Acqu/Const Fds</b>				
Floodplain	\$124,100	\$265,304	\$231,242	
Acquisition/Construction	\$1,500,000	\$1,300,000	\$0	
<b>Total Other Funds Account Income</b>	<b>\$1,624,100</b>	<b>\$1,565,304</b>	<b>\$231,242</b>	
	<b>-\$196,218</b>	<b>\$196,732</b>	<b>\$645,774</b>	
<b>ENDING BALANCE</b>	<b>\$4,914,141</b>	<b>\$5,193,516</b>	<b>\$3,624,055</b>	
	\$4,867,923	\$5,390,248	\$4,275,328	

Total Expenditures Including Flood & Acqu/Cons Funds  
Available Resources



**CARSON WATER SUBCONSERVANCY DISTRICT  
FLOODPLAIN MANAGEMENT FUND  
Fiscal Year 2026-27 Tentative Budget**

<b>FLOODPLAIN MANAGEMENT FUND</b>	Proposed Tentative Budget	Adopted Final Budget	Projected Actual	Notes
	Jul '26- Jun '27	Jul '25- Jun '26	Jul '25- Jun '26	
<b>Ordinary Income/Expense</b>				
<b>Income</b>				
5032-01 · Interest Inc - Inv. Pool	6,177	9,348	16,000	3.00%
<b>Net Income</b>	6,177	9,348	16,000	
<b>Other Income</b>				
8000-01 · Beginning Balance	205,909	311,594	418,986	Based on 24-25 Audit
Reimbursement from Churchill Co Maps	0	0	7,666	
8001-01 · Transfer In-General Fund	75,000	0	0	
<b>Net Other Funds</b>	280,909	311,594	426,652	
<b>Total Available Funds</b>	287,086	320,942	442,652	
<b>Expense</b>				
Alpine County Geomorphological Study WF	0	43,350	57,386	
Web Access Hosting data	0	0	5,500	
Flood Hazard Web Site/Flood Study	24,100	71,954	84,506	
TCID Diversion Dam	0	50,000	50,000	
Carson City Eagle Valley Flood Project	0	0	39,350	
7203-03 Floodplain Planning	100,000	100,000	0	
<b>Net Expenses</b>	124,100	265,304	236,743	
<b>Transfers out-General Fund</b>				
Web Access Hosting data	0.00	0.00	0.00	
<b>Net Transfers Out-General Fund</b>	-	-	-	
<b>Total Expense</b>	124,100	265,304	236,743	
<b>Ending Balance</b>	162,986	55,638	205,909	

**CARSON WATER SUBCONSERVANCY DISTRICT  
ACQUISITION/CONSTRUCTION FUND  
2026-27 Tentative Budget**

ACQUISITION/CONSTRUCTION FUND	Proposed	Approved	Projected	
	Final	Final	Actual	
	Budget	Budget		
	Jul '26 - Jun '27	Jul '25 - Jun '26	Jul '25 - Jun '26	
<b>Ordinary Income/Expense</b>				
Income				
5032-01 · Interest Inc - Inv. Pool	47,066.82	44,526.48	57,370.00	Based on 3.0 %
Net Income	47,066.82	44,526.48	57,370.00	
Other Income				
Beginning Equity	1,568,894.09	1,484,216.00	1,492,334.00	Based on the 24-25 Audit
Transfer In- General Fund	75,000.00	0.00	0.00	
Net Other Funds	1,643,894.09	1,484,216.00	1,492,334.00	
<b>Total Available funds</b>	1,690,960.91	1,528,742.48	1,549,704.00	
<b>Expense</b>				
Right-A-Way Lyon County Utility to Silver Springs	0.00	0.00	-19,190.09	Refund Check
Acquisition/Construction Projects	1,500,000.00	1,300,000.00	0.00	
Net Expenses	1,500,000.00	1,300,000.00	-19,190.09	
<b>Total Expenses</b>	1,500,000.00	1,300,000.00	-19,190.09	
<b>Ending Balance</b>	190,960.91	228,742.48	1,568,894.09	
4 Percent	60,000.00			



---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

1

**APPLICANT:** Alpine Watershed Group

Name  
P.O. Box 296

Address  
Markleeville Alpine

City County  
CA 96120

State Zip Code  
awg.kimra@gmail.com (530) 694-2327

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

N/A

Name

Address

City County

State Zip Code

Email Telephone #

**PROJECT NAME:** Carson River Upper Watershed Programs

**PROJECT LOCATION/ADDRESS:**

Service area - Alpine County, CA

AWG office - 50 Diamond Valley Road in Woodfords, CA

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

See Project Description attached.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

See Project Goals and Benefits attached.

**TOTAL ESTIMATED PROJECT COST:** \$379,500

**AMOUNT REQUESTED FROM CWSD:** \$35,000

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

See Sources of Other Funds attached.

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** June 30, 2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

While large-scale restoration projects with other funding sources require various permits, no permits are required for AWG's Carson River Upper Watershed Programs as described in this application.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

See Other Information attached.

AWG is requesting a letter of support from the Alpine County Board of Supervisors at the February 3, 2026, meeting.

SIGNED: Kimra D. McAfee

NAME: Kimra D. McAfee

TITLE: Executive Director

DATE: 1/16/2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

**CARSON WATER SUBCONSERVANCY DISTRICT**  
**Fiscal Year 2026-27**  
**Alpine Watershed Group Funding Request for Carson River Upper Watershed Programs**  
**Additional Sheets**

**PROJECT DESCRIPTION:**

Alpine Watershed Group (AWG) seeks funding for the fiscal year 2026-27 from the Carson Water Subconservancy District for the coordination of its Carson River Upper Watershed Programs. AWG's mission is to protect, conserve, and restore the watersheds of Alpine County by promoting sustainable community and science-based collaborative solutions. For 25 years, AWG has organized volunteers and inspired widespread participation to address water quality monitoring and restoration needs in Alpine County. To further the stewardship of our county's natural resources, our organization has developed diverse partnerships around watershed issues. As the nonprofit environmental organization for the Carson River headwaters (see attached map), our positive impacts extend downstream, where the Carson River flows into Northern Nevada.

Through this project, AWG staff will: 1) involve local citizens in watershed stewardship; 2) plan and implement priority watershed monitoring and restoration activities; 3) engage diverse stakeholders and strengthen community partnerships; and 4) support local watershed education and community outreach.

Alpine County attracts thousands of visitors each year from Nevada, California, and beyond. It is a popular recreation area for fishing, hiking and backpacking, river-running, and winter sports, and it is particularly well-loved by outdoor enthusiasts who reside in adjoining Nevada. The recreational offerings and magnificent nature in Alpine County depend on the clean water and riparian resources that AWG helps to protect. While it is one of AWG's goals to expand involvement in the watershed group by Nevadans, we already have volunteers and participating stakeholders from throughout Northern Nevada. Our active participation in CWSD through its forums and Carson River Coalition working groups, as well as our contributions to newsletters and e-blasts, allow us to help educate residents of the other counties in the watershed about where the water originates and the programs AWG carries out—programs that protect and improve water quality for human use and habitat values both in Alpine County and downstream.

**PROJECT GOALS AND BENEFITS:**

We have a community that values and acts to protect, conserve, and celebrate the healthy, resilient watersheds of Alpine County. Our organization's goals are to broaden this support and put it to work effectively.

- Goal 1: Alpine County's watersheds and the waters that flow through them are protected, conserved, and restored.
- Goal 2: Community and regional awareness and participation in watershed stewardship are increased.
- Goal 3: AWG has greater organizational capacity and a sustainability plan.

AWG's monitoring, restoration, and education programs benefit the watershed not only in Alpine County, where the Carson River headwaters are located, but also have positive impacts downstream. Protecting and enhancing the headwaters is a critical start to maintaining healthy water quality conditions throughout the watershed's region. Our programs are consistent with the *Carson River Watershed Adaptive Stewardship Plan* and meet the following funding criteria:

- Provide regional benefits within the Carson River watershed
- Improve water quality

- Prevent further stream bank erosion in the long term
- Reduce flooding along the Carson River
- Improve the administration and management of river and stream systems
- Assist water users and the general public in understanding current water issues

Our work to restore and rehabilitate river function is also consistent with the *Carson River Regional Floodplain Management Plan* as these actions help to maintain the waterway in a condition to help ensure unimpeded flows during high storm water events.

In spanning two states, the Carson River watershed presents unique opportunities and challenges. Upper Carson River watershed management planning is of concern to the Nevada Department of Environmental Protection, but the Alpine County portion of the watershed depends on the State of California and the Lahontan Regional Water Quality Control Board for funding eligibility from the US Environmental Protection Agency (EPA) 319 Grant Program. Acceptance of the *West Fork Carson River Vision Plan* by the Regional Board in 2023 opened the door for 319 Grant Program funding for the Upper West Fork Carson River watershed. AWG applied for and received funding from California's Nonpoint Source Grant Program to complete a geomorphological assessment, sediment budget, and project prioritization plan for the Upper West Fork Carson River watershed, with CWSD providing the required 25% match; this planning project will be completed in March 2026, and AWG and other partners can then start pursuing implementation funding for priority projects. In December 2023, AWG submitted an application for the Upper East Fork Carson River watershed to initiate a similar planning project; this analysis will lead the way to development of the EPA-required 9-element plan. The State Water Resources Control Board approved this project for funding, and in late 2025 AWG succeeded in securing the required 25% match thanks to funding received from Bently Foundation, Friends of Hope Valley, and Sierra Nevada Foundation; the East Fork Carson Prioritization Project will move forward in 2026.

As a very small nonprofit organization, our challenge in 2026-27 is to continue all of AWG's usual programs and ongoing projects while continuing to serve as a community leader in the wake of the Tamarack Fire. Because of the strong relationships we have built with public land managers over the last two decades, AWG has been uniquely qualified to be the catalyst needed for Upper Carson River watershed recovery from the Tamarack Fire. Since the fire, AWG has been successful at garnering support for post-fire work, including data collection, community outreach and education, agency collaboration, and volunteer restoration projects. Regional Forest and Fire Capacity Program funding from Sierra Nevada Conservancy continues through 2026 for AWG to assist with building Alpine County's capacity to increase the scope and scale of forest health and resilience projects; this funding helps to support AWG's part-time Forest Health Coordinator position.

Following is a summary of AWG's monitoring, restoration, and education program plans and projects in the coming year, in addition to the West Fork Carson River Prioritization Project and East Fork Carson River Prioritization Project described above.

#### Monitoring

- Continuing our long-standing river monitor program, collecting data at eight sites in the Carson River upper watershed four times/year
- Coordinating with the Alpine County Public Health Officer on public outreach on harmful algal blooms (HABs); providing assistance with HAB monitoring in Alpine County if requested by the Lahontan Regional Water Quality Control Board
- Conducting Year 1 post-project aspen monitoring near Monitor Pass to begin the data collection to assess how fuel loading and aspen sucker density have changed after treatment; the goal is to use this data to inform future projects that seek to have the dual benefit of reducing fuels loads and improving aspen grove health

- Continuing seedling survivability surveys of trees planted by volunteers in burned areas to inventory survival rates and share monitoring results
- Ongoing coordination with Markleeville Water Company and Forest Health Community Working Group partners to conduct monitoring in the Musser and Jarvis drainage and implement the recommendations in the *Musser and Jarvis Assessment Report*
- Partnering with East Fork Carson River hot springs partners on monitoring and cleanup of the hot springs area
- Partnering with California State Parks to monitor and address invasive species in and around Grover Hot Springs State Park meadow
- Partnering with Bureau of Land Management (BLM) to coordinate volunteer weed pulls around Alpine County where they have identified nonnative, invasive plant populations on BLM land, such as bull thistle at Indian Creek Reservoir
- Entering data from water quality monitoring into the California Environmental Data Exchange Network (CEDEN), creating data summaries and reports for the public and Alpine County, and analyzing data trends over time to identify priority projects
- Ongoing recruitment of new volunteers for AWG's monitoring programs
- Supporting GIS database development and maintenance for the county's watersheds

## Restoration

### **Hope Valley Restoration & Aquatic Habitat Enhancement Project – 2016 to 2027**

The initial goal of this project was to stabilize approximately 450 feet of eroding banks along the West Fork Carson River just downstream of the Highway 88 bridge on California Department of Fish & Wildlife (CDFW) land. The first site was a new project on the first meander downstream of the bridge; the second site was the 2015 American Rivers project site downstream of the first site, where additional work increased bank stability.

**Update:** Construction was completed in fall 2020, and the latest annual monitoring report is available on the project webpage: <https://www.alpinewatershedgroup.org/hope-valley-restoration-and-aquatic>. Funding from CDFW via the National Fish & Wildlife Foundation, funded by the State Water Board as part of a settlement of a Water Board enforcement action for Kirkwood Resort, covers monitoring and adaptive management. Funding has been extended through June 2027 given unspent funds so that adaptive management work can be designed, permitted, and implemented between Site 1 and Site 2 since there were not significant adaptive management needs at Site 1, and in consulting with the project engineer and partner staff, it was determined that bringing out more equipment to do additional major work at Site 2 would cause more harm than benefit to the meadow.

### **Markleeville Creek Restoration Project – 2005 to 2030**

This project will re-establish the natural form and function of Markleeville Creek through the site of the former US Forest Service Guard Station. The project will re-create the streamside habitat by removing the floodwall and revegetating the floodplain. In 2026 Markleeville Public Utility District (MPUD) will complete an infrastructure upgrade project that includes decommissioning manholes in the floodplain and upgrading the sewer line that runs under the creek. Our community hopes that future funding will allow for development of public access amenities, such as a public restroom.

**Update:** AWG secured funding for final design and a small portion of the implementation costs from California's Integrated Regional Water Management program. AWG helped facilitate Alpine County securing the remainder of the implementation funding by having the project's revegetation serve as mitigation for Caltrans' Markleeville Bridge replacement project (construction in 2021-2024). Construction of the floodplain restoration project began in 2025 and will be completed in 2026; AWG completed baseline monitoring, is doing monthly field checks, and will conduct monitoring after the project is completed in 2026.



### Education and Community Outreach

- Hosting watershed group meetings and field tours; in 2026 we hope to lead a public tour of the Monitor Pass fuels reduction and aspen restoration project area, and we will be hosting a Rangeland Health Workshop and a Forest Health Workshop as part of our Natural and Working Lands Hub with Amador, Calaveras, and Tuolumne Resource Conservation Districts; we will also be doing one-on-one interviews with agricultural producers as part of this partnership to develop a regional Natural and Working Lands Strategy
- Providing administrative support for the Forest Health Community Working Group (FHCWG) meetings and activities, including public meetings, field tours, and tree planting events for Arbor Day and in the fall
- Ongoing education of community members about water quality to encourage stewardship, working especially closely with Alpine County Health & Human Services to communicate about harmful algal blooms
- Engaging community members and visitors through our annual Creek Day workday, and expanding volunteer opportunities through other events such as Adopt-A-Highway cleanups; volunteers who assist with restoration projects have the opportunity to help improve critical wildlife habitat while also learning about the connection between watershed conservation activities and water quality; volunteers also learn simple restoration techniques that they can implement on their own, extending the impact beyond our workday and immediate community
- Continuing to build a stronger partnership with the federally-recognized Washoe Tribe of NV and CA, the Hung-A-Lel-Ti (Woodfords) community, and the Washoe Environmental Protection Department; through the FHCWG we have started work on creating a Tribal Engagement Plan in collaboration with the Tribe
- Expanding our community outreach and action on invasive weeds in collaboration with Alpine County/Upper Carson River Watershed Weed Management Group
- Participating in Lahontan Cutthroat Trout Carson Recovery Implementation Team meetings and helping to ensure that agency studies and plans are communicated to stakeholders
- Continuing to advance sustainable recreation in Alpine County through agency collaboration, community discussions, and utilizing the outreach tools of partners including Carson River Coalition and Sierra Nevada Alliance; continuing to work with partners and agencies on specific issues such as graffiti and litter
- Continuing environmental education programs with Alpine County schools and working to reach Alpine County youth when they move on to Douglas High School, including leading a school-wide field trip for Carson River Snapshot Day; developing a long-term plan for classroom lessons and field trips with support from River Wranglers; and providing support for the re-established Trout in the Classroom Program at Diamond Valley Elementary School
- Expanding watershed awareness by ongoing tabling presence at events throughout the region
- Continuing to be creative on how to expand watershed awareness through virtual tools such as social media and virtual options for watershed group meetings

**SOURCE OF OTHER FUNDS:**

Alpine County Tobacco Control Program (anticipated) - \$5,000

Bently Foundation - \$30,000

California Department of Conservation (via Amador Resource Conservation District) - \$22,000

California Department of Fish & Wildlife Kirkwood Settlement - \$40,000\*

California Integrated Regional Water Management - \$75,000\*

The Keith Campbell Foundation for the Environment - \$5,000

Sierra Nevada Conservancy - \$60,000

State Water Board Nonpoint Source Grant Program - \$100,000\*

Trout Unlimited - Sagebrush Chapter - \$7,500

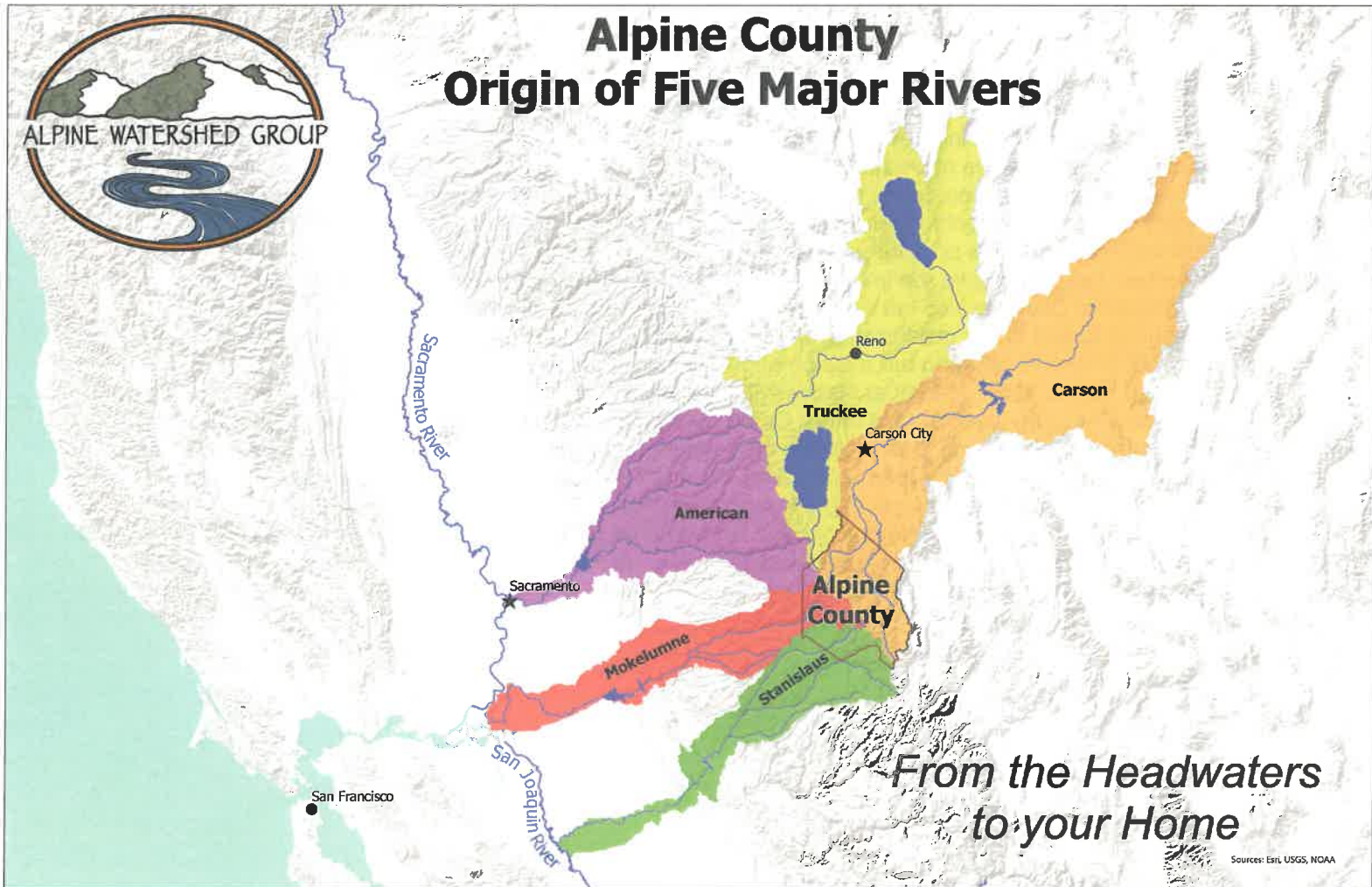
*\*Majority of funds are pass-through funds for consultant services and project permitting; these are estimates of funds to be expended during CWSD grant period of 7/1/2026-6/30/2027*

**OTHER INFORMATION:**

In 2025, 321 volunteers contributed 667 hours sampling water quality, helping with Creek Day cleanup projects, planting trees in burned areas, watering planted trees, cleaning up highways, and sorting recyclables at Death Ride. Volunteers planted 1,235 trees and gathered hundreds of pounds of trash, keeping debris from entering Alpine County's waterways. Our staff applied a variety of monitoring techniques including vegetation monitoring, photo points, and seedling survivability surveys at sites throughout the Upper Carson River watershed. Our staff, with volunteer help, led a field trip in Hope Valley for all Diamond Valley Elementary School students on Snapshot Day. We also led a bioblitz to teach people how to use iNaturalist, and our staff continued to add to our organization's observations of flora and fauna. AWG participated in 15 community events, sharing our mission and projects with approximately 300 people; these included tabling at the Market at Markleeville and participating in South Lake Tahoe and Washoe Earth Day events. One of our California Climate Action Corps Fellows joined our staff after finishing her second term at AWG, assuming the full-time position of Headwaters Coordinator. We recently added a part-time Watershed Projects Coordinator to our team to help us start tackling priority projects in the Upper West Fork Carson River watershed. CWSD support helps our small, community-based organization build the capacity of Alpine County to address the most critical environmental concerns by utilizing local expertise to monitor changes, lead projects to improve water quality, and educate residents and visitors on water issues. Thank you!



## Alpine County Origin of Five Major Rivers





**PROJECT LOCATION/ADDRESS:**

Multiple Locations  
Within district boundaries

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Please See Attached

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

Please See Attached

**TOTAL ESTIMATED PROJECT COST:** \$109,999.00

**AMOUNT REQUESTED FROM CWSD:** \$60,000.00

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

Please See Attached

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** June 30, 2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

Please See Attached

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

Please See Attached

SIGNED: Richard Wilkinson

NAME: Richard Wilkinson

TITLE: Manager/Coordinator

DATE: 01-15-2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

### **Projects Objectives:**

The Carson Valley Conservation District (CVCD) would like to request funding assistance with Staff salaries and operational costs that do not fall directly within the river restoration project's scope of work. In addition to these costs, we would like to ask for your financial support with our Vegetation Management program which helps protect our vital Cottonwood Gallery.

### **Projects Overview:**

Each year, the Carson Valley Conservation District provides significant staff time and support for consulting services to multiple agencies and landowners working in the Carson River Watershed. In the past, district staff have not been able to bill for these services since they do not fall within a particular project scope. As a result, the district has had to volunteer time or the CVCD board has had to pay for staff time without the ability to get reimbursed. The CVCD is a partner with many Federal, State, County and Municipalities and we are considered an excellent source for consulting on matters concerning the health and function of the watershed.

### **Projects Methods:**

CVCD will assist local landowners and agency partners with events/plans/projects that do not directly affect our contracted projects. These tasks include 1) assisting Douglas County with all erosion and stormwater related concerns, 2) assisting CWSD with Carson River Coalition functions, Education Outreach and staff projects, 3) assisting Carson City Open Space with river and tributary erosion and water quality issues, 4) working with local agricultural producers and NRCS on improving irrigation efficiency, crop management and issues with water conveyance, 5) assisting state agencies with water related issues that may arise following high water events or land use concerns, and 6) providing technical assistance for all agencies and landowners with permitting requirements.

### **Projects Goals:**

Allow District Staff flexibility in assisting project partners with resource concerns in the Carson River Watershed  
Help the district reimburse staff time for tasks that are outside current project scopes  
Help CVCD provide consulting and technical assistance to landowners and agencies  
Help the district pay for things that cannot be reimbursed through a river project contract

### **Projects Tasks:**

Work with CWSD Staff to assist with programs  
Work with Douglas County to assist with stormwater and erosion issues  
Work with Carson City to assist with stormwater and erosion issues  
Work with NRCS with EQIP programs for local landowners  
Work with local landowners on resource concerns along the Carson River and its Tributaries  
Assist state agencies with resources concerns within our district boundaries  
Hire an administrative assistant to help with office and fiscal management

### **Scope of Work (Workplan):**

Assist with permitting for landowners utilizing the NRCS EQIP Program  
Assist with CWSD staff needs  
Assist local agriculture producers with resource concerns  
Assist local, state and federal partners with plans to address natural resource issues

**Measures of Success:**

The district anticipates an overall improvement in their ability to assist district partners with unforeseen conservation issues within district boundaries. The funding will allow staff to address resource and water quality issues that are outside the scope of current river restoration funding. This grant funding will help us establish a network of project partners in hope of expanding district capabilities within our watershed.

**Estimated Funding Sources:**

Carson Water Subconservancy District	\$60,000.00	Submit in Spring FY 26-27
Carson City Parks & Open Space	\$24,999.00	Approved 2026
Douglas County	\$25,000.00	Approved 2026

**DRAFT ESTIMATED PROJECT BUDGET:**

CVCD Draft Detailed Budget – CWSD Funding 2025	
District Manager Salary Support	\$25,000
District Coordinator Salary Support	\$25,000
District Admin Assistant Salary Support	\$7,500
Vegetation Management	\$2,500
<b>TOTAL:</b>	<b>\$60,000</b>



Rich Wilkinson  
providing a river tour  
with State, Federal,  
and local partners on  
the Carson River  
near Genoa.





**PROJECT LOCATION/ADDRESS:**

Multiple location on the Carson River in Douglas County, NV  
Upstream of Cradlebaugh Bridge & Dresslerville/North of River Rock Rd.

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Please See Attached

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

Please See Attached

**TOTAL ESTIMATED PROJECT COST:** \$1,360,000  
**AMOUNT REQUESTED FROM CWSD:** \$175,000.00

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

Please See Attached

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** June 30, 2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

Please See Attached

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

Please See Attached

SIGNED: Richard Wilkinson

NAME: Richard Wilkinson

TITLE: Manager/Coordinator

DATE: 01-15-2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

### **Projects Objectives:**

Carson Valley Conservation District would like to request funding for flood damage repairs and bioengineering establishment at four different locations on the Carson River near Genoa, NV. These four project sites experienced severe erosion during the 2017 floods and most recently in 2022-23. These projects need bioengineering treatments, sediment removal, shaping, and additional rock rip-rap barbs and bank protection. The objectives include 1) utilizing instream materials to reshape the eroded bank and protecting it with rock riprap and bioengineering techniques, 2) removing sand and gravel deposits to utilize as fill materials and minimizing channel migration, 3) constructing rock riprap stream barbs to ensure bank slope protection and push the thalweg to the center of the river channel and to help reduce hydraulic pressure off the eroded riverbank, and 4) replace and add additional willow poles, container plants, and reseeding on all the proposed projects.

### **Projects Overview:**

The four project locations occur in two general areas. The first area is just upstream of the Cradlebaugh Bridge and includes three bank stabilization project locations. The second area is near Dresslerville, just north of River Rock Rd, and includes one bank stabilization project location.

Cradlebaugh Bridge area sites:

- Heinemann Site #1 – The project length is approximately 700 linear feet of the riverbank.
- Heinemann Site #2 – The project length is approximately 775 linear feet of the riverbank.
- Lippincott Site #1 – The project length is approximately 1,010 linear feet of the riverbank.

Dresslerville area site:

- Settelmeyer Site #1 – The project length is approximately 500 linear feet of the riverbank. There are several downed cottonwood trees at this site that were undercut by erosion.

The implementation of projects at all four site locations will be dependent upon final funding received from all grant sources. If less funding is received, CVCD may only implement projects at only two or three sites.

### **Scope of Work (SOW):**

For each of these sites, the district proposes to use a combination of rock riprap and bioengineering treatments to stabilize the project site. CVCD will utilize instream sand and gravel material to shape banks to a 3:1 slope and will then place riprap along the toe and bank. Bioengineering applications will include willow plantings, COIR fabric to reduce erosion, and willow mats and fascines. Depending on a formal survey, the district may consider instream rock barbs to help slow down the river flows and redirect hydraulic energy to the center of the channel. CVCD would like to plant vegetation in the project upland areas which may include trees, shrubs, and grasses at these locations.

CVCD will harvest and install native willow poles and plant native or desirable seed to help mitigate erosion and reseed the disturbed areas. If there are any additional instream materials, these will be removed and taken outside of the 100-year floodplain. CVCD will also remove and large woody debris and place it outside of the work area.

### **Projects Goals:**

Re-establish desirable vegetation  
Stabilize eroding riverbanks  
Improve water quality  
Mitigate future sediment transport  
Improve wildlife habitat  
Increase channel capacity

Mitigate potential impacts on the Lutheran Bridge, Cradlebaugh Bridge, and roadways  
Mitigate potential impacts to the Washoe Tribe's irrigation ditch that is adjacent to the Dresslerville site

#### **Projects Tasks:**

Initiate project stakeholder meetings  
Start the process of renewing or applying for permitting  
Establish landowner access with formal right-of-entry permits  
Hire a consultant for support with design and bidding documents  
Determine the need for repairs or modifications  
Solicit formal bids from contractors  
Start construction and harvesting of bioengineering materials and plants  
Quarterly reporting and reimbursements  
Complete construction  
Submit final reports and reimbursements

#### **Benefits:**

This project will serve to benefit the Carson River Watershed through the stabilization of riverbanks and concurrent reduction of erosion at the four proposed project sites. This will also result in a reduction in sedimentation and turbidity of the river in these areas. Rock stream barbs and rock riprap placed on the toe of the bank encourage sediment deposition and riverbank vegetation benefit from the trapped soil and nutrients. The stabilization of the bank will create a gradual slope connecting the river to the floodplain which allows for establishment of riparian vegetation and wildlife access to the river. This stable connection of river to floodplain also allows for gradual flooding and groundwater recharge in the floodplain. Riverbank stabilization is a project type identified as needed in the Carson River Adaptive Stewardship Plan (CRASP).

#### **Construction Methods and Equipment Used:**

Equipment may vary based on each contractor's preference however usually the equipment utilized is as follows:  
Large Dozer typically D-8 or larger with a semi-u blade used for pushing materials  
Large Loader with typically a 4 cubic yard bucket or larger used for lifting materials  
Large Backhoes used for pushing, trenching or lifting materials  
Skid Steers used for back dragging and lifting materials  
Large Excavators used for trenching, lifting and placing materials  
Trucking equipment used for hauling materials and equipment

#### **Monitoring and Maintenance Program:**

These projects are proof that the conservation district takes pride in annual monitoring. These existing projects are being considered because of our focus on annual photo monitoring and site visits. CVCD will visit each site annually and determine if each project is still intact and functioning as designed. One of the requirements with the Nevada Division of State Lands' right of entry permit is to actively maintain our project work for 20 years. We will continue to monitor and maintain these projects in the future.

Once we complete these projects, we expect to see improvements in the establishment of vegetation and water quality. Our work will improve the project's ability to trap sediment, deflect hydraulic energy and allow for the natural recruitment of water-loving plants.

#### **Permit Requirements:**

### **Projects Objectives:**

Carson Valley Conservation District would like to request funding for flood damage repairs and bioengineering establishment at four different locations on the Carson River near Genoa, NV. These four project sites experienced severe erosion during the 2017 floods and most recently in 2022-23. These projects need bioengineering treatments, sediment removal, shaping, and additional rock rip-rap barbs and bank protection. The objectives include 1) utilizing instream materials to reshape the eroded bank and protecting it with rock riprap and bioengineering techniques, 2) removing sand and gravel deposits to utilize as fill materials and minimizing channel migration, 3) constructing rock riprap stream barbs to ensure bank slope protection and push the thalweg to the center of the river channel and to help reduce hydraulic pressure off the eroded riverbank, and 4) replace and add additional willow poles, container plants, and reseed on all the proposed projects.

### **Projects Overview:**

The four project locations occur in two general areas. The first area is just upstream of the Cradlebaugh Bridge and includes three bank stabilization project locations. The second area is near Dresslerville, just north of River Rock Rd, and includes one bank stabilization project location.

Cradlebaugh Bridge area sites:

- Heinemann Site #1 – The project length is approximately 700 linear feet of the riverbank.
- Heinemann Site #2 – The project length is approximately 775 linear feet of the riverbank.
- Lippincott Site #1 – The project length is approximately 1,010 linear feet of the riverbank.

Dresslerville area site:

- Settelmeyer Site #1 – The project length is approximately 500 linear feet of the riverbank. There are several downed cottonwood trees at this site that were undercut by erosion.

The implementation of projects at all four site locations will be dependent upon final funding received from all grant sources. If less funding is received, CVCD may only implement projects at only two or three sites.

### **Scope of Work (SOW):**

For each of these sites, the district proposes to use a combination of rock riprap and bioengineering treatments to stabilize the project site. CVCD will utilize instream sand and gravel material to shape banks to a 3:1 slope and will then place riprap along the toe and bank. Bioengineering applications will include willow plantings, COIR fabric to reduce erosion, and willow mats and fascines. Depending on a formal survey, the district may consider instream rock barbs to help slow down the river flows and redirect hydraulic energy to the center of the channel. CVCD would like to plant vegetation in the project upland areas which may include trees, shrubs, and grasses at these locations.

CVCD will harvest and install native willow poles and plant native or desirable seed to help mitigate erosion and reseed the disturbed areas. If there are any additional instream materials, these will be removed and taken outside of the 100-year floodplain. CVCD will also remove and large woody debris and place it outside of the work area.

### **Projects Goals:**

Re-establish desirable vegetation  
Stabilize eroding riverbanks  
Improve water quality  
Mitigate future sediment transport  
Improve wildlife habitat  
Increase channel capacity

United States Army Corp. of Engineers Letter of Permission Procedure (LOP)  
Nevada Department of Environmental Protection Working Waterways Permit  
Nevada Department of Environmental Protection 401 Certification  
Nevada Division of State Lands Right of Entry Permit  
State Historic Preservation Office Archeological Section 106  
CVCD Landowner Access Owners Right of Entry Permit

**Estimated Funding Sources:**

Conserve Nevada Program	\$400,000.00	Submit in Summer FY 26
Carson Water Subconservancy District	\$175,000.00	Submit in Spring FY 26
Nevada Division of Wildlife	\$35,000.00	Submit in Spring FY 26
Nevada Division of Environmental Protection	\$250,000.00	Submit in Spring FY 26
Douglas County	\$100,000.00	Approved FY 26
Shared Stewardship	\$150,000.00	Submit in Spring FY26
Nevada Division of Water Resources	<u>\$250,000.00</u>	Submit in Spring FY 26
	\$1,360,000.00	Potential Income

**DRAFT ESTIMATED PROJECT BUDGET:**

The district will draft a specific project budget once all the project funding requests have been received or denied. Once we determine how much funding we have, we can complete our line-item budget breaking down each specific category. See draft detailed budget below.

<b>CVCD Draft Detailed Budget 2025</b>	
Project Management	\$40,000
Administration	\$10,000
Permitting/Environmental	\$35,000
Supplies	\$40,000
Equipment Fuels	\$2,500
Vehicle Mileage	\$7,500
Bioengineering Crew	\$125,000
Construction Contractor	\$1,035,000
Engineer Contractor	\$65,000
<b>TOTAL:</b>	<b>\$1,360,000</b>

*\*CVCD will draft a specific project budget once all funding requests have been processed and granted or denied. Estimated funding sources listed in the supporting materials document have been awarded in recent years but are not guaranteed. Funding totals will ultimately determine the scope of work. Once funding totals are determined, a complete categorized line-item budget will be provided. Due to the nature of river projects, quotes for construction contractors and materials will not be available until later summer once water levels are low enough for final engineering surveys to be completed. Site conditions change yearly, and it is not possible to finalize plans until a few months preceding construction initiation.*

## **Site-Specific Conditions**

### **Heinemann #1 Site**



Project Length: 700 linear feet  
Project Bank Height: 10 Feet  
Coordinates:  
Latitude: 39.2'40.62" N  
Longitude: -119.47'0.44" W

### **Project Location Needs for Restoration**

- Site is experiencing accelerated erosion and bank sloughing.
- Banks are vertical or concave.
- No desirable vegetation within the project site.
- Project site contributes to sediment discharges.
- Project site conditions contribute to turbid water.
- Impacts to the landowners fencing.
- This project directly impacts the past restoration projects downstream.
- The project directly impacts the Cradlebaugh Bridge downstream.



## **Site-Specific Conditions**

### **Heinemann #2 Site**



Project Length: 775 Feet  
Project Bank Height: 10 Feet  
Coordinates:  
Latitude: 39°2'35.08" N  
Longitude: -119°47'9.68" W

### **Project Location Needs for Restoration**

- This headcut is starting to impact the Ambrosetti Pond water discharge for Carson City.
- Banks are vertical or concave.
- No desirable vegetation within the project site.
- Project site contributes to sediment discharges.
- Project site conditions contribute to turbid water.
- Impacts to the landowners fencing to keep cattle out of the river.
- This project directly impacts the past restoration projects downstream.
- The project directly impacts the Cradlebaugh Bridge downstream.

## **Site-Specific Conditions**

### **Lippincott #1 Site**



Project Length: 1,010 Feet  
Project Bank Height: 10 Feet  
Coordinates:  
Latitude: 39°2'50.11" N  
Longitude: -119°47'1.07" W

### **Project Location Needs for Restoration**

- Banks are vertical or concave.
- No desirable vegetation within the project site.
- Project site contributes to sediment discharges.
- Project site conditions contribute to turbid water.
- Impacts to the landowners fencing to keep cattle out of the river. One section of fencing has already fallen into the river.
- Over the past several years, multiple cottonwood trees have been undercut and fallen into the river. They were removed by NDOT at the Cradlebaugh Bridge.
- This project directly impacts the past restoration projects downstream.
- The project directly impacts the Cradlebaugh Bridge downstream.

## **Site-Specific Project Details**

### **Settelmeyer #1 Site**



Project Length: 500 linear feet  
Project Bank Height: 8 Feet  
Coordinates:  
Latitude: 38°53'35.35" N  
Longitude: -119°42'32.46" W

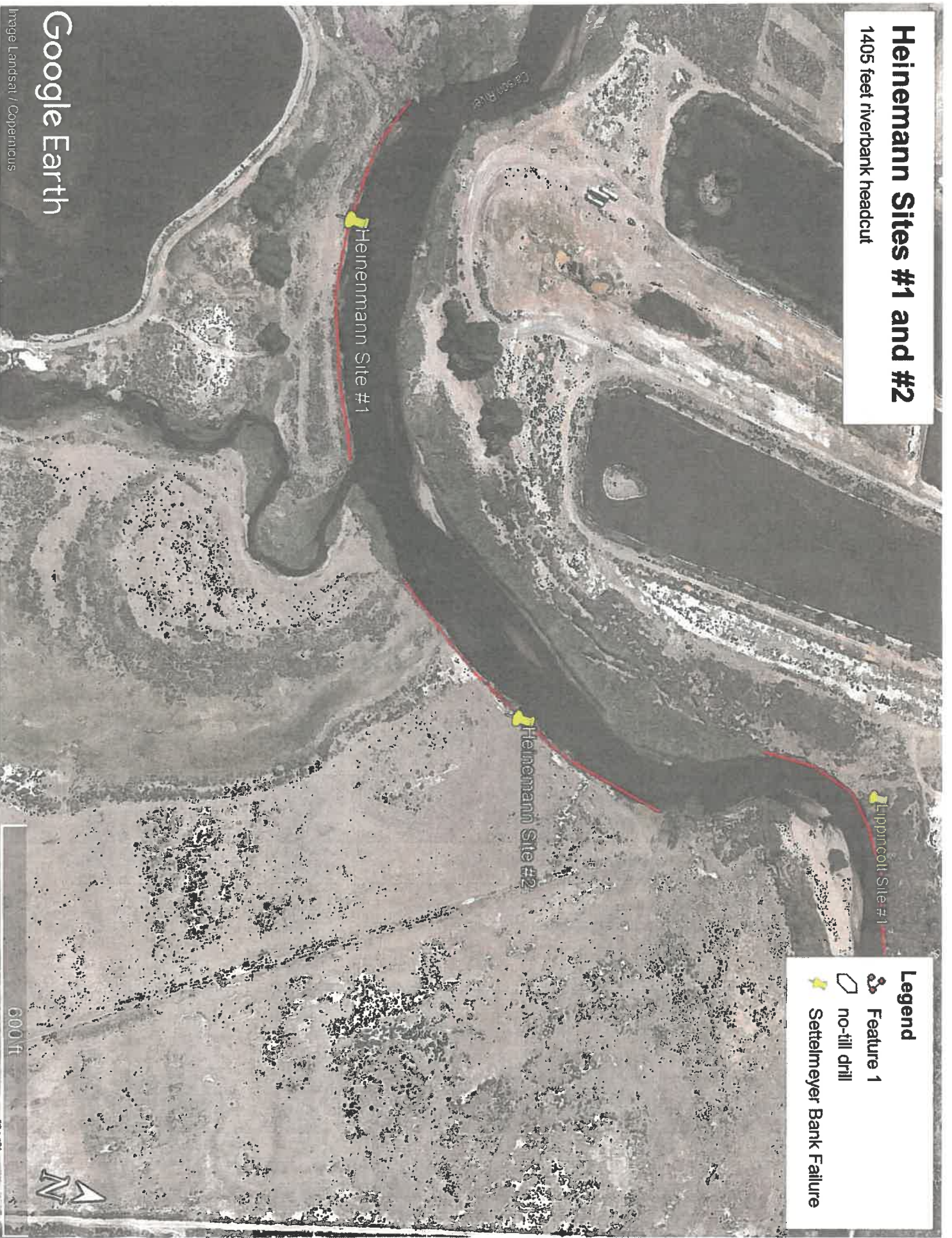
### **Project Location Needs for Restoration**

- Banks are vertical or concave.
- No desirable vegetation within the project site.
- Project site contributes to sediment discharges.
- Project site conditions contribute to turbid water.
- Multiple cottonwood trees have been undermined at this location.
- This bank is eroding towards the adjacent Washoe Tribe irrigation ditch.
- Impacts to the landowners fencing to keep cattle out of the river.
- This project directly impacts the past restoration projects downstream.



# Heinemann Sites #1 and #2

1405 feet riverbank headcut






- Legend**
- Feature 1
  - no-till drill
  - Settlemyer Bank Failure



# Lippincott Site #1

790 feet riverbank headcut

- Legend**
-  Feature 1
  -  no-till drill
  -  Settelmeyer Bank Failure

Lippincott Site #1

Google Earth

Image © 2023 Airbus

500 ft

395





# Settelmeyer Site #1

500 feet riverbank headcut

- Legend**
- Feature 1
  - no-till drill
  - Settelmeyer Bank Failure

Settelmeyer Bank Failure

Google Earth

Image © 2026 Airbus

2000 ft





---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

4

**APPLICANT:** Dayton Valley Conservation District

Name  
#34 Lakes Blvd

Address  
Dayton Lyon

City NV County 89403

State  Zip Code

alemons@daytonvalleyconservation.com / 775-246-6220 ext 1878

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

N/A

Name

Address

City  County

State  Zip Code

Email Telephone #

**PROJECT NAME:** DVCD Admin/ Management FY26-27

**PROJECT LOCATION/ADDRESS:**

#34 Lakes Blvd.  
Dayton, NV 89403

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Please see attached PDF.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

Please see attached PDF.

**TOTAL ESTIMATED PROJECT COST:** \$100,000

**AMOUNT REQUESTED FROM CWSD:** \$100,000

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

None

**ESTIMATED DATE PROJECT TO BEGIN:** July 1st, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** June 30th, 2028 / \$50,000 per year  
(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)



**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

None

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

any leftover admin grant funding from DVCD's admin grant at the end of FY25 can be included/ rolled over in the total for this new funding

SIGNED: \_\_\_\_\_

NAME: Austin Lemons

TITLE: District Manager

DATE: 1/14/26

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information.

History: Dayton Valley Conservation District began in 1996 as the Middle Carson River Coordinated Resource Management Plan, or Middle Carson River CRMP. In 1999 the CRMP became the Dayton Valley Conservation District. Since its inception, the primary source of funding for Management and Administrative staff came from the Carson Truckee Water Conservancy District. This funding remained in place until 2013. During that 17-year span, with management and administrative costs covered through these funds (\$80,000 annually as of 2013), DVCD completed over 40 major construction projects, multiple repairs, and brought in excess of \$15,000,000 into the local economy.

Project: DVCD hopes to continue local conservation work with a dedicated source of administrative funding, which would cover Fiscal years 2026 and 2027. The last two years of funding has allowed us to cover the salary of an administrative assistant and to upgrade staff computers to working units, thus allowing DVCD to be much more productive on project-related tasks. This continued funding would allow DVCD to continue the progress made as well as begin public outreach such as High School Range Camp Scholarships and River Wrangler workdays. Utilizing project-specific grant funding for personnel and overhead costs is not a tenable approach, as most grants require that hours be exactly specific to the project Scope of Work (SOW) and do not allow for general administrative tasks. DVCD is requesting a 2-year commitment from CWSD to provide annual funding to cover non-project-specific personnel and overhead costs to facilitate continued conservation goals.

Over the next 2 years Dayton Valley CD will be executing a large-scale noxious weed/habitat restoration effort that includes extensive public relations and private landowner outreach elements. There is a significant amount of time and effort required, outside of these endeavors, to continue the daily function of District matters, and to work on the coordination, education, and implementation of the efforts to secure funding.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP.

The goal of DVCD is to successfully complete local conservation work, and in so doing, establish broad public awareness and support of the DVCD mission with visible outcomes that benefit the broad population of Central Lyon County. The successful completion of

river projects, the implementation of successful noxious weed/habitat restoration throughout the Middle Carson watershed, and the engagement of the public through public events, social media, and other avenues are expected to contribute to broader public awareness and support for DVCD and its efforts.

Since 1996, DVCD has quietly performed projects that have protected vital riparian areas, agricultural lands, public open spaces, water quality, and habitat restoration. For these efforts to continue for years to come, DVCD is in critical need of a consistent source of dedicated funding to cover ordinary and customary daily management, administrative, and operational functions. These are a large portion of the personnel and operational expenses, and necessary for both the function and survival of DVCD.

Having a two-year source of administrative funds will allow DVCD to:

- 1) Successfully complete ongoing/planned projects which enhance and support riparian function, water quality, flood plain restoration/protection, public education/engagement, and noxious weed control
- 2) Avoid continued spending of project-specific funding on management/administrative costs
- 3) Successfully conduct the necessary efforts to establish public support for and designated funding for the ongoing and successful implementation of broad-reaching conservation efforts within the watershed of the Middle Carson River
- 4) Establish a program at DVCD that is widely identified and supported within the community



---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

5

**APPLICANT:** Dayton Valley Conservation District

Name  
#34 Lakes Blvd

Address  
Dayton Lyon

City NV County 89403

State  Zip Code

alemons@daytonvalleyconservation.com / 775-246-6220 ext 1878

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

N/A

Name

Address

City  County

State  Zip Code

Email Telephone #

**PROJECT NAME:** DVCD Weeds crew FY26-27

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

None

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

attached to this application are Treatment Plans for Rolling A open space, mapped river corridor weed surveys and a supplemental project description and benefits.

SIGNED: \_\_\_\_\_

NAME: Austin Lemons

TITLE: District manager

DATE: 1/14/26

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

**PROJECT LOCATION/ADDRESS:**

Lyon County, Nevada

---

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Please see attached PDFs:

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

Please see attached PDFs:

**TOTAL ESTIMATED PROJECT COST:** 83,961.62

**AMOUNT REQUESTED FROM CWSD:** 60,000

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

NDA EDRR FY24/25 Grant 6,502.32 matched to CWSD  
(Requested) NDA Noxious Weeds FY26/27 grant \$17,459.30 matched to CWSD

**ESTIMATED DATE PROJECT TO BEGIN:** Spring 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** December 2027/ \$30,000 per year  
(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information.

With assistance from the Nevada Dept. of Agriculture; Dayton Valley Conservation District is planning to continue a multiple year noxious weed management and treatment project that will encompass not only the riparian corridor and adjacent floodplains, but also several primary drainages that feed the middle Carson River in Lyon County. These areas include the Moundhouse Industrial Complex, Six Mile Canyon in Lyon County, Gold Canyon in Lyon County, lower Eldorado Canyon, the Rolling A Public open space and the riparian corridor and adjacent floodplains of the Carson River between from Dayton Valley to and including the Fort Churchill area.

DVCD plans to hire a new Conservation Technician and at least one 9-month seasonal noxious weeds specialist as soon as possible to be ready for the late spring/summer herbicide application season. These new employees are needed to address noxious weed control, revegetation, and habitat restoration within the aforementioned areas.

Noxious weed funding from CWSD will be applied to this project, with emphasis given not only to appropriate weed treatments, but coordinated restoration of treated and surrounding areas. The CWSD funds will offset some personnel costs related to the Conservation Tech and noxious weeds specialist, and will also address equipment maintenance/repair, and supply and seed acquisition.

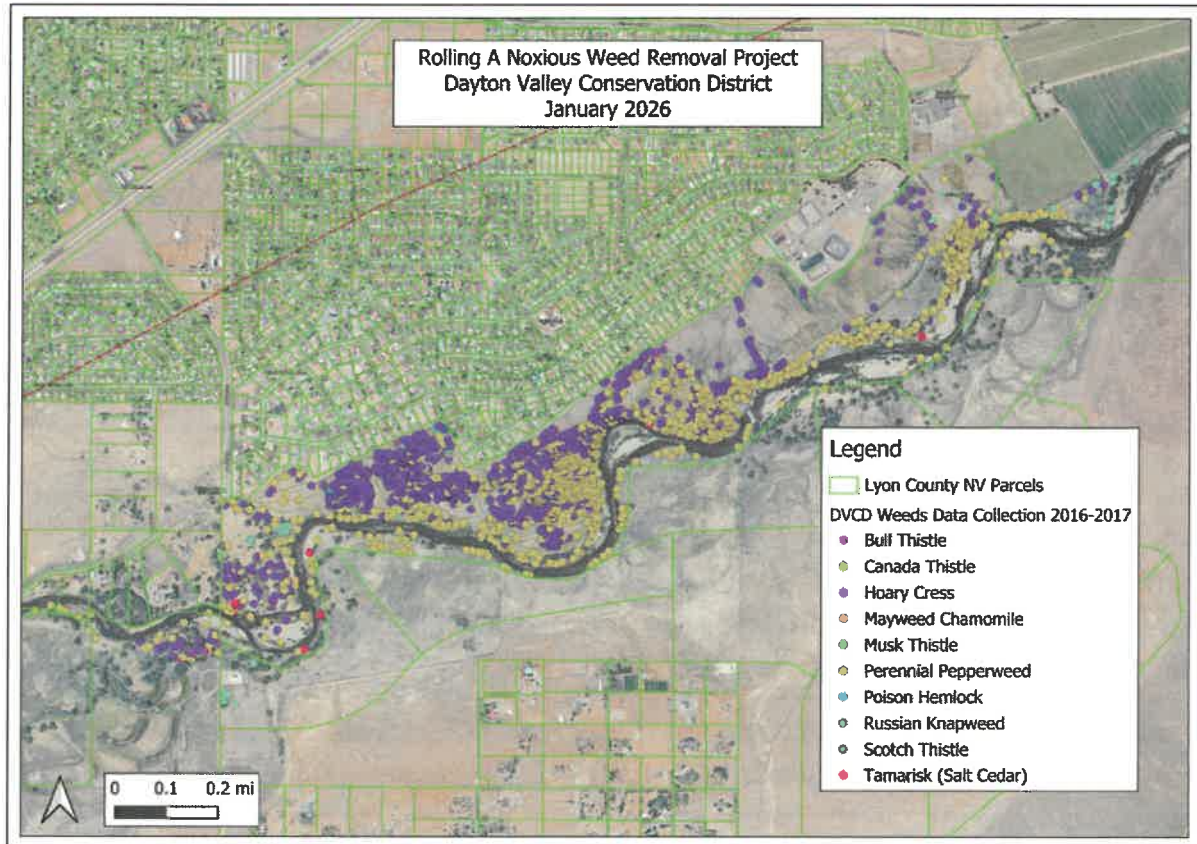
Specifically, the requested \$30,000 (to be requested next fiscal year, as well) will be applied primarily toward the hiring of at least one staff person to assist the Conservation Technician during the spring, summer and fall months. Efficient and effective weed treatments require precise and rapid applications that are better accomplished with multiple personnel. Some funds, as required, may be applied to acquisition, maintenance, and repair of related equipment and supplies.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP.

Not only will this project greatly reduce noxious weed populations, but associated revegetation and reseeding efforts will increase the resiliency of treated and surrounding lands and increase floodplain permeability and effectiveness.

DVCD has the equipment and expertise to perform large-scale and effective noxious weed control and restoration work. We have lacked the staff over the last 4 seasons to accomplish this type of work. Between DVCD employees and the renewed collaboration with Central Lyon Fire (CLF) fuels crew, the pooling of the NDA grants, CWSD Weed grants,

and these requested funds (over two years) will enable DVCD to reestablish control of noxious weed populations while making visible and functional improvements to the riparian area, the flood plain, adjacent agricultural and private lands, and to multiple tributaries of the Middle Carson River.



Dayton-Carson River Corridor Weeds data





Rolling A- Proposed weed treatment sites



Summer 2025 Whitetop Mowing at Rolling A Open Space



## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

6

**APPLICANT:** Lahontan Conservation District

Name  
111 Sheckler Road

Address  
Fallon

City Nevada County 89406

State  Zip Code

Christy.sullivan@nv.nacdnet.net (775) 217-5273

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Name

Address

City  County

State  Zip Code

Email Telephone #

**PROJECT NAME:** Clearing and Snagging Carson River

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

**PROJECT LOCATION/ADDRESS:**

Carson River Channel Below Diversion Dam

To the Carson Sink

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

The project aims to improve river channel flow by removing obstructions at natural choke points. Historically, bridges such as Highway 50, Highway 95, and Bafford have been clogged with debris during high-water flooding events. These obstructions cause backups and overflow, which often impact residential areas in Fallon and surrounding counties. In some locations, sediment buildup has created islands that alter flow patterns, erode banks, and block water passage under bridges. Removing sediment and debris will help restore natural flow and reduce the risk of flooding downstream.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

The primary goal of this project is to maintain a clear and unobstructed channel within the Carson River Watershed through the removal of debris, foliage, beaver dams, and sediment. This effort will:

- Reduce flood risk to residential, commercial, and critical infrastructure in Churchill County.
- Improve water quality and promote the re-establishment of native vegetation.
- Minimize streambank erosion, protecting property and ecological integrity.
- Enhance river management and administration, ensuring long-term sustainability.
- Expand recreational opportunities for citizens and support community engagement.
- Advance watershed stewardship, aligning with regional conservation priorities.

This project directly supports the Carson River Adaptive Stewardship Plan (CRASP) and the Carson River Regional Floodplain Management Plan (CRRFMP) by implementing strategies that:

- Maintain natural floodplain functions and reduce flood hazards.
- Protect water quality and riparian habitat through proactive channel maintenance.
- Promote sustainable land and water management practices consistent with regional goals.
- Foster community resilience and recreational use of the river system.

**TOTAL ESTIMATED PROJECT COST:** \$ 50,000.00

**AMOUNT REQUESTED FROM CWSD:** \$ 25,000.00

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

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

### **In-Kind Match Contributions**

- **Churchill County Grant Funding:** \$6,500.00
- **Lahontan Conservation District:** \$9,000.00
- **Administration and Equipment:** Included in above contributions
- **Landowners – Equipment and Labor:** \$9,500.00

**Total In-Kind Match: \$25,000.00**

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** May 30, 2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

Permit with the Nevada Division of Environment Protection.

- Site/ID Invoice # GMNT-40165
- Permit type: Routine Maintenance Activities
- Valid from July 1, 2025, to June 30, 2026 (Pending July 1, 2026, to June 30, 2027)

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

This project provides critical benefits that extend beyond routine maintenance, addressing public safety, environmental health, and community well-being:

- **Flood Damage Prevention:** By maintaining a clear and unobstructed river channel, the project will prevent and minimize property loss and infrastructure damage during flood conditions, reducing costly disaster recovery efforts.

- **Riverbank Stabilization and Habitat Restoration:** Sediment removal followed by riverbank stabilization will minimize erosion, improve water quality, and support the re-establishment of native vegetation, enhancing the ecological integrity of the Carson River Watershed.
- **Public Recreation and Community Engagement:** A maintained channel ensures safe and accessible river conditions, enabling citizens to utilize the river for recreational purposes such as fishing, boating, and wildlife observation.
- **Public Health Protection:** Maintaining adequate river flow velocity prevents stagnant pools from forming, which can become breeding grounds for mosquitoes and pose health risks to residents along the Carson River.

These benefits underscore the project's alignment with regional stewardship goals and its role in safeguarding property, infrastructure, and public health while promoting environmental sustainability and community use of the river.

SIGNED:



NAME: Lahontan Conservation District

TITLE: District Clerk

DATE: 1/20/2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*



# HIGHWAY 95 BRIDGE



# HIGHWAY 50 BRIDGE





# BAFFORD BRIDGE





---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

7

**APPLICANT:** River Wranglers

Name  
P.O. Box 1612

Address  
Dayton Lyon

City County  
NV 89403

State Zip Code  
rebecca@riverwranglers.org 775-286-3743

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Rebecca Feldermann

Name  
P.O. Box 1612

Address  
Dayton Lyon

City County  
NV 89403

State Zip Code  
Same as above

Email Telephone #

**PROJECT NAME:** River Wranglers Conserve the Carson River workdays/field days

**PROJECT LOCATION/ADDRESS:**

Various locations within the Carson River watershed

---

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

See attachment

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

See attachment

**TOTAL ESTIMATED PROJECT COST:** 100,000

**AMOUNT REQUESTED FROM CWSD:** 40,000

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

NOER (Nevada Outdoor Education & Recreation): \$16,000 for 2026 calendar year,  
America 250: one time volunteer event, \$1,000 for event  
Trout Unlimited, Sagebrush Chapter, \$2,500 for 2026 TIC program  
Redfield Foundation: \$40,500 Spring 2026

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** June 30, 2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.  
N/A

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.  
See attachment

SIGNED: Rebecca L. Feldermann

NAME: Rebecca L. Feldermann

TITLE: Executive Director

DATE: 1/16/2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*



---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

**APPLICANT:** River Wranglers

**PROJECT NAME:** Conserve the Carson River Workdays/Field Days

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

River Wranglers continues to host Conserve the Carson River Workdays (CCRWD) throughout the Carson River watershed, as well as hosting Snapshot Day and additional multiple field days and outreach events at the river or within the watershed. In the past year, we have continued to commit to host Conserve the Carson River Workdays, as well as focus on expanding our program with field day trips, trout in the classroom, and larger school events. At all outdoor learning events, we teach to Next Generation Science Standards (NGSS).

For CCRWDs, in Churchill County, we continue to go into high school FFA and science classrooms to teach high school students the necessary information and skills so that they in turn can teach elementary students at the river in a combined workday. The high school students are trained in activities that teach children about the geography of our watershed, the importance of clean water, the water cycle, and nonpoint source pollution. At the river, they become “mentors” to the younger students, spending the day with them, and taking ownership of and teaching students on their specific activity. If high school students are unable to participate, we still provide an enriching workday with the assistance of professional volunteers from many of our partners and trained community volunteers. In addition to educational stations, we partner with county conservation districts, Carson City Parks & Recreation, Open Space, Nevada State Parks, and The Nature Conservancy to develop and include a work project for students attending a workday to complete. This year, students grew and planted native pollinator plants, painted trees to protect against beaver predation, removed trash from Nevada State Park sites, and lined trails. After the workday is complete, River Wranglers staff go back in-class to provide a “wrap-up” with elementary students. This reinforces the material and messages they learned at the river. We do a pre- and post-test with all students involved to track their increase in knowledge about the watershed and nonpoint source pollution to gauge the effectiveness of our programs. This year we added a component for students that includes excitement about science and the environment. Additionally, we have a teacher assessment to determine the success of the workday from an educational and

---

social-emotional standpoint.

On a standard field day, students will spend hours in the outdoors being taught by industry professionals and learn about riparian habitat, water quality, benthic macroinvertebrates, beaver adaptations, nonpoint source pollution, flooding and flood safety, flora and fauna of the watershed, map reading skills relating to the Carson River and geographic locations within the watershed, the water cycle, animal habitats, history of the area, pollution, how to identify animal tracks and scat within their habitat, trout anatomy and life cycle. For our Seasonal Changes program, students learn about seasonal patterns as they relate to the four seasons, temperature, plants, animals, light, and precipitation as they observe one site outdoors during each season and complete a scientific journal for the school year. We teach to core and curriculum standards by using Next Generation Science Standards, English Language Arts Standards, and Social Studies Standards in our experiential environmental educational learning activities. Many of our activities are multi-faceted and include transferable skills. Some of these include how to interact respectfully with their environment, how to interact with and have educational discussions with industry professionals, and the use of hand-held tools (activities such as pollinator planting, trail trash pick-up, tree wrapping or tree painting for beaver predation, etc.), to name a few.

For Snapshot Day, usually held in October, River Wranglers partners with numerous agency professionals and skilled volunteers to bring Snapshot Day to the Carson River watershed. Elementary and Middle School students from local elementary and middle schools gather at sites along the Carson River on one day to learn about and test the water quality of the river at a specific time, taking a "snapshot" of the river's health in that moment. Data has been captured since 2006 and it is released to teachers and volunteers who have interest in using it. It is something we look forward to every fall!

At many of our events, we have community partners who present and participate in providing educational opportunities for our students. These include organizations like the Nevada Department of Wildlife, Nevada State Parks, Carson Water Subconservancy District, Nevada Division of Environmental Protection, Nevada Division of Water Resources, Nevada Silver Jackets, Carson City Public Works, USACE, Lahontan Conservation District, Dayton Valley Conservation District, High Sierra Fly Casters, Carson City Fly Club, Trout Adventures, The Nature Conservancy of Nevada, Carson City Parks & Recreation Open Space, Frey Ranch, Washoe Environmental Department, Wild Sheep Foundation, Nevada Outdoor Education & Recreation, Resource Concepts, Inc., University of Nevada Reno Extension, and The Bureau of Land Management.

River Wranglers continues to be passionate about and committed to providing environmental education to students in our watershed and looks to find new ways to interact with students who might face a multitude of barriers to receiving the education we provide. This past year we worked with new first grade classes in our Seasonal Changes program in Douglas, Lyon, and Carson Counties. We also worked with the

---

administration and staff of Eagle Valley Middle School to implement a plan of programming for each grade: 6<sup>th</sup> graders received Flood Awareness programming, 7<sup>th</sup> graders have an "Environmental Education Field Day" in which 10-15 partners provide an interactive station for students to cycle through, and the 8<sup>th</sup> grade class participates in Snapshot Day. This year, we look forward to a bigger and better Snapshot Day, multiple field days and events at schools, as well as providing continued interactive educational opportunities for all students within the Carson River watershed.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

River Wranglers provides a unique experience for students in the Carson River watershed to learn in place. By hosting educational activities outdoors, we improve students' physical and mental health. Being outdoors along the banks of the river allows students to get physical activity and breathe in the fresh Nevada desert air. Students gain self-confidence in their ability to recognize and identify geographical features of their watershed, flora and fauna within their own backyard, and reap the mental health benefits provided by being in the great outdoors. With these experiences, students will develop a sense of personal responsibility for their environment. High school students participating in our program as mentors learn responsibility, public speaking, and teaching younger students the subject materials while gaining leadership skills. They make a direct connection with the river habitat, which gives students the opportunity to increase their self-confidence of how to interact with their environment responsibly. River Wranglers also uses a peer mentoring model, training high school students to teach small groups of elementary students at field trips on the banks of the river. High school students and their teachers who participate in workdays report the benefits of increased confidence in public speaking, leadership skills, and an appreciation of working with younger children. They have an increased sense of responsibility in overseeing the teaching of students and keeping them safe during the workday.

River Wranglers focuses on the entirety of the Carson River watershed which includes not only the water, but the riparian ecosystem, including flora and fauna. The majority of River Wranglers program revolves around the utilization and promotion of "outdoor classroom" space. We strongly believe that being in the outdoors gives students the ability to connect with nature in a way you cannot do from inside a classroom. Our field day, workday, outreach, and Seasonal Changes events are held along the riverbank or in an outdoor area that allows students to belong to and be a part of nature. At these events students are outdoors and use sensory interactions to learn about their environments, as well as being provided with interactive educational activities that allow for opportunities to learn about Nevada's nature and the watershed they live in. After the events most schools choose to have their students enjoy their lunchtime outdoors, continuing the connection with nature.

Our program provides many benefits for students, including students learning to be good stewards of the outdoors and learning self-confidence in their interactions with their environment and their community. Through participation in our program, students will

---

---



have the knowledge and skills to help sustain ecological stability within their watershed and outdoor environments. Students may have the opportunity to complete a stewardship project on their field day. This can include picking up trash, building and installing bat or wood duck boxes, wrapping or painting trees to protect them from beaver predation, planting to attract pollinators, clearing trails, stream stabilization, and sowing seeds. An additional benefit we see with students that participate at our events is an uplift in mood for students while in nature, adding another element to how we connect students with nature.

All of River Wranglers activities link to the health of the watershed and those that inhabit it—whether they be plant or animal. We teach about pollution, water quality, and tangible things people can do to help protect and become good stewards of their watershed. All our interactions circle back to the vital message of being aware and willing to commit to a healthy watershed and river. At our events, we believe the youth and community at large will recognize and value their place and relationship to the watershed they live in, that their actions have impacts, and that everyone can help with the health of our environment by being good stewards. We work with most of the schools in the Carson River watershed in a given year; in some counties we work with schools providing programming to multiple grades, or for multiple events.

Because of the impact of these trips, I have been approached countless times over the years by students (currently in school or having graduated) as well as parents and family members. They fondly recall their workday/field day, and don't hesitate to tell me about what they remember, what was their favorite activity, and what they have learned.

**OTHER INFORMATION:** Provide any other information that may be important for the approval of this application.

River Wranglers is asking for additional funding this year due to decreased funding in other areas, as well as rising operational costs. The \$40,000 would be utilized to provide workdays in the four main counties: Douglas, Carson, Lyon, and Churchill Counties, with possible participation in Storey County. \$37,000 is intended for the program and \$3,000 for administrative costs/supplies/mileage associated with the project. River Wranglers is asking for additional funding this year due to decreased funding from other sources, as well as rising operational costs.

We thank CWSD for their continued support for this important project. We appreciate the chance to partner with so many other applicants and CWSD to do our work. We couldn't do the work without you, and we appreciate your guidance and funding to continue.





## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

8

**APPLICANT:** Carson City Public Works

**Name**  
3505 Butti Way

**Address**  
Carson City Carson City

**City** NV **County** 89701

**State** asingleton@carsoncity.gov **Zip Code** 775-283-7370

**Email** **Telephone #**

**APPLICANT'S AGENT (if different from Applicant):**

**Name**  
\_\_\_\_\_

**Address**  
\_\_\_\_\_

**City** \_\_\_\_\_ **County** \_\_\_\_\_

**State** \_\_\_\_\_ **Zip Code** \_\_\_\_\_

**Email** **Telephone #**

**PROJECT NAME:** Bowers Lane Storm Drain Improvements - Phase 1

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

**PROJECT LOCATION/ADDRESS:**

Bowers Lane, August Lane, Sunrise Drive  
Carson City, NV

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

See Attached.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

See Attached.

**TOTAL ESTIMATED PROJECT COST:** \$750,000.00

**AMOUNT REQUESTED FROM CWSD:** \$50,000.00

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

Carson City Public Works Stormwater

**ESTIMATED DATE PROJECT TO BEGIN:** April 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** <1 year (Design)

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

Drainage Easement through properties on the south side of Hwy 50.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

Phase 2, Construction, for this project has been included in Carson City's 5-year Capital Improvement Project Plan.

SIGNED: Amanda Singleton Digitally signed by Amanda Singleton  
DN: E=ASingleton@carson.org, CN=Amanda  
Singleton, OU=Users, OU=PW, DC=CCC, DC=Id  
Date: 2026.01.15 16:33:42-08'00'

NAME: Amanda Singleton

TITLE: Project Manager - Stormwater

DATE: 1/15/2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

---

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

---

## **CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27**

### **Title:**

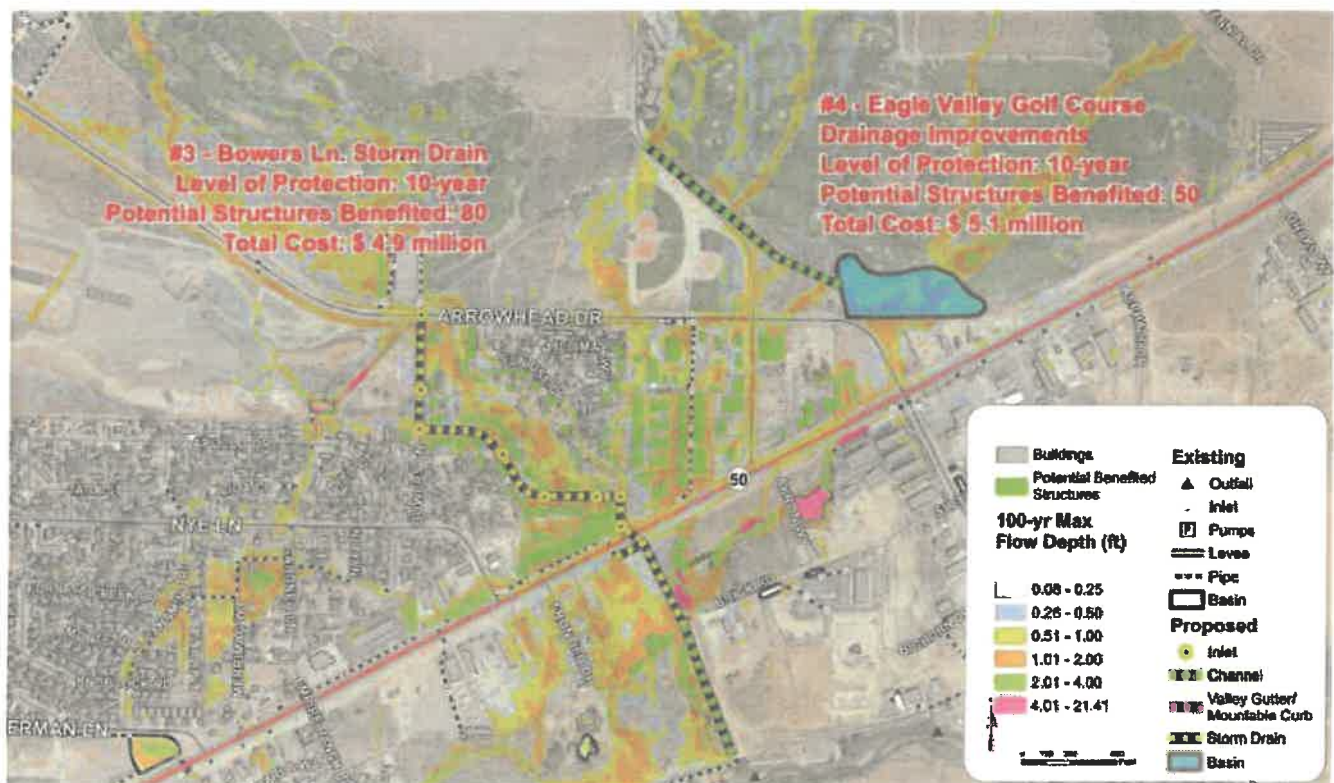
Bowers Lane Storm Drain Improvements – Phase 1

### **PROJECT DESCRIPTION:**

Bowers Lane Storm Drain is located in the Eagle Valley Golf Course domain within the North Carson City Area Drainage Master Plan (NCADMP). Runoff from the Eagle Valley Golf Course crosses Arrowhead drive and inundates the downstream neighborhood which ultimately leads to ponding upstream of Highway 50. The affected neighborhood consists primarily of single-family homes with 3 commercial buildings along Highway 50. There is currently no storm drain infrastructure in this area; stormwater is conveyed by sheet flow and collects along the roads in front of properties.

The project will be designed to convey 10-year flows via storm drain and open channels to the Carson River by intercepting flows at Arrowhead Drive and Bowers Lane.

Figure 1: Proposed Design Identified in NCADMP



### **PROJECT GOALS AND BENEFITS:**

This phase of the project will be focusing on the design of the Bowers Lane Storm Drain. These improvements are projected to benefit 80 structures. Facilitating water flow in this region will eliminate the problem of ponding water and result in modifications to FEMA mapping. This project will remove the SFHA, benefitting 29 structures that are presently located in Zone AO. This aligns with one of CWSD's main goals of flood protection by reducing the impact of flooding to this neighborhood and getting water to the river.

**TOTAL ESTIMATED PROJECT COST:** \$750,000

**AMOUNT REQUESTED FROM CWSD:** \$50,000

**SOURCE OF OTHER FUNDS:** Carson City will use funds from its Stormwater Utility Fee to fund the project.

**ESTIMATED DATE PROJECT TO BEGIN:** April 2026.

**ESTIMATED TIME TO COMPLETE PROJECT:** It is anticipated that the design will be completed in 2026.

**PERMIT REQUIREMENTS:** Drainage easement through properties on the south side of Hwy 50.

**OTHER INFORMATION:** Phase 2, Construction, for this project has been included in Carson City's 5-year Capital Improvement Project plan.



---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

9

**APPLICANT:** Douglas County - Community Services

Name  
1329 Waterloo Lane

Address  
Gardnerville Douglas

City NV County 89410

State 775-782-6246 Zip Code

badie@douglasnv.us 775-782-6246

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Name

Address

City  County

State  Zip Code

Email Telephone #

**PROJECT NAME:** River Bend Floodplain Revitalization and Recreation Project

**PROJECT LOCATION/ADDRESS:**

1308 Centerville Lane, Gardnerville, NV 89410

---

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Please see attached.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

Please see attached.

**TOTAL ESTIMATED PROJECT COST:** \$100,000

**AMOUNT REQUESTED FROM CWSD:** \$100,000

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

No other funds will be needed for the planning and design stage. Douglas County will look for additional funding sources for construction based on the plans formulated during this project.

**ESTIMATED DATE PROJECT TO BEGIN:** July 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** 12 months

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached. Please see attached.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application. Please see attached.

SIGNED: Brook Adie

NAME: Brook Adie

TITLE: Director, Douglas County Community Services

DATE: January 14, 2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*



**Douglas County Community Services –**  
**Application to the CARSON WATER SUBCONSERVANCY DISTRICT**  
**River Bend Floodplain Revitalization and Recreation Project**

**PROJECT DESCRIPTION**

This project will plan and design a multi-purpose riverfront park that integrates recreation, environmental restoration, and public education into a single, resilient community asset. The proposed park will be located along the Carson River corridor and will transform an underutilized floodplain area into a safe, accessible, and ecologically functional public space.

River Bend Park is a 3.66-acre property centrally located near Douglas County's Lampe Park, Community and Senior Center, and business and residential areas. It was included in a 2008 river park study completed by the county and has more recently been designated a priority project by the county Parks & Recreation Advisory Board. Access to the river in this area is a priority for both the county and residents and the planning proposed in this application will allow Douglas County to seek the funding and approvals necessary to make this long-desired project a reality.

The park will provide a range of recreational amenities, including picnic areas, restrooms, river access, and designated swimming areas, creating new opportunities for residents and visitors to safely enjoy the river. These amenities will be designed to accommodate seasonal flooding and fluctuating water levels, ensuring long-term durability and public safety while maintaining open access to the river.

The project planning process will include design, engineering, permitting, and public outreach, to ensure that all stakeholders have a voice in the design and utilization of this community asset.

**PROJECT GOALS AND BENEFITS**

A central component of the project is riverbank stabilization and floodplain enhancement. The planning effort will identify and design nature-based solutions such as native vegetation, floodplain reconnection to reduce erosion, and increasing the river's ability to absorb and slow floodwaters, while improving aquatic and riparian habitat. These

improvements will reduce downstream flood risk while enhancing ecological function and visual appeal.

The park will also serve as a demonstration site for low-impact development (LID) and water-quality protection. Green infrastructure elements such as bioswales, permeable surfaces, and vegetated buffers will be incorporated into the park design to treat stormwater before it reaches the river. These features will visibly demonstrate how runoff from impervious areas can be filtered and infiltrated to reduce pollution, protect aquatic life, and improve overall watershed health.

Public education and outreach are core goals of the project. The park will include interpretive signage and outdoor learning areas that explain how floodplains work, why they are important for flood control and water quality, and how green infrastructure improves river health. The planning process will engage community members, local schools, and partner organizations to ensure the park reflects local needs while increasing public understanding of river systems and watershed stewardship.

By integrating recreation, flood resilience, water-quality protection, and education, this project will create a model riverfront park that strengthens community connections to the river while protecting natural resources. The completed planning and design will position the community to move forward with construction of a park that delivers long-term environmental, social, and economic benefits.

This project is consistent with the CRASP in that it applies five project categories identified in the plan:

- 1) Floodplain Management
- 2) Water Quality
- 3) River Rehabilitation/Stabilization/Habitat Enhancement
- 4) Recreation
- 5) Outreach and Education

This project is also consistent with the CRRFMP in that it uses three strategies outlined in the plan:

- 1) Protect natural floodplain functions and values
- 2) Balance channel migration and bank erosion monitoring
- 3) Increase floodplain and flood hazard outreach and education

## **PERMIT REQUIREMENTS**

The revitalization of River Bend Park has been named as a priority by the Douglas County Parks & Recreation Advisory Board. No other permits or approvals will be necessary to move forward with planning. Construction will require additional permitting, which will be addressed in the planning and design process.

## **OTHER INFORMATION**

As mentioned above, River Bend Park was included in a 2008 master plan of Douglas County's river parks. This planning process will build on that plan and provide the needed engineering and design to ensure it aligns with the CWSD's goals and priorities for the Carson River Watershed. An excerpt of the 2008 plan is attached for reference.

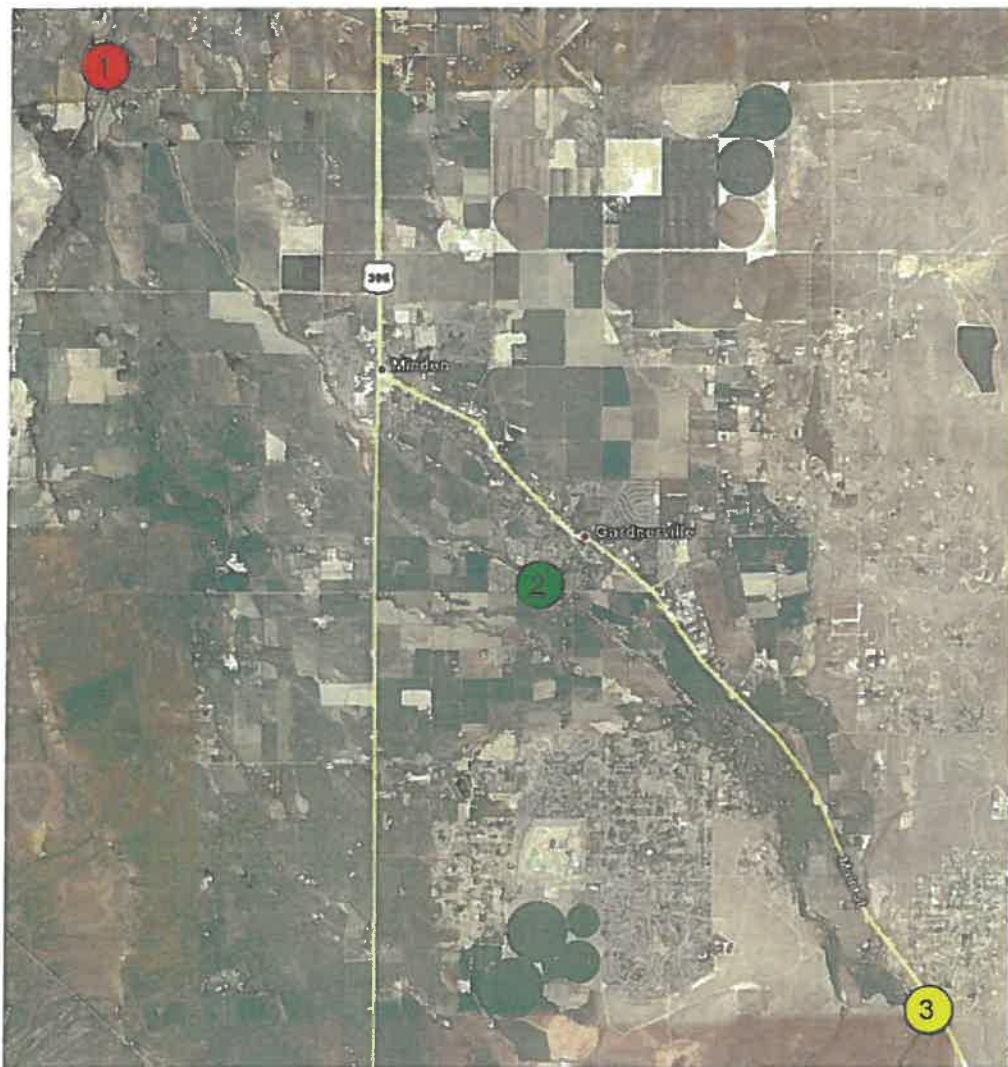
# Douglas County River Parks

## Conceptual Master Plans



Sandra Wendel & Associates • Landscape Architecture • Minden, NV





**Willow Bend Park**

- (6.42 acres)
- located on Hwy. 206 near Genoa



**River Bend Park**

- (3.66 acres)
- Waterloo & Hwy. 756



**Rocky Bend Park**

- (7.34 acres)
- located by power dam

NORTH





## Common Objectives

- Public access to river frontage
- Maximize the unique qualities of each site
- Provide safe vehicular entry and exit into the park
- Provide the following public amenities:
  - Vaulted toilets
  - Parking
  - Individual picnic facilities
  - Group use areas
  - Water and power where permissible
  - Bike racks
  - Provide low-level security lighting if required
- Create ADA friendly sites
- Allow dogs with restrictions
- Provide signage and guidelines for use and personal safety
- Design to accommodate shifting stream patterns
- Economical design (i.e. limited paving, minimal grading, etc.)
- Construct fencing to delineate park boundaries
- Do not encourage upstream or downstream use
- No amplified sound
- Limit the use capacity of each facility, to enhance user experience and to reduce impact on neighbors.





# River Bend Park

- 3.66 acres
- Located at Waterloo & Hwy. 756, near Lampe Park

NORTH





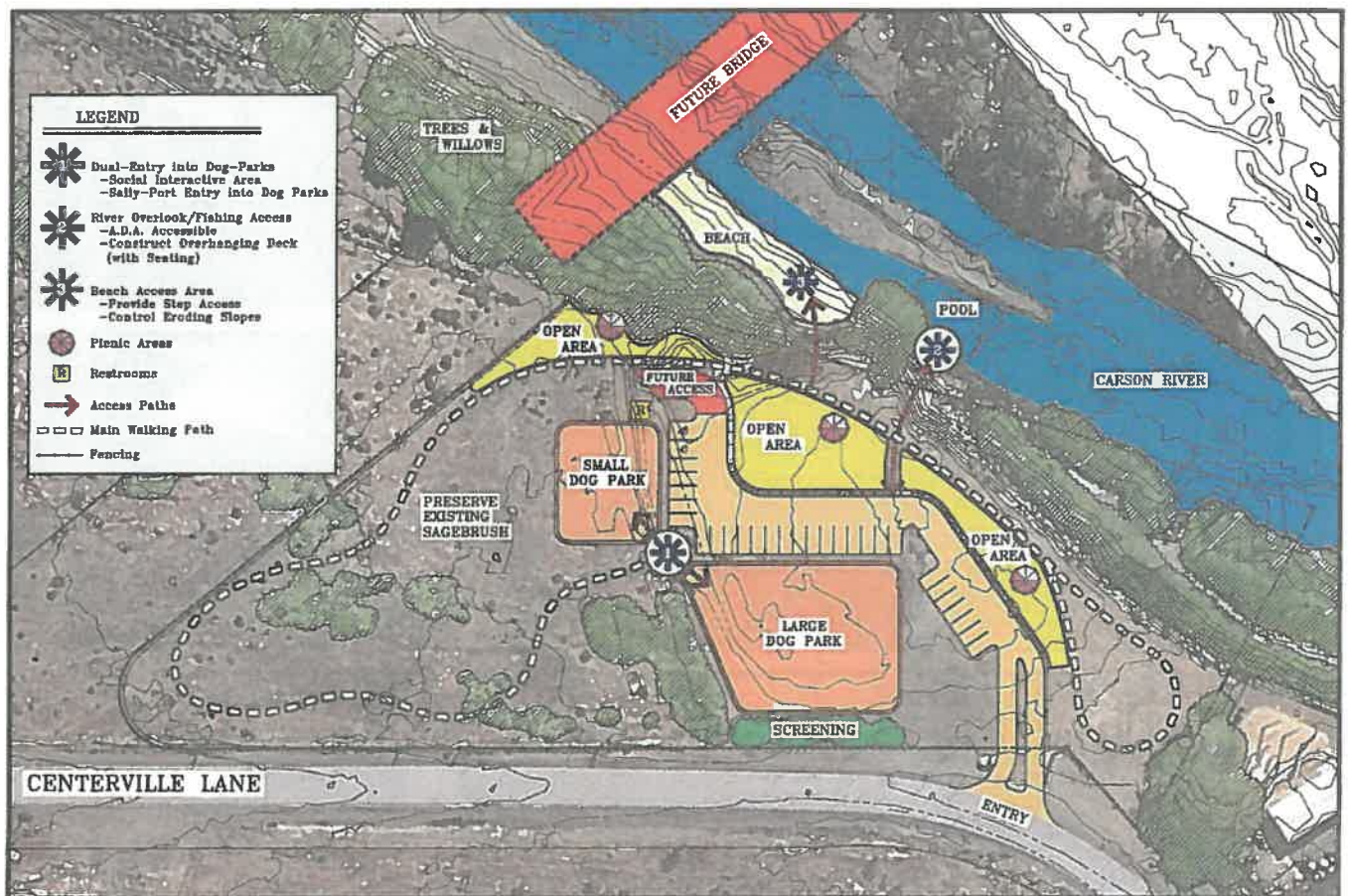
# River Bend Park

## Existing Site Character:

- This is the most protected of the 3 sites from flood damage even during a 100-year event.
- The north half of the site is graded and compacted.
- The southern half is vegetated with sagebrush.
- A ditch/depression bisects the used and unused halves of the site.
- The site is characterized by steep banks, 15'-20' vertical feet, subject to erosion from feet traffic.
- This is currently the river parcel with the highest use.
- The site is bound on the east by Hwy. 756 and high traffic volume; on the west by the river, willows and trees.
- Future easement for Waterloo extension and bridge lies directly south and commercial use borders the north.
- A stream enters across the river, by the sandbar, providing visual interest and sound.
- There is access to water and power.
- Special uses to be accommodated:
  - Large and small fenced dog parks
  - ADA accessible fishing platform







# River Bend Park





## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

10

**APPLICANT:** Board of Regents, NSHE, obo the Desert Research Institute

Name  
2215 Raggio Parkway

Address  
Reno Washoe

City County  
NV 89512-1095

State Zip Code

rishi.parashar@dri.edu 775-673-7422

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Name

Address

City County

State Zip Code

Email Telephone #

**PROJECT NAME:** Supporting Conjunctive Management in Carson Valley

**PROJECT LOCATION/ADDRESS:**

Carson Valley, Nevada

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

See the attached Project Description.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

See the attached Project Goals and Benefits.

**TOTAL ESTIMATED PROJECT COST:** ~~\$135,888~~ \$202,829

**AMOUNT REQUESTED FROM CWSD:** \$199,989

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

In-kind support of \$2840 provided by NDWR.

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** December 31, 2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached. The project does not require any permits, licenses, or agency approvals.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

A detailed budget is available upon request.

SIGNED: \_\_\_\_\_

*Rishi Parashar*

NAME: Rishi Parashar

TITLE: Research Professor

DATE: 1/16/26

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

# **Supporting Conjunctive Management in Carson Valley Through Canal–Groundwater Connectivity Mapping**

## **PROJECT DESCRIPTION**

### **1. Introduction**

Understanding the hydraulic connection between surface water features, such as canals and ditches, and groundwater pumping, is essential for protecting existing water rights and providing basis for future development and decisions on water deliveries. In irrigated basins such as the Carson Valley, groundwater and surface water systems are closely intertwined through a dense network of irrigation canals and ditches (referred to collectively as canals). Groundwater pumping in proximity to these canals may capture surface water that is critical for supporting water deliveries to existing right holders and to the downstream users. Despite the importance of these interactions, basin-wide information on the nature and extent of where irrigation canals are hydraulically connected to the groundwater is limited.

This project proposes an integrated approach combining remote sensing and geospatial analysis of varied datasets to systematically identify irrigation canal reaches in Carson Valley and classify them as hydraulically connected, disconnected, or transitionally connected to the groundwater. Transitional connections here refer to reaches where surface water-groundwater connections are intermittent or vary seasonally. The project will produce basin-wide information about the hydraulic character of the canal network to support evaluation of surface water-groundwater interactions and inform future water management, land-use planning, and infrastructure development.

### **2. Data Compilation and Integration**

By leveraging publicly available and commercial datasets, the project aims to 1) develop a high-resolution geospatial inventory of irrigation canals across the Carson Valley using existing LiDAR-derived data; 2) integrate satellite-based observations to assess wet versus dry conditions along reaches of mapped canals; and 3) use spatially and temporally varying data of hydro-geomorphic indicators for classification of canals into hydraulically connected, disconnected, or transitionally connected segments.

The following three groups of data will be used to construct a basin-wide data acquisition, assimilation, and analysis framework:

- High-resolution ( $\leq 1$  m) LiDAR datasets for delineating canal networks, and for extracting topographic indicators relevant to hydraulic connectivity.
- Multispectral optical satellite imagery of varying resolutions to assess presence of surface water and moisture conditions along canal corridors. Synthetic Aperture Radar (SAR) data will be used to identify soil moisture and surface wetness conditions where optical imagery is obscured by vegetation or cloud cover.
- Existing irrigation district maps/GIS layers, streamflow data, and groundwater level observations (where available) will be incorporated to provide context and constraints to the remotely sensed data.



### **3. Technical Approach**

#### **Task 1 – Irrigation Canal Delineation Using LiDAR**

The first step in the project would involve extracting irrigation canal features from LiDAR-derived DEMs. This would provide the foundation for geometric analysis as many canals are narrow (often just a few feet wide) and may not be consistently visible in satellite images alone. Terrain attributes, such as the slope and curvature, will be used to detect linear depressions. Manual refinement and validation will be applied as necessary against existing irrigation maps and aerial imagery. This task will finally produce a vector dataset representing canal centerlines, segmented into fixed length reaches (e.g., ~200-foot segments) to support subsequent analyses. Canal reaches will also be attributed with canal width, which is an important parameter for estimating interactions between groundwater and surface water in connected and transitionally connected canals.

#### **Task 2 - Remote Sensing Analysis**

Once canal geometries are established, satellite data will be analyzed within narrow corridors centered on each segment. This corridor-based approach would allow the analysis to focus on known infrastructure locations, thus overcoming the limitations associated with detecting narrow features directly from satellite images. For each segment and for each satellite observation date, the following indicators will be derived: a) Spectral indices sensitive to open water and wet soil conditions derived from optical images; b) SAR metrics indicative of saturated soils or standing water; c) Temporal changes in (a) and (b) indicative of the strength and vigor of vegetation adjacent to canals that may indicate persistent seepage or interaction with the shallow groundwater; and d) Temperature and reflectance differences between canal corridors and surrounding fields (if available) to infer evaporative cooling and/or moisture retention.

#### **Task 3 - Temporal Analysis and Seasonal Patterns**

To capture spatial and temporal flow dynamics in canals, the project will use satellite images acquired for several dates and spanning irrigation and non-irrigation periods. Time-series analysis will be used to identify the reaches that remain persistently wet across seasons (connected reaches), reaches that are wet during periods of high groundwater conditions (intermittently connected reaches), and reaches that are wet only during active surface water delivery or remain consistently dry (disconnected reaches). Implementation of this process would lay the framework for distinguishing fully connected systems from transitional or disconnected segments.

The Alpine Decree dictates that the Federal Water Master (FWM) directs the distribution of surface water for irrigation in the Carson River Basin. To distinguish between water sources (i.e., diverted surface water or groundwater) for a specific time and segment, historical streamflow data from the FWM for Carson Valley have been acquired, including telemetered data and digitized field measurements. Telemetered stream gages are monitored for streamflow year round (i.e., Allerman Canal and Upper Virginia Ditch); however, manual streamflow measurements along other canals are only made during the irrigation season. Some canals divert stockwater during the non-irrigation season and this flow is not monitored by the FWM. These periods of unmonitored diversions will be identified using historical satellite imagery, groundwater level data, and field observations from the FWM.

Alpine Decree stipulations are also considered to distinguish between water sources, such as 1) one-third of the flow from the East Fork is diverted to the Allerman Canal when flow at the East

Fork Gardnerville Gage is less than 200 cubic feet per second and 2) the “West Fork Rotation” when the available water supply is rotated on a weekly basis between the California and Nevada segments. There can be exceptions to these stipulations, however. For example, the West Fork Rotation may be modified during years of high flow (D. Wathen, personal communication, January 8, 2026). Interpretations of streamflow data will be confirmed with the FWM.

#### Task 4 - Classification of Connectivity

Each canal segment will be classified into one of three connectivity categories using a probabilistic framework that would integrate geometric, spectral, radar, and temporal indicators. Segments will be labeled as *Connected* if they are found to be persistently wet, have consistent moisture signals, and/or have geomorphic signals indicative of shallow groundwater. Absence of wetness indicators and limited temporal variability would classify a segment as *Disconnected*. Mixed or seasonal indicators reflecting intermittent interaction with groundwater would lead to a classification of *Transitionally Connected* segments. Further, uncertainty metrics will be assigned to each segment-wise connectivity classification to support balanced decision-making.

#### **4. Deliverable**

The deliverables of the project include: 1) an electronic inventory of irrigation canals and their hydraulic connection to groundwater and 2) a peer-reviewed report or journal article to document methods, assumptions, and limitations to ensure reproducibility of the technical process and the results. Summary maps and statistics of areas of connectivity to groundwater will provide water managers with actionable information to evaluate whether proposed groundwater development is likely to intercept water supporting surface water rights or impact the broader river system.

#### **5. Project Team**

Project team members Rishi Parashar and Dan Safter share a strong working relationship and demonstrated synergy, having successfully collaborated on a large-scale modeling project for the Gardnerville Ranchos community in the Carson River Valley. Their prior experience working together ensures effective coordination and technical alignment throughout this project. In addition, the team will receive in-kind support from NSWR’s Kip Allander and Dillon Murphy (support letter attached), who will provide guidance and assistance to help ensure successful integration with NDWR’s operational needs and regulatory decision-making framework

## **PROJECT GOALS AND BENEFITS**

The primary goal of this project is to support effective conjunctive management of surface water and groundwater in the Carson River Basin by providing the Nevada Division of Water Resources (NDWR) with a scientifically defensible inventory of irrigation canals and their hydraulic connection to groundwater. As NDWR advances conjunctive management for all new water right and change applications, understanding whether groundwater is hydraulically connected to surface water features is essential for protecting existing water rights while allowing appropriate future development. This project directly addresses a critical data gap that currently limits NDWR's ability to screen water right applications efficiently and consistently.

The project will produce a basin-specific dataset classifying irrigation canal reaches in Carson Valley as connected, disconnected, or transitionally connected to groundwater. By integrating this information into NDWR's application review process, regulators will be better equipped to answer fundamental questions such as: *What is the source of water captured by a well, and does pumping interfere with surface water rights conveyed through irrigation infrastructure?* This information is particularly important in Carson Valley, where a dense and historically complex network of irrigation canals intersects with groundwater development.

This project will directly benefit NDWR by strengthening the technical foundation of its conjunctive management screening process. NDWR is developing criteria to identify when applications require additional hydrogeologic review—such as proximity to springs, canals, or streams, or when a well is projected to derive a meaningful portion of its supply from surface water sources over time. Incorporating canal-groundwater connectivity into this process will allow NDWR to identify potential conflicts more accurately, reduce uncertainty during application review, and focus detailed analyses where they are most needed. Kip Allander, Chief of Hydrology at NDWR and Dillon Murphy will partner in this effort to ensure the project outputs are directly aligned with NDWR's operational needs and regulatory decision-making framework (see attached letter of support).

The project will also provide substantial benefits to existing water right holders by improving NDWR's ability to prevent impacts to senior rights. By identifying where irrigation canals are hydraulically connected to groundwater, NDWR can better ensure that new or relocated groundwater pumping does not intercept water that would otherwise support surface water deliveries tied to existing rights. This proactive approach reduces the likelihood of conflicts, protests, or long-term litigation, and helps preserve the reliability of established water uses in Carson Valley.

At the same time, the project will benefit new water right applicants and applicants seeking changes to existing rights by increasing transparency in the application process. Clear information on canal-groundwater connectivity will help applicants understand potential constraints before submitting an application and allow them to select alternative points of diversions that are more likely to meet NDWR's conjunctive management criteria. This is particularly important for water purveyors in Carson Valley, which are adapting to a regulatory environment where proximity to rivers, streams, and canals now plays a larger role in permitting decisions. By making NDWR's screening considerations clearer and more data-driven, the project increases the likelihood of successful, defensible applications.

Ultimately, this project supports sustainable water resource management in the Carson River Basin by improving how surface water and groundwater are evaluated as a single, interconnected system.

More effective conjunctive management helps balance growth, water rights protection, and long-term basin health—outcomes that directly benefit NDWR, water users, and residents throughout the watershed. By providing a transferable framework for canal-groundwater connectivity assessment, the project also lays the groundwork for similar efforts in other basins across Nevada, advancing statewide water management goals.

This project is consistent with the Carson River Adaptive Stewardship Plan (CRASP) by advancing basin-wide understanding of hydrologic connectivity and water resource interactions, a foundational element of adaptive watershed management. The CRASP emphasizes the need for improved scientific information to support coordinated decision-making across jurisdictions and water uses. By systematically identifying where irrigation canals are hydraulically connected, disconnected, or transitionally connected to groundwater, the project provides critical information needed to evaluate surface water-groundwater interactions in Carson Valley. These data directly support CRASP objectives related to water supply reliability, protection of existing water rights, and improved management of shared water resources through science-based planning.

The project also aligns with the Carson River Watershed Floodplain Management Plan (CRWFMP) by supporting integrated, watershed-scale planning that recognizes the interconnected nature of surface water infrastructure, groundwater systems, and land use. While the CRWFMP focuses primarily on flood risk, it underscores the importance of understanding how water moves through both natural and managed systems to reduce long-term risk and improve resilience. An improved understanding of canal-groundwater connectivity will help inform land-use decisions, infrastructure placement and impact, and water management strategies that minimize unintended impacts to water users and the river system. In this way, the project contributes to the CRWFMP's broader goals of coordinated water management, risk reduction, and sustainable stewardship across the Carson River Watershed.



Nevada Division of  
**WATER RESOURCES**

STATE OF NEVADA  
Department of Conservation and Natural Resources

Joe Lombardo, Governor  
James A. Settelmeyer, Director  
Chris Thorson, P.E., Acting State Engineer

January 16, 2026

Ed James  
General Manager  
Carson Water Subconservancy District  
777 E. William Street, Suite 209  
Carson City, NV 89701

Subject: NDWR support for DRI proposal to investigate connection between groundwater and canals in Carson Valley

Mr. Ed James,

The Nevada Division of Water Resources (NDWR) is pleased to express our support for the proposed project by the Desert Research Institute (DRI) entitled "Supporting Conjunctive Management in Carson Valley Through Canal–Groundwater Connectivity Mapping." The project aims to develop a scientifically-defensible inventory of irrigation ditches and canals in Carson Valley and their hydraulic connectivity to groundwater.

NDWR is actively implementing conjunctive management for all new and change water right applications, which requires a clear understanding of how groundwater pumping interacts with surface water features and existing water rights. In basins such as Carson Valley, where irrigation ditches intersect with groundwater to varying degrees, this information is needed to streamline evaluations of water right conflicts. This project will also support NDWR's efforts to assist water right applicants in navigating conjunctive management requirements and increase the likelihood of application success.

NDWR endorses this project and will collaborate with DRI to ensure project outputs meet our needs. NDWR staff, through the direction of our Chief of Hydrology, will provide technical input on screening criteria and needs, data format requirements, and practical application of results within the water rights review process, and will coordinate as needed throughout the project to ensure alignment with NDWR's conjunctive management objectives. NDWR views this project as an important step toward more sustainable water resource management in the Carson River Basin and appreciates the opportunity to partner with DRI on this effort.

Sincerely,

Chris Thorson, P.E.  
Acting State Engineer



---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

11

**APPLICANT:** Board of Regents, NSHE, obo the Desert Research Institute

Name

2215 Raggio Parkway

Address

Reno

Washoe

City

County

NV

89512-1095

State

Zip Code

daniel.saftner@dri.edu

775-673-7422

Email

Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Name

Address

City

County

State

Zip Code

Email

Telephone #

**PROJECT NAME:** A Pilot Program for Domestic Well Water Quality Sampling in the Carson River Basin

**PROJECT LOCATION/ADDRESS:**

Douglas County, Nevada

---

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Please see the attached Project Description.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

Please see the attached Goals and Benefits.

**TOTAL ESTIMATED PROJECT COST:** \$117,645

**AMOUNT REQUESTED FROM CWSD:** \$99,752

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

Douglas County will provide in-kind contributions totaling \$17,894. See additional details in the attached section titled "Source of Other Funds."

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** June 30, 2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)



**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

No permits are required for the project.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

A letter of support from Douglas County is attached to this application package. An itemized project budget is available upon request.

SIGNED: Daniel Saftner

NAME: Daniel Saftner

TITLE: Assistant Research Scientist

DATE: 1/16/26

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

**Project Title:** A Pilot Program for Domestic Well Water Quality Sampling in the Carson River Basin

**Submitted by:** Daniel Saftner, Assistant Research Scientist, DRI and Monica Arienzo, Associate Research Professor, DRI

### **PROJECT DESCRIPTION**

Groundwater quality has been highlighted as a public health concern throughout the Carson River Basin, with historic datasets showing elevated concentrations of arsenic and nitrate tied to land use, development and groundwater dynamics. The proposed project is a pilot program for domestic well water quality sampling in Douglas County, Nevada, focused on the communities of Johnson Lane and Ruhenstroth in Carson Valley. Significant portions of the Johnson Lane and Ruhenstroth areas are not served by a public water supply and therefore homeowners rely on domestic wells for their water.

While public water systems are required to test water quality, it is the responsibility of domestic well users to test their water quality. A prior survey conducted by the project team focused on the domestic well population of Nevada and found that, of the 609 respondents, 53% have never had their well water quality analyzed (Arienzo et al., 2022). This is a public health concern because domestic well users in Nevada are at increased risk of exposure to harmful contaminants in drinking water. An arsenic hazard study by the project team predicted that, of all the hydrographic basins in northern Nevada, Carson Valley has the second highest population of domestic well users (4,700 people) with arsenic levels that have been linked with increased human health risk (Saftner et al., 2023). Figure 1 shows the predicted domestic well population exposed to arsenic exceeding 5 micrograms per liter (Saftner et al., 2023). The eastern section of Carson Valley, where Johnson Lane and Ruhenstroth are located, has high population densities that may be exposed to elevated arsenic.

The proposed pilot program will provide domestic well users with free arsenic and nitrate testing by distributing sampling kits, sampling protocols, and chain-of-custody documentation from a central County location. Well owners will collect their own water samples following the sampling protocol. DRI will share water quality results directly with the participating domestic well users along with tailored recommendations for future monitoring, treatment options, and water quality resources (Evaluation Criteria B6: The project will assist water users and/or the general public in understanding current water issues). The pilot program will establish a scalable approach that can be expanded to additional Douglas County communities and eventually to neighboring counties within the Carson River Basin, improving basin-wide understanding of groundwater quality and

supporting proactive land-use planning (Evaluation Criteria B1: The project will provide regional benefits within the Carson River Watershed).

The project will compile new spatially and temporally referenced data on arsenic and nitrate concentrations in Johnson Lane and Ruhenstroth because recent measurements are sparse in these areas. Since 2000, there have only been three arsenic data points in Johnson Lane and one in Ruhenstroth (U.S. Geological Survey, 2026). From 2000 to 2023, nitrate sampling was more common, with nearly 50 data points in Johnson Lane and nearly 40 in Ruhenstroth. However, there are no nitrate data available since 2023 (U.S. Geological Survey, 2026).

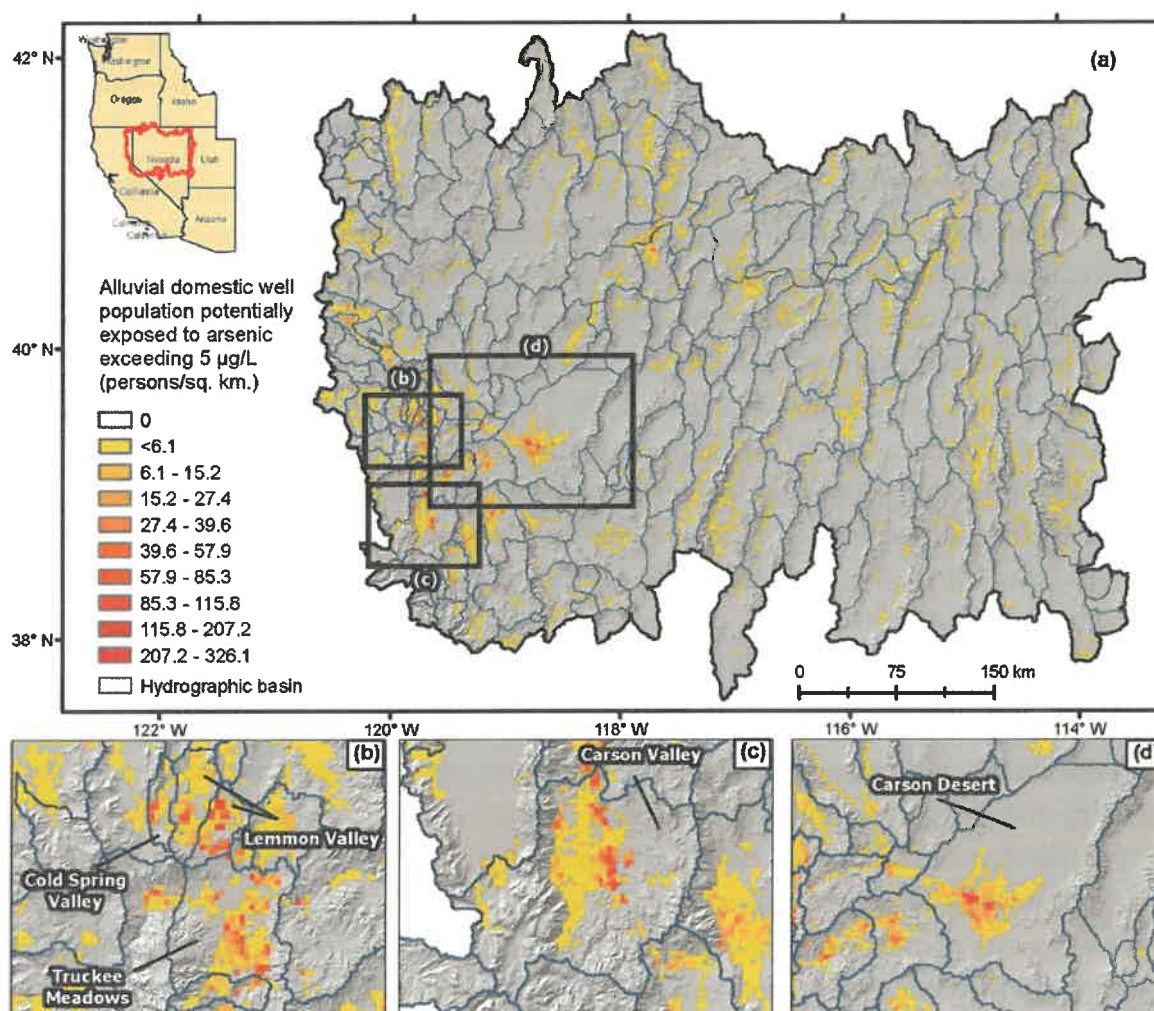


Figure 1. Maps show hydrographic basin boundaries and predicted population density with arsenic  $\geq 5$  micrograms per liter from Saftner et al., 2023. (a) All of northern Nevada; (b) the Reno area; (c) Carson Valley (Johnson Lane and Ruhenstroth); and (d) Carson Desert (Fallon).

The pilot program aims to collect a total of 40 well water quality samples, split between the two communities. While the primary focus is on arsenic and nitrate, samples will also be analyzed for ammonium, which is a precursor to nitrate, meaning it can turn into nitrate under aerobic conditions (Heller et al, 2025). Arienzo et al. (2022) identified domestic wells in Carson Valley with elevated levels of arsenic and uranium. In addition to arsenic, samples will also be analyzed for uranium, iron, lithium, and manganese. To augment the new water quality data, the project team will also request copies of past water quality results from project participants to help fill spatial and temporal data gaps.

Douglas County will play a key role in community engagement, recruiting, and water sample collection (see attached letter of support). The County's Public Information Officer will lead targeted recruitment efforts via social media and local communications to encourage participation in the sampling program. Interested residents will complete an online sign-up form to determine eligibility based on location and domestic water source (domestic well versus public water system). Participants will be asked to review and sign a consent form prior to well sampling that details the goals of project, their role in the project, and how the data will be used. Because the project includes human subjects, DRI will submit the project and all related materials for necessary reviews and approvals through its Institutional Review Board (IRB). Sampling kits, including sample bottles, sampling instructions, chain of custody, and sample storage containers (coolers with ice), will be stored and distributed directly by Douglas County. Domestic well participants will retrieve their sampling kits from the Douglas County office, collect their water samples following the sampling protocol, and return the samples to the Douglas County office on the same day as sample collection. Samples will be preserved and stored following the analytical laboratory's established protocols. The samples will be transported on ice from Douglas County to the Core Analytical Laboratory at the University of Nevada Reno, where the samples will be analyzed. The pilot program will leverage materials developed by DRI during prior domestic well sampling projects, including sampling protocols, water quality report templates, and lists of monitoring and treatment considerations to be shared with well users.

In addition to sharing results with participating domestic well users, water quality results will be integrated with regional water management tools for public access. Results will be documented in a county-accessible dataset and delivered to local and regional planners to support water resource and land-use decision-making. These data will be analyzed by DRI in conjunction with existing well construction details (e.g., depth, screened intervals, age), water-level trends, and aquifer characteristics to better understand locations that may be prone to elevated concentrations of arsenic or nitrate.

## **PROJECT GOALS AND BENEFITS**

The primary goals of this project are to increase water quality knowledge among domestic well users, generate a robust and updated dataset of arsenic and nitrate concentrations, and inform county planning and public health decisions. By offering direct testing and tailored information at no cost to domestic well users, the project reduces barriers to community understanding of water quality risks and empowers residents with actionable results.

This project is associated with three of the main focus areas of the Carson Water Subconservancy District (CWSD), including water supply, water quality, and outreach. This project is also consistent with objectives outlined in the Carson River Adaptive Stewardship Plan (CRASP) by supporting monitoring and assessment and enhancing public outreach and watershed literacy. The CRASP identifies water quality monitoring and assessing watershed conditions over time as priorities. This project aligns with these priorities by systematically collecting new water quality data and directly engaging citizens in water quality stewardship. Increasing watershed literacy among residents also supports CRASP strategies for broader public understanding and action on water issues.

This pilot program is also linked to the Douglas County Strategic Plan and would contribute to the objective under the section entitled “Balanced Growth and Infrastructure – Water and Sewer,” which is to “*set policies and requirements for new development to ensure water and sewer accessibility for future generations, in partnerships with towns, districts, and partner agencies.*” Data collected through the program will strengthen capacity for Douglas County to incorporate water quality data into development decisions. One of the initiatives of the county’s strategic plan is to implement strategies to reduce further nitrate contamination from septic systems. The dataset produced will help identify potential correlations with septic system density and nitrate concentrations—key factors for future planning and infrastructure prioritization as the County considers septic to sewer conversions (Criteria B2: The project will improve water quality). The program is also relevant to ongoing regulatory and operational needs of the Douglas County Sewer Utility, which operates under a groundwater discharge permit issued by the Nevada Bureau of Water Pollution Control. Data generated can be used to support the Sewer Utility’s groundwater discharge permit by helping distinguish ambient groundwater conditions from any potential influences of wastewater effluent on groundwater quality.

This project is intentionally designed as a pilot program to serve as a proof-of-concept for a sustained, larger-scale domestic well water quality monitoring effort in the Carson Valley and throughout the Carson River Basin. By partnering closely with Douglas County, the project establishes the institutional framework, public outreach mechanisms, and

technical workflows needed to maintain sampling and community engagement beyond the initial funding period. The pilot will demonstrate the feasibility of a County-supported model in which residents are empowered to participate directly in monitoring their water quality, while the County and DRI gain timely, decision-relevant data. Successful implementation will position Douglas County to expand sampling beyond Ruhenstroth and Johnson Lane into other areas of the Carson Valley where data gaps persist, such as Minden, Gardnerville, Indian Hills, and rural residential zones adjacent to agricultural and septic-dense areas (Naranjo et al., 2024).

Over the longer term, the goal is to expand this domestic well monitoring framework to neighboring counties within the Carson River Basin, including Lyon, Storey, and Churchill counties, to develop a more holistic and coordinated regional monitoring program. DRI and Douglas County intend to pursue future funding to scale this program, including competitive grants and potential congressional appropriations, to ensure long-term sustainability and maximize benefits to residents throughout the Carson River Watershed.

#### **SOURCE OF OTHER FUNDS**

Douglas County will provide in-kind contributions through staff time committed to the project totaling \$17,894. County staff will assist with project coordination, community engagement, survey development and tracking responses, and logistical support during sample kit distribution and collection windows.

The County's Public Information Officer will lead targeted recruitment efforts via social media and local communications to encourage domestic well user participation in the sampling program. The Public Information Officer will develop and distribute a SurveyMonkey sign-up form to determine participant eligibility. They will compile and synthesize survey results.

Domestic well sampling kits will be stored at the Douglas County office. Domestic well participants that consent to participate in the study will retrieve and return their sampling kits directly from the Douglas County office. Douglas County will store the samples and send them to the analytical laboratory for analysis.

Douglas County will compile and provide historical arsenic and nitrate data from public supply wells to support comparative analysis and enhance the contextual value of new data collected.

## References

- Arienzo, M. M., Saftner, D. M., Bacon, S. N., Robtoy, E., Neveux, I., Schlauch, K. A., Carbone, M., & Grzymiski, J. J. (2022). Naturally occurring metals in unregulated domestic wells in Nevada, USA. *Science of The Total Environment*, 851(Pt 2), 158277. <https://doi.org/10.1016/j.scitotenv.2022.158277>
- Heller, N. R., Feraud, M., Bonds, C., Bohan, J. D., Leach, C., & Miles, K. A. (2025). The essential role of aquitard boundaries in geochemical outcomes for public supply wells. *Ground Water*. <https://doi.org/10.1111/gwat.70035>
- Naranjo, R. C., & Bubi, A. (2024). *Assessment of water levels, nitrate, and arsenic in the Carson Valley alluvial aquifer and the development of a data visualization tool for the Carson River Basin, Nevada* (U.S. Geological Survey Open-File Report 2024-1045). U.S. Geological Survey. <https://doi.org/10.3133/ofr20241045>
- Saftner, D. M., Bacon, S. N., Arienzo, M. M., Robtoy, E., Schlauch, K. A., Neveux, I., Grzymiski, J. J., & Carbone, M. (2023). Predictions of arsenic in domestic well water sourced from alluvial aquifers of the Western Great Basin, USA. *Environmental Science & Technology*, 57(8), 3124–3133. <https://doi.org/10.1021/acs.est.2c07948>
- U.S. Geological Survey. (2026). Carson River Hydro Mapper [Data set]. Retrieved January 14, 2026, from <https://webapps.usgs.gov/carsonriverbasinhydromapper/>



---

## PUBLIC WORKS

PHILIP RITGER  
Director

RICK ROBILLARD, PE  
Deputy Director



(775)-783-6480  
[www.douglascountynv.gov](http://www.douglascountynv.gov)

1120 Airport Rd, Bldg. F-2  
PO Box 218  
Minden, NV 89423

Minden-Tahoe Airport  
Water & Sewer Utility  
Road Maintenance  
Building & Fleet Services  
Solid Waste Management

---

January 13, 2026

To the Carson Water Subconservancy Board,

Douglas County strongly supports the proposed pilot project led by the Desert Research Institute (DRI) to provide domestic well water testing for arsenic and nitrate in the Carson Valley. As Public Works Director, I am responsible for overseeing county infrastructure, utilities, environmental compliance, and water-related planning efforts that directly affect public health and safety.

Recent studies and historical datasets demonstrate that arsenic and nitrate are known groundwater quality concerns in Carson Valley; however, much of the available data are limited in spatial coverage or are outdated. This project addresses a critical need by providing new water quality data while directly supporting domestic well owners through no-cost testing. The County currently lacks sufficient recent data, particularly in areas reliant on domestic wells, which limits our ability to make informed planning and development decisions. The results will strengthen Douglas County's ability to support land-use and development decisions and inform long-term infrastructure planning, including decisions related to wastewater management and septic-to-sewer conversions.

The County is committed to partnering with DRI on this effort and will support project implementation through public outreach, participant recruitment, provision of relevant historical data, and well sampling logistics. We view this pilot program as an important step toward a sustained, county-supported domestic well monitoring program that will benefit residents and improve water resource management across Carson Valley.

Sincerely,

Philip Ritger  
Douglas County, Public Works Director



---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

12

**APPLICANT:** Nevada Division of Water Resources - Kip Allander

Name  
901 S. Stewart St., Suite 2002

Address  
Carson City Carson City

City NV County 89701

State Zip Code

kallander@water.nv.gov (775) 684-2853

Email Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Name

Address

City County

State Zip Code

Email Telephone #

**PROJECT NAME:** Carson Desert Water Availability Study

**PROJECT LOCATION/ADDRESS:**

Carson Desert Hydrographic Basin (Basin 101)

---

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

See attached project description.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

See attached project description

**TOTAL ESTIMATED PROJECT COST:** ~\$1 million

**AMOUNT REQUESTED FROM CWSD:** \$200,000

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

See attached project description

**ESTIMATED DATE PROJECT TO BEGIN:** May 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** October 2030

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached. See attached project description.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application. See attached project description.

SIGNED: Kip Allander

NAME: Kip Allander

TITLE: Chief of Hydrology

DATE: 1/16/2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*



# Carson Desert Water Resource Availability Study

## Project Description

### Problem

Economic development in the Fallon and Lahontan Valley area is constrained by outdated assessments of water availability. The original reconnaissance-era study estimated a perennial yield of 2,500 acre-feet per year (Glancy and Katzer, 1975). As a result of that estimate, recent evaluations by the Nevada Division of Water Resources (NDWR) classify the Carson Desert hydrographic basin (Basin 101) as severely over allocated by >350%, over pumped by >280%, despite showing no significant negative water level trends (NDWR Basin Status Assessment, 2023).

Subsequent studies and ongoing work by the [Nevada Water Initiative](#) (NWI), along with other studies since 1975 (Glancy, 1986; Maurer et al., 1996) indicate that greater water resources may exist if developed responsibly. Advances in water treatment technology further support re-evaluating historically unusable water sources as well as consideration of brines for potential mineral resource opportunities.

Given these factors, the Carson Desert hydrographic basin (Figure 1) is long overdue for a comprehensive reassessment of water availability to ensure sustainable management and to support economic potential. This reassessment will provide regional benefits within the Carson River Watershed, improve water quality through better resource planning, and strengthen long-term watershed health.

### Objectives

This funding request to the Carson Water Subconservancy District (CWSD) is intended to initiate and fund a portion of a larger investigation by focusing on stakeholder engagement and initial data collection. These activities will lay the foundation for subsequent work on the project.

The objectives of the broader investigation are:

- 1) Engage with stakeholders to develop a scope of work that will most effectively re-evaluate water availability in the Carson Desert while protecting existing water rights and

resources. This engagement will also assist water users and the general public in understanding current water issues, meeting CWSD's outreach criterion. *(To be supported by CWSD funding if awarded)*

- 2) Update understanding of hydrogeology, water budgets, water quality, and the general hydrologic conceptual model for the Carson Desert Hydrographic basin as needed. *(Partially supported by CWSD funding if awarded; and additional funding required)*
- 3) Update the estimate of water availability from a perennial yield to a system yield that considers secondary use of recharged water associated with the Newlands Project. This will provide regional benefits and improve long-term water management. *(Contingent on future funding)*
- 4) Develop a water resource management tool (Hydrologic Model) to guide sustainable groundwater extraction in the Carson Desert while protecting existing water rights, domestic wells, cultural resources, and water resources dedicated to wildlife. *(Contingent on future funding)*

## Approach

This investigation will begin with a series of meetings with relevant stakeholders and local governing officials to ensure the study reflects local priorities and interests. Based on feedback from these meetings, a detailed study design will be developed, and the overall project scope, workplan, and cost refined.

The NWI is actively seeking funding for this project through federal and state resources. The request to CWSD is for initial funding to begin stakeholder engagement, develop the scope of work, and initiate data collection. CWSD funding will also serve as matching funds in addition to in-kind services provided by NDWR, to demonstrate local commitment and need for this investigation.

The work will be carried out collaboratively by the NWI partners: Desert Research Institute (DRI), the US Geological Survey Nevada Water Science Center (NWSWC), and the NDWR.

## Products

CWSD funding will produce:

- 1) Stakeholder engagement resulting in a scope of work that effectively re-evaluates water availability in the Carson Desert while protecting existing water rights and resources. This engagement will also assist water users and the general public in understanding current water issues, meeting CWSD's outreach criterion.
- 2) An initial study design and workplan outlining the project and detailed costs.
- 3) Scoping and workplan for development of a water resource management tool (numerical hydrologic model) to be developed at a later date contingent on future funding.
- 4) Preliminary data collection to support future work on this project.



- 5) Progress and interim findings will be shared with the community and stakeholders through annual updates, and data collected will be made available through existing publicly accessible databases and official data releases.
- 6) Future work (contingent on additional funding) will include a peer-reviewed report, a completed hydrologic model, and comprehensive data releases.

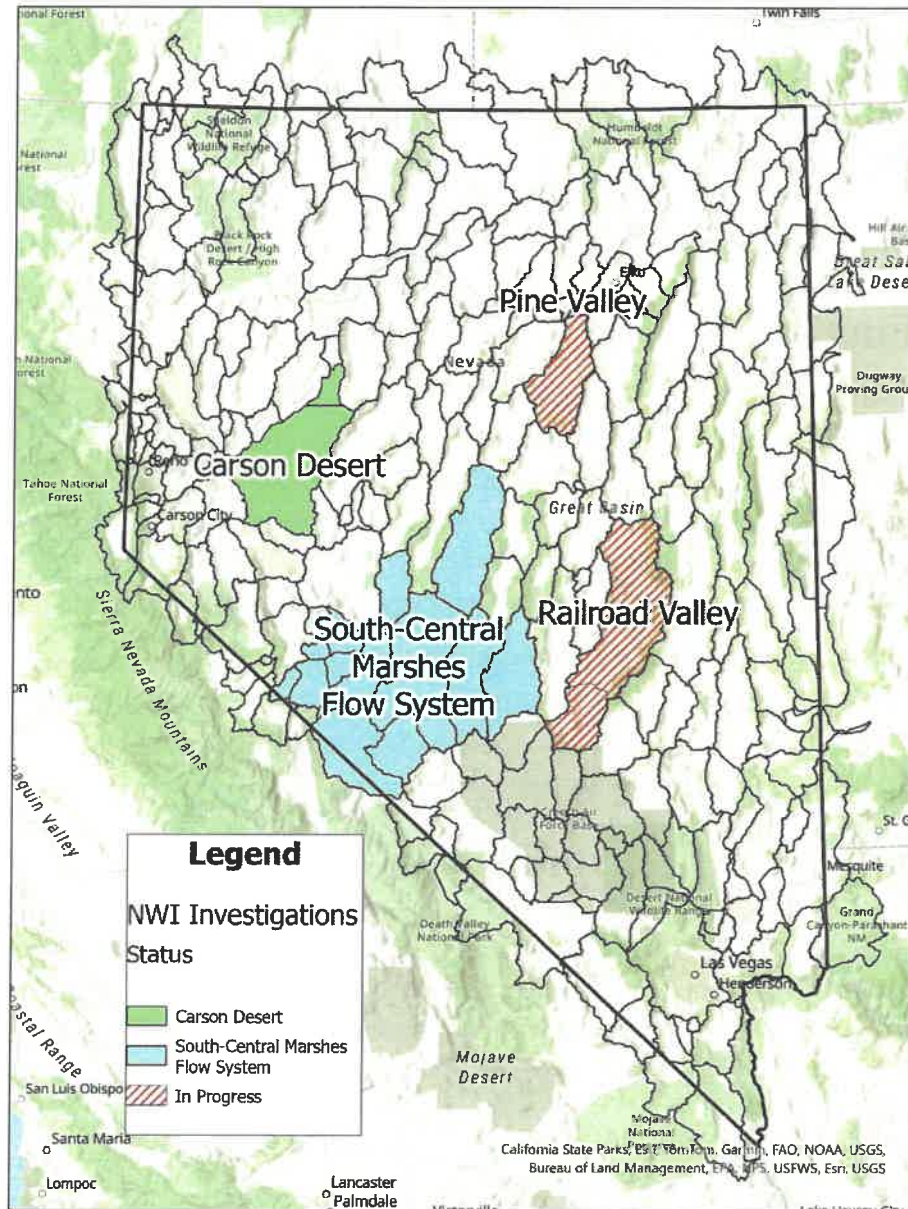


Figure 1. Map showing location of Carson Desert and status of NWI basin investigations.

## Project Goals and Benefits

The ultimate goal of this project is to quantify additional available water for development in the Carson Desert Hydrographic Basin (HA 101) while protecting existing water rights and resources. It is anticipated that this project will identify greater water availability than is currently recognized for this basin. This will allow NDWR to allocate groundwater resources for economic development, while simultaneously updating the basin's status to reflect sustainable conditions. These outcomes will provide regional benefits, improve water quality, and strengthen watershed management.

This project is also consistent with CWSD long term goals for the Carson River watershed as outlined in the Carson River Watershed Adaptive Stewardship Plan (CRASP) in section 8.3.3 by re-evaluating the water balance and groundwater recharge of the Carson Desert and updating the estimate of water availability for this hydrographic basin (CWSD, 2017).

## Costs and Funding

The total cost of the overall project is expected to be around \$1 million. A request of \$200,000 from CWSD is proposed to initiate this study and to provide foundational matching funds alongside in-kind services from NDWR. CWSD funding would be administered through NDWR and used to subcontract technical expertise from DRI and USGS. These funds will primarily support Objective 1 (stakeholder engagement and scope development) and contribute toward Objective 2 (updating hydrogeologic, water budgets, and water quality understanding).

NDWR is currently seeking partial funding (~\$750,000) for this project through a Community Project Funding grant from Congress through the offices of Senators Cortez Masto and Rosen. Additionally, NDWR continues to seek additional funding for NWI through state budgeting process as part of the 2027-2029 executive budget cycle.

## Timeline

This project is anticipated to begin once initial funding is secured for DRI and USGS participation. Stakeholder and public outreach are expected to begin around May 2026. This study is planned as a 4.5-year effort, with completion in October 2030. The CWSD funded component of this study would be expended over a two-year period from the start date.

## Permit Requirements

Some permits may be required for additional data collection stations on public lands, which would be obtained through the BLM Stillwater Field Office. Where possible, data collection stations will be located on private property with permission from property owners.

## References

- Carson River Subconservancy District, 2017, Carson River Watershed Adaptive Stewardship Plan Update: Carson River Subconservancy District Publication, 160 p., <https://www.cwsd.org/wp-content/uploads/2017/12/Final-CRWASP-2017-Update-Plan-Part-1.pdf>.
- Glancy, P.A., and Katzer, T.L., 1975, Water-Resources Appraisal of the Carson River Basin, Western Nevada: Nevada Division of Water Resources Reconnaissance Report 59, 57 p., [http://images.water.nv.gov/images/publications/recon%20reports/rpt59-carson\\_river\\_basin.pdf](http://images.water.nv.gov/images/publications/recon%20reports/rpt59-carson_river_basin.pdf).
- Glancy, P.A., 1986, Geohydrology of the Basalt and Unconsolidated Sedimentary Aquifers in the Fallon Area, Churchill County, Nevada: U.S. Geological Survey Water-Supply Paper 2263, 62 p., <https://doi.org/10.3133/wsp2263>.
- Maurer, D.K., Johnson, A.K., and Welch, A.H., 1996, Hydrogeology and Potential Effects of Changes in Water Use, Carson Desert Agricultural Area, Churchill County, Nevada: U.S. Geological Survey Water-Supply Paper 2436, 106 p., <https://doi.org/10.3133/wsp2436>.



## Office of the Churchill County Manager

---

January 23, 2026

Mr. Ed James, P.E.  
Mr. Reed Cozens, P.E.  
Carson Water Sub-Conservancy District  
777 E. Williams St., Suite 209  
Carson City, NV 89703

Dear Ed & Reed:

Churchill County strongly supports the funding request by Nevada Division of Water Resources (NDWR) for the "Nevada Water Initiative: Carson Desert Water Resource Availability Study" The Nevada Water Initiative (NWI) is essential for modernizing Nevada's groundwater data and ensuring sustainable water management. Funding is necessary to initiate the study, to expand scientific research, update outdated datasets, and provide the best available science for informed decision-making.

As the driest state in the nation, Nevada faces increasing water demands due to population growth and expanding energy and mineral development. The current groundwater datasets, developed over 50 years ago, are outdated. Baseline measurements and quantification of groundwater availability, use, and potential development impacts using contemporary science are essential for improved groundwater management.

NWI replaces outdated water budget estimates with contemporary, science-based assessments. Phase I have successfully refined methodologies, improved groundwater recharge estimates, and enhanced aquifer sustainability insights. To build on this progress, Phase II will expand efforts to the Carson Desert, advancing groundwater measurements, research, and applications using the best available science. Most of Churchill County's residents and economic development occur within the Carson Desert hydrographic basin 101, and the NDWR 2023 "Basin Status Assessment Maps" show basin 101 both over appropriated and over-pumped by ~300% based on decades old, outdated science. There are four aquifer systems in basin 101, all of which are hydrologically connected with each other and primarily recharged by irrigation surface water application through the Newlands Project. If funded, Phase II of NWI will address the significant secondary recharge associated with Newlands Project irrigation practices to the basin 101 aquifers. These efforts are vital to support regional economic growth and responsible water development.

We urge CWSD to fund the study to ensure informed water management and economic sustainability. Thank you for your leadership in securing Nevada's water future.

Sincerely,

Chris Spross,  
County Manager



---

## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

---

13

**APPLICANT:** Harold Jones (United States Geological Survey)

Name

2730 N. Deer Run Rd., Suite 3

Address

Carson City

City

Nevada

State

County

89701

Zip Code

haroldjones@usgs.gov

775-431-6371

Email

Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Name

Address

City

State

County

Zip Code

Email

Telephone #

**PROJECT NAME:** Carson River Watershed Groundwater Monitoring Program

**PROJECT LOCATION/ADDRESS:**

Carson River Watershed (Carson, Eagle, Dayton, Churchill, and Lahontan Valleys)

---

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

See attached.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

See attached.

**TOTAL ESTIMATED PROJECT COST:** \$277,200 (FY26: \$134,400, FY27: \$142,800)

**AMOUNT REQUESTED FROM CWSD:** \$160,300 (FY26: \$77,400, FY27: \$82,900)

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

USGS: \$96,900 (FY26: \$47,000, FY27: 49,900)

Churchill County: \$20,000, signed JFA expected March 2026. \$10,000/fiscal year

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** June 30, 2028

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached. No permit requirements expected. See "Precipitation Gages" subsection under Project Description for more details on precipitation gage in question last agreement period.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.

SIGNED: \_\_\_\_\_

NAME: Harold Jones V

TITLE: Hydrologist

DATE: 1/15/2026

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*



## **Carson River Watershed Groundwater Monitoring Program**

Current CWSD agreement: July 1, 2025 – June 30, 2026

Requesting funds for July 1, 2026 – June 30, 2028

**PROJECT DESCRIPTION:** In 2023, several long-term groundwater monitoring networks within the Carson River watershed were combined into a single watershed-wide network (Fig. 1). Data generated from this collaboration have been crucial for developing groundwater resource models and used by water resource managers within the watershed (Yager and others, 2012; Kitlasten and others, 2021, Naranjo and others, 2013, Naranjo and Bubi, 2024). The watershed-wide groundwater monitoring network has been divided into three geographically based subnetworks: Douglas County, Middle Carson, and Newlands. (Figs. 1-4). network of five bulk precipitation gages also provides quarterly measurements of precipitation throughout the watershed (Figure 3). Currently, groundwater levels are measured in each subnetwork and selected wells within two subnetworks (Douglas County and Newlands) are sampled for water quality (temperature, dissolved oxygen, pH, specific conductance, major ions, nutrients, arsenic). The most recent agreement with Carson Water Subconservancy District (CWSD) (FY2025-2026) included canvassing for the expansion of water quality monitoring in the Douglas County subnetwork and addition of water quality in the Middle Carson subnetwork. Each updated subnetwork is described in greater detail below.

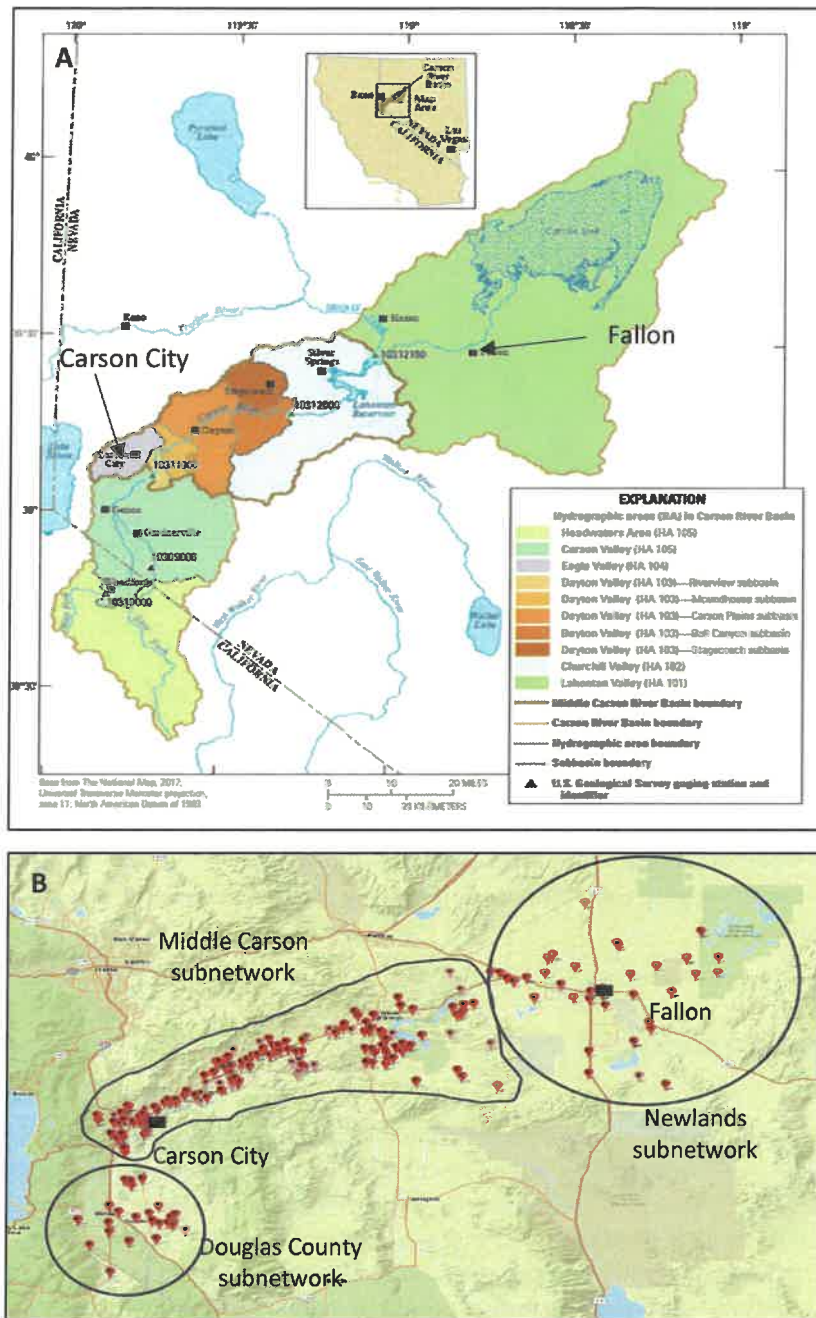
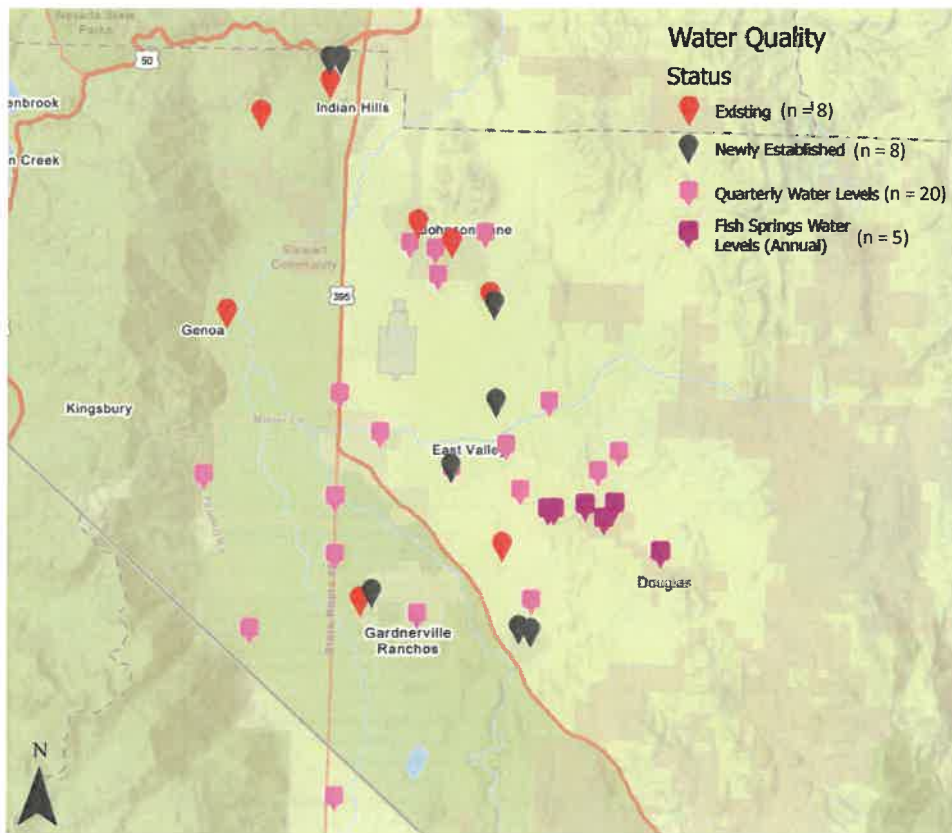


Figure 1. The (A) Carson River watershed and (B) entire water level network



**Figure 2.** Current Douglas County water-level and water-quality networks. Note that one newly established water quality well has not yet had a site created and is not currently displayed on the map.

## Douglas County Subnetwork

**Subnetwork Description:** Currently, residents of Carson Valley receive drinking water from either private domestic wells, public-supply wells located in the towns of Minden and Gardnerville, or general improvement districts (GIDs) such as the Gardnerville Ranchos GID. Since the 1980's, declines in groundwater levels of up to 30 ft have occurred in some residential areas in Carson Valley, prompting homeowners to deepen wells to maintain a reliable source of water. Due to high arsenic concentrations observed in the 2010s, public-supply wells were decommissioned in northern Carson Valley resulting in increased pumping of groundwater from Minden public supply wells (Paul, 2010). There is concern from water resource managers that the deepening of domestic wells and increasing pumping from municipal wells may increase the vulnerability of these groundwater sources to groundwater with elevated arsenic. There remains insufficient data on the distribution and occurrence of arsenic to be able to evaluate trends in arsenic. Nitrate contamination of groundwater continues to be a concern as the population in the valley increases, especially in residential areas where septic systems are in use. The monitoring of groundwater levels and water quality within the Douglas County network will continue to provide data necessary to address changes in the alluvial aquifer underlying Carson Valley.

Approach: Groundwater levels are measured in 25 wells in Douglas County. This includes quarterly measurements in 20 wells throughout the Carson Valley and annual measurements in five wells in the Fish Springs area (Fig. 2). Water-quality samples are currently collected biannually from five wells and annually from six wells in Douglas County. Canvassing for additional wells was completed in summer 2025, resulting in eight new water quality wells being added to the network. This included six new wells to the network and two wells to replace monitoring at sites where property owner permission had been revoked. During a reanalysis of the water quality network (Naranjo and Buby, 2024), one biannual well was identified as having sufficiently stable constituent concentrations to scale back to annual sampling, beginning in 2026. This allowed six new wells, rather than only five, being added to the monitoring network. Each water-quality sample will be analyzed for acid neutralizing capacity, major ions, iron, nutrients, and arsenic.

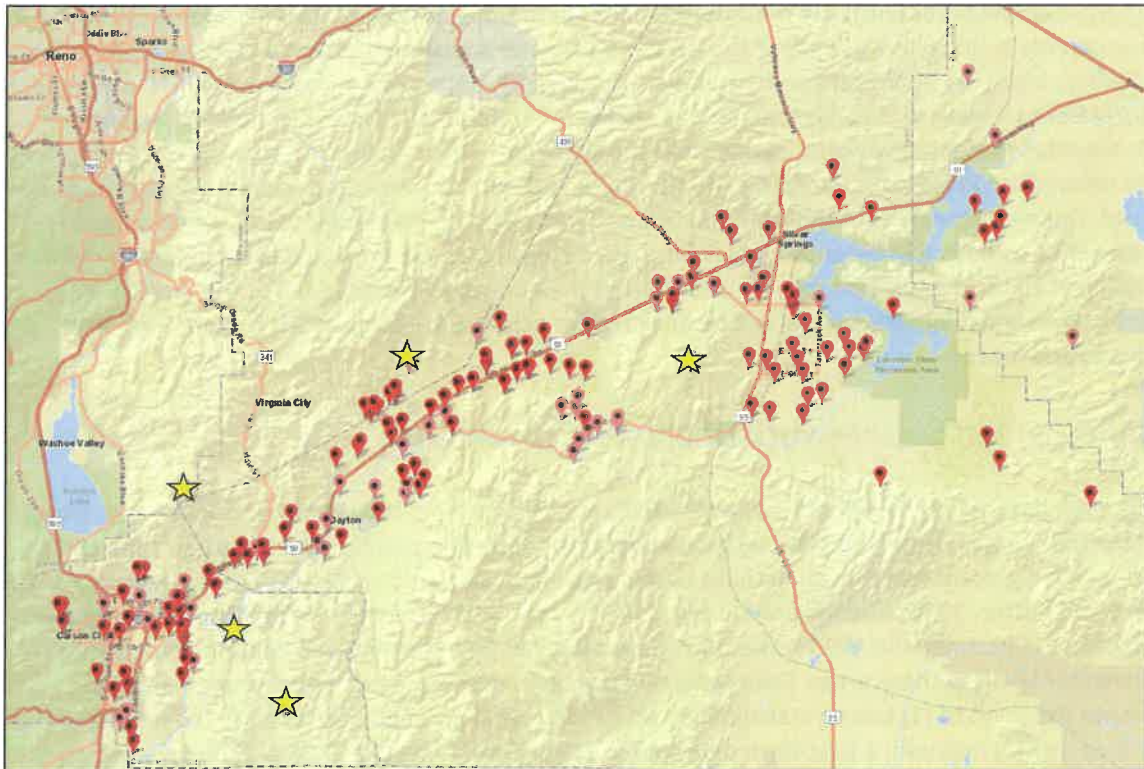
## Middle Carson Subnetwork (Includes Carson City)

Subnetwork description: Residents in the Middle Carson subnetwork area, which includes Eagle, Dayton, and Churchill Valleys, largely depend on groundwater for domestic supply. Since the 1970's the USGS has monitored groundwater-levels in these basins providing data used to identify trends in supply (Glancy and Katzer, 1976; Arteaga and Durbin, 1979; Berger, 1987; Harrill and Preissler, 1994; Maurer and others, 2009). Since the 1990's, the USGS has partnered with the CWSD to continue monitoring groundwater levels in these areas. Data collection has been maintained at a spatial and temporal frequency designed to (1) inform stakeholders on conditions of groundwater levels in the middle Carson River area and (2) maintain a long-term data set for use in developing the USGS Middle Carson groundwater model.

Approach: The Middle Carson monitoring network currently includes 122 wells (Fig. 3). During the most recent project period, wells that have either been destroyed or where access has otherwise been lost have been removed from the total count of wells in the water-level monitoring network. Currently, quarterly water-level measurements are made at 45 wells and annually at 77 wells. The monitoring design is intended to provide data needed to describe trends in groundwater levels and provide a continuous assessment of groundwater level conditions in the subnetwork as development continues and population increases.

Water chemistry has not been monitored in the area between Eagle Valley and Churchill Valley since 2013 (also referred to broadly as Stagecoach), therefore current water quality is uncertain (U.S. Geological Survey, 2023b). To evaluate the current water quality conditions within this area, canvassing for six additional wells began in fall 2025 and is ongoing. New water quality monitoring sites will leverage the existing water level network, and permission has been secured from three well owners in Dayton and Silver Springs. Canvassing for the remaining three sites will target Silver Springs and the Stagecoach neighborhoods. During the current proposed period (FY 2026-2028), sampling at the six new wells will occur on an annual basis. Each water-quality sample will be analyzed for acid neutralizing capacity, major ions, iron, nutrients, and arsenic.





**122 water level measurements**  
 - 45 quarterly  
 - 77 annual

**5 Bulk Precipitation gages**  
 - all quarterly

**Figure 3. Current Middle Carson water level subnetwork. Locations of bulk precipitation gages are identified by yellow stars (★).**

## Newlands Subnetwork

Subnetwork description: Lahontan Valley residents depend exclusively on groundwater resources for domestic and municipal drinking-water supply. To inform Churchill County, federal agencies, and other stakeholders on the condition of groundwater resources in Lahontan Valley, the USGS has monitored water levels from the beginning of the Newlands Project in 1903 (Stabler, 1904). The Newlands groundwater subnetwork currently consists of 64 wells distributed throughout the Lahontan Valley (Fig. 4A) to monitor water-level change in the aquifers used for domestic and municipal supplies.

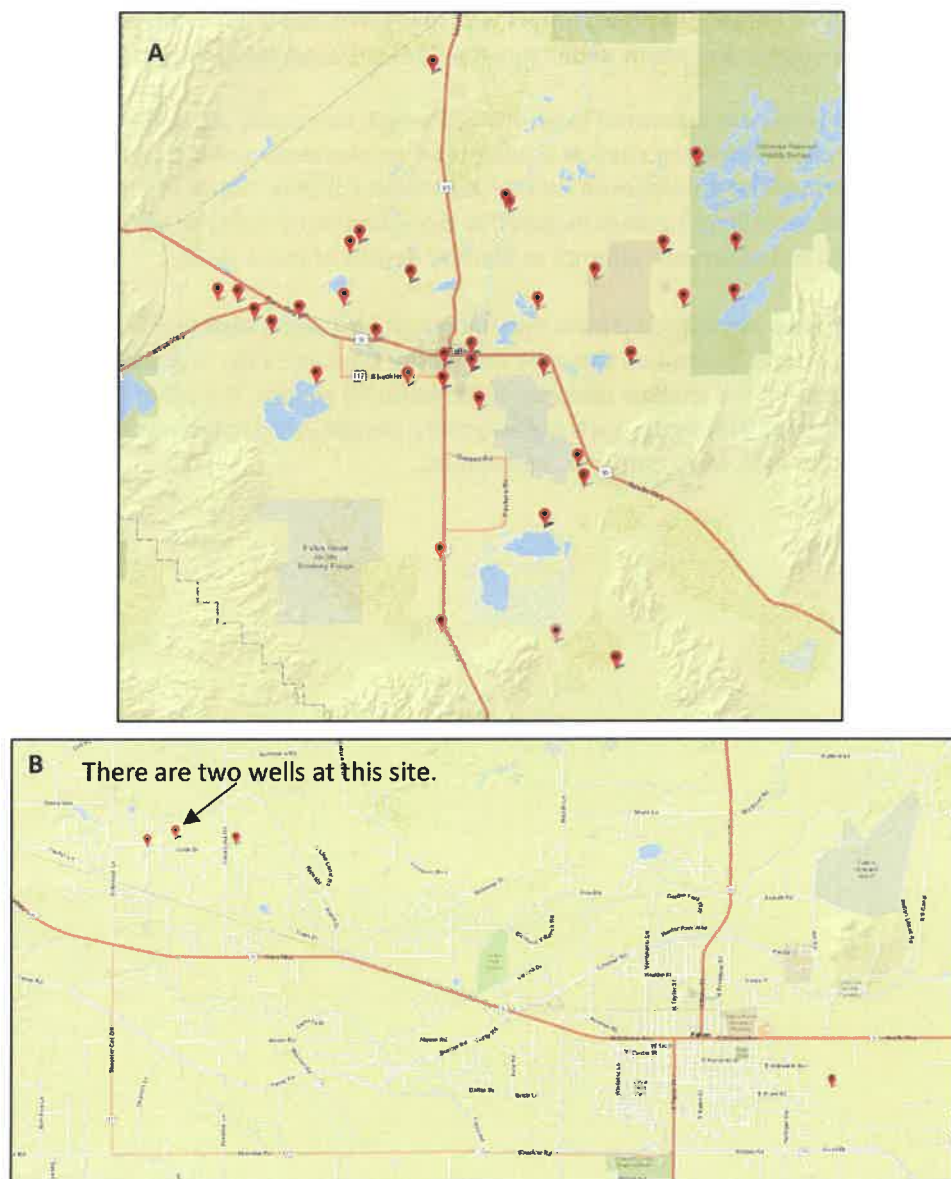
Domestic water supply wells are completed in valley-fill deposits, characterized by Glancy (1986) as the shallow aquifer, from 0-50 ft below land surface (bls), and the intermediate aquifer from 50-500 ft bls. The Nevada State Engineer's well log database indicates 1,823 shallow and 2,736 intermediate domestic wells inventoried in the subnetwork area.

Municipal water supply for the town of Fallon, the Paiute Shoshone Tribe, and Naval Air Station Fallon (NAS Fallon) is drawn from the fractured basalt aquifer. The basalt aquifer is a highly permeable

mushroom shaped “body of basalt” that is in contact with and surrounded by all three sedimentary aquifers (shallow, intermediate, and deep) underlying the Carson Desert (Maurer and Welch, 2001).

Approach: Groundwater levels are measured quarterly (26 wells), biannually (19 wells), and annually (19 wells). 37 wells are screened within the shallow aquifer used for domestic water supply and 15 wells are screened within the intermediate aquifer used for municipal water supply. Depth of screen interval is not currently available for the remaining 12 wells included in the subnetwork, and the USGS will sound the total depth of these wells and otherwise attempt to identify depths of these wells.

Annual water-quality samples are collected from one municipal well completed in the fractured basalt aquifer and four domestic wells located on the west side of the town of Fallon (Fig. 4B). Two of the domestic wells are screened in the shallow portions of the basin fill aquifer; the other two domestic wells are screened at intermediate depth. Each water-quality sample will be analyzed for acid neutralizing capacity, major ions, iron, nutrients, and arsenic.



#### 64 water level measurements

- 26 quarterly
- 19 biannual
- 19 annual

#### 5 water quality measurements

- annual only

**Figure 4.** The Newlands network of (A) water level and (B) water quality monitoring wells.

## Precipitation Gages

Currently, there are five bulk precipitation gages within the Middle Carson River area (Fig. 3) that are used for trend analyses and to compare to commonly used spatial precipitation datasets (PRISM,



GridMet, Chirps; P. Gardner, January 13, 2025, USGS, personal communication). These bulk precipitation gages are serviced quarterly, depending on accessibility. During the winter months, some of the gages can become inaccessible due to snow and servicing is postponed until conditions permit a safe site visit.

After discussions with the owners of the Basalite Knob facility, it is our current understanding that the location of the Basalite Knob precipitation gage (392037119312201; Figure 3) will not be altered during this agreement period. Additionally, when relocation is required, the gage can remain on Basalite Knob for the foreseeable future. Therefore, the USGS currently sees no need to scope an entirely new gage site away from Basalite Knob.

Since 2023, bulk precipitation data has transitioned to a new database, resulting in no bulk precipitation data being available online since roughly summer 2023. While this data is not currently viewable publicly, quarterly measurements have continued. Within the first fiscal year of this new agreement, the USGS will ensure that all bulk precipitation data is accessible via each gage webpage.

## Carson River Watershed GW Monitoring Budget

Estimated total cost for this project is approximately \$277,200 over the two-year agreement period from July 1, 2026 – June 30, 2028. The USGS can tentatively provide 35% in matching funds, which is \$96,900. This USGS matching funds contribution is based on availability of USGS cooperative matching funds and subject to change. Carson Water Subconservancy District would be responsible for the remaining cost of \$160,300, with Churchill County contributing \$20,00 for the Newlands Network. A signed agreement with Churchill County is expected March 2026.

**Table 1<sup>1</sup>.** Funds Distributed per Fiscal Year

[Fiscal year (FY) represents the state fiscal years from July 1 - June 30]

	FY 2026/27	FY 2027/28	FY26-28 Total
Labor	\$65,100	\$68,700	\$133,800
Laboratory Analyses	\$15,300	\$16,500	\$31,800
Other <sup>1</sup>	\$3,200	\$3,300	\$6,500
Indirect Costs	\$50,800	\$54,300	\$105,100
Total	\$134,400	\$142,800	\$277,200
CWSD	\$77,400	\$82,900	\$160,300
Churchill County	\$10,000	\$10,000	\$20,000
USGS Matching	\$47,000	\$49,900	\$96,900

<sup>1</sup> Other includes shipping and supplies.

### References:

[Arteaga, F.E., and Durbin, T.J., 1979, Development of a relation for steady-state pumping rate for Eagle Valley ground-water basin, Nevada: U.S. Geological Survey Open-File Report 79-261, 44 p.](#)

[Berger, D.L., 1987, Ground-water levels in water years 1984–86 and estimated ground-water pumpage in water years 1984–85, Carson Valley, Douglas County, Nevada: U.S. Geological Survey Open-File Report 86-539, 16 p.](#)

Glancy, P.A., and Katzer, T.L., 1975, Water-Resources Appraisal of the Carson River basin, Western Nevada: United States Geological Survey Open-File Report 75-179, 177 p.

Harrill, J.R., and Preissler, A.M., 1994, Ground-water flow and simulated effects of development in Stagecoach Valley, a small, partly drained basin in Lyon and Storey Counties, western Nevada: U.S. Geological Survey Professional Paper 1409-H, 74 p.

Kitlasten, W., Morway, E.D., Niswonger, R.G., Gardner, M., White, J.T., Triana, E., Selkowitz, D., 2021, Integrated hydrology and operations modeling to evaluate climate change impacts in an agricultural valley irrigated with snowmelt runoff. Water Resources Research, vol. 57, no. 6, 30 p.

Maurer, D.K., Paul, A.P., Berger, D.L., and Mayers, C.J., 2009, Analysis of streamflow trends, ground-water and surface-water interactions, and water quality in the upper Carson River basin, Nevada and California: U.S. Geological Survey Scientific Investigations Report 2008-5238, 106 p.

Maurer, D.K., and Welch, A.H., 2001, Hydrogeology and geochemistry of the Fallon basalt and adjacent aquifers, and potential sources of basalt recharge, in Churchill County, Nevada. U.S. Geological Survey Water-Investigations Report 01-4130, 72 p.

Naranjo, R.C., Welborn, T.L., Rosen, M.R., 2013, The distribution and modeling of nitrate transport in the Carson Valley alluvial aquifer, Douglas County, Nevada. United States Geological Survey Scientific-Investigations Report 2013-5136, 51 p.

Naranjo, R.C. and Bubi, A., 2024, Assessment of water levels, nitrate, and arsenic in the Carson Valley alluvial aquifer and the development of a data visualization tool for the Caron River Basin, Nevada. United States Geological Survey Open-File Report 2024-1045, v. 1.1, 29 p.

Paul, Angela, March 10, 2020, Distribution of Arsenic in Southern Carson Valley: What We Currently Know. Presentation, Carson River Watershed Management Forum.

Stabler, H., 1904, Report on ground waters of Carson Sink: U.S. Geological Survey Reclamation Service, 49 p.

U.S. Geological Survey, 2023b, Carson Basin Hydro Mapper: U.S. Geological Survey web page, accessed January 5, 2026, at <https://webapps.usgs.gov/carsonriverbasinhydromapper>

Yager, R.M., Maurer, D.K., Mayers, C.J., 2012, Assessing potentiation effect of changes in water use with a numerical groundwater-flow model of Carson Valley, Nevada, and Alpine County, California. United States Geological Survey Scientific-Investigations Report 2012-5262, 84 p.

## **PROJECT GOALS AND BENEFITS:**

Funding the Carson River Basin Groundwater Monitoring Program will maintain the long-term monitoring of groundwater resources within the Carson River watershed. Monitoring bulk precipitation, water levels, and water quality provides data needed to evaluate any effects of increased demand on aquifers within Carson River watershed. Data generated from the proposed monitoring furthers the understanding of the influences of changes in land-use, pumping, and water-resources management practices on the groundwater resource. Data collected as part of this monitoring effort will provide

useful information for the CRASP update. Importantly, this new agreement adds arsenic as a constituent to all water quality sampling in the groundwater network and adds 12 new water quality sites across the basin. In addition to data collection, labor costs will support USGS staff time to attend and/or present at any potential meetings or workshops hosted by CWSD or other stakeholders in the Carson River watershed.

**TOTAL ESTIMATED PROJECT COST:** \$277,200 (FY26: \$134,400, FY27: \$142,800)

**AMOUNT REQUESTED FROM CWSD:** \$160,300 (FY26: \$77,400, FY27: \$82,900)

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

**USGS Matching Funds:** \$96,900 (FY26: \$47,000, FY27: 49,900)

**Churchill County (Newlands):** \$20,000, signed JFA expected March 2026. \$10,00 per fiscal year.

**ESTIMATED DATE PROJECT TO BEGIN:** July 1, 2026

**ESTIMATED TIME TO COMPLETE PROJECT:** July 1, 2026 – June 30, 2028



## CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-27

14

**APPLICANT:** Truckee-Carson Irrigation District

Name  
PO Box 1356

Address  
Fallon

Churchill

City  
NV

County  
89407-1356

State

Zip Code

ben@tcid.org

775-423-2141

Email

Telephone #

**APPLICANT'S AGENT (if different from Applicant):**

Name

Address

City

County

State

Zip Code

Email

Telephone #

**PROJECT NAME:** Carson River Diversion Dam Log Boom Installation

**PROJECT LOCATION/ADDRESS:**

Approximately 5 miles downstream of  
The Lahontan Dam in Churchill County

**PROJECT DESCRIPTION:** Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Please see attached Project Description and Scope of Work.

**PROJECT GOALS AND BENEFITS:** Briefly describe the project goals and benefits to be realized if the project is implemented, and how it is consistent with the CRASP and/or CRRFMP. Additional sheets may be attached.

Please see attached Project Goals and Benefits.

**TOTAL ESTIMATED PROJECT COST:** \$78,755.06

**AMOUNT REQUESTED FROM CWSD:** \$50,000.00

**SOURCE OF OTHER FUNDS:** List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

Please see the attached Source of Other Funds

**ESTIMATED DATE PROJECT TO BEGIN:** 12/01/2026

**ESTIMATED TIME TO COMPLETE PROJECT:** 03/15/2027

(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

**PERMIT REQUIREMENTS:** If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached. No permits are required for this project.

**OTHER INFORMATION:** Provide any other information that may be important to the approval of this application.  
Please see attached.

SIGNED: \_\_\_\_\_



NAME: \_\_\_\_\_

**Benjamin Shawcroft**

TITLE: \_\_\_\_\_

**General Manager**

DATE: \_\_\_\_\_

**01/12/2026**

*Carson Water Subconservancy District reserves the right to deny any and/or all applications for funding.*

# **CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING FY 2026-2027**

## **Attachments to Application for Truckee-Carson Irrigation District**

### **PROJECT DESCRIPTION:**

This project consists of installing a log boom on the upstream side of the Carson River Diversion Dam (Dam) located approximately five (5) miles downstream of Lahontan Dam in Churchill County, Nevada. This project will consist of engineering, design and purchase of the log boom. The log boom will consist of 46 TUFFBOOM brand waterway barriers complete with bottom connection plates and interboom connection chain; 46 12" deep and 10' long TUFFBOOM galvanized debris screens and mounting hardware; 40 feet of 1" galvanized chain, anchor shackles and a fuse link assembly. See attached photos of proposed location and the Worthington Products Inc. quote and brochure.

The Dam is a United States Bureau of Reclamation facility constructed in 1906. It serves to divert water released from Lahontan Dam, flowing in the Carson River channel, in one of three (3) ways: 1. Through a series of gates directing continuing flow in the Carson River Channel; 2. Through the head-works of the V-Line Canal; and, 3. Through the head-works of the T-Line Canal. The Dam is 24 feet long with a 225-foot long, 31-foot high concrete control section. In flood operations conducted in 2017, we diverted approximately 3,320 cfs of flow from Lahontan Dam. Then, at the Carson Diversion Dam, we diverted as much as 1,700 cfs. into the V-Line Canal, 1,200 cfs. in the Carson River Channel (the Carson River gates are capable of 1,950 cfs), and approximately 200 cfs in the T-Line Canal.

Pivotal to continuing water management of water on the Carson River, is our ability to make diversions through the Diversion Dam. In this application we seek to install a log boom on the upstream side of Diversion Dam to prevent debris from becoming lodged in the gates. Diversion Dams' use in both regular operations and in flood operation remains essential. Installation of a log boom at Diversion Dam will protect against potential flooding. Protecting the dam serves, ultimately, to protect all property owners on the Carson River below it from flood waters that could not be controlled.

### **PROJECT GOALS AND BENEFITS:**

The proposed project is consistent with the Carson River Regional Floodplain Management Plan in that the newly installed log boom will keep excess debris from being flushed downstream potentially damaging infrastructure that has been added downstream. This will decrease the threat of uncontrolled flooding along the Carson River (See Section 4.6 Reduction of Infrastructure Impacts in CRRFMP). The log boom will keep objects from becoming stuck in the Dam and in need of equipment or force for removal thus, preserving the life of this important concrete structure which will ensure many more years of valuable flow controls below Lahontan Dam. The benefits resulting from this project similarly satisfy the qualification criteria required in this funding application by reducing the risk of flooding along the Carson River and improving the management of the river.

### **SOURCE OF OTHER FUNDS:**

The District will contribute time and materials to prepare the site and will install log boom per Worthington Product's design. The District will contribute funds not covered by the CWSD grant and will seek additional grant funding for this project.





Google Earth - Edit Path

Name: Truckee Carson Irrigation District - Debris Barrier

Description Style, Color View Altitude Measurements

Length: 500 Feet



# Truckee Carson ID - Diversion Dam

## Truckee Carson Irrigation District

PO Box 1356  
Fallon, Nevada (US) 89407-1356  
United States

## Cody Biggs

cody@tcid.org  
(775) 427-0964

Reference: 20210108-141727040

Quote created: January 8, 2026

Quote expires: February 12, 2026

Quote created by: Val Gardner

Business Development

vgardner@tuffboom.com

+13304527400 exL1

## Comments from Val Gardner

Taxes, anchors, boom design, anchor design, unloading, final assembly and installation are available for additional fees.

## Products & Services

Item & Description	Quantity	Unit Price	Total
TUFFBOOM Waterway Barrier - Yellow. TUFFBOOM Waterway Barrier, Standard Self-Rescue Handholds, No Graphics. Supplier complete with bottom connection plates and inter-boom connection chain.	46	\$955.11	\$43,935.06
Tuffboom Debris Screen - 12" HDG Standard hot dipped galvanized debris screen for TUFFBOOM barrier (fits 12" deep x 10" high) with mounting hardware and connection chain	46	\$520.00	\$23,920.00
Fuse Link Assembly: an engineered weak link so that the boom will open up in a designed location if the loads exceed a specified tension. Keeps anchors from pulling out and allows anchors to be smaller than the break strength of the boom (130 kip). Fuse Link Assy - Include (2) Fuse Link Plates, (2) Bolts and (2) ANCO Nuts.	1	\$620.00	\$620.00

Item & Description	Quantity	Unit Price	Total
Chain - 1" GR80 galvanized. To connect from the end of the boom to the shoreline anchor blocks. Supplied as one segment of chain to be cut into two pieces onsite. 1" diameter, Grade 80, galvanized dock fender chain. Unit of measure: per foot.	40	\$35.00	\$1,400.00
Anchor Shackle - 1" galvanized. To connect the anchor chain to the shoreline anchor blocks. 1" Anchor Shackle, Bolt Type, HDC, WLL 2.5t	2	\$40.00	\$80.00
Engineering/Design - Tier 2 Engineering/Design Services - Tier 2 - no Nevada P.Eng stamp included	1	\$4,800.00	\$4,800.00
Shipping - from Canton, OH to Fallon, NV Shipping & Handling Charges (Estimated Freight Only. Subject to rates in effect at time of shipment)	1	\$4,000.00	\$4,000.00
One-time subtotal			\$78,755.06
<b>Total</b>			<b>\$78,755.06</b>

#### Purchase terms

Payment Terms: Net 30

#### Questions? Contact me



Val Gardner  
Business Development  
vgardner@tuffboom.com  
+13304527400 ext 1

Worthington Products, Inc.  
1520 Wood Ave. SE  
East Canton, OH 44730  
United States

## Worthington | TUFFBOOM Series



**REDUCE**  
Dam Safety Risk

**INCREASE**  
Power Generation

**LOWER**  
Public Safety Liability

TUFFBOOM, the world's first polymer log boom introduced in 1994 is installed in over 65 countries. The TUFFBOOM reduces dam safety risk and increases power generation output by deflecting surface debris, trash and vegetation away from water intake and spillgate structures.

For Public Safety, TUFFBOOM series barriers provide a visible headpond deterrent to clearly define dangerous zones and prevent boaters from getting too close to water intakes, spillways, spillgates, and other critical water structures.

**Specified by top engineers**  
**Used by dam owners worldwide**



**Worthington** Waterway Barrier Experts Since 2001



## Worthington | TUFFBOOM Series

### Standard Features

- Shackle-Free Connections (no more shackle failures!)
- Alloy chain interconnections.
- Heavy-wall impact resistant polyethylene with max. UV resistance.
- Unsinkable solid internal core of non-water absorbing foam fill. Maintains buoyancy even when punctured.
- High load bearing internal steel member provides strength and ballast, resists horizontal and vertical loads.
- Zero-gap fine debris option available.
- 15 to 20-year design life.
- Mold-in Graphics™ with standard or customized warnings.
- Exceptional debris load capacity.
- Standard Color: Safety Yellow. Also available in International Orange, Log Boom Brown, Forest Green, and others.
- High Visibility, high buoyancy for maximum freeboard visibility.



## Worthington | TUFFBOOM Series

### Patented Life-Saving Handholds

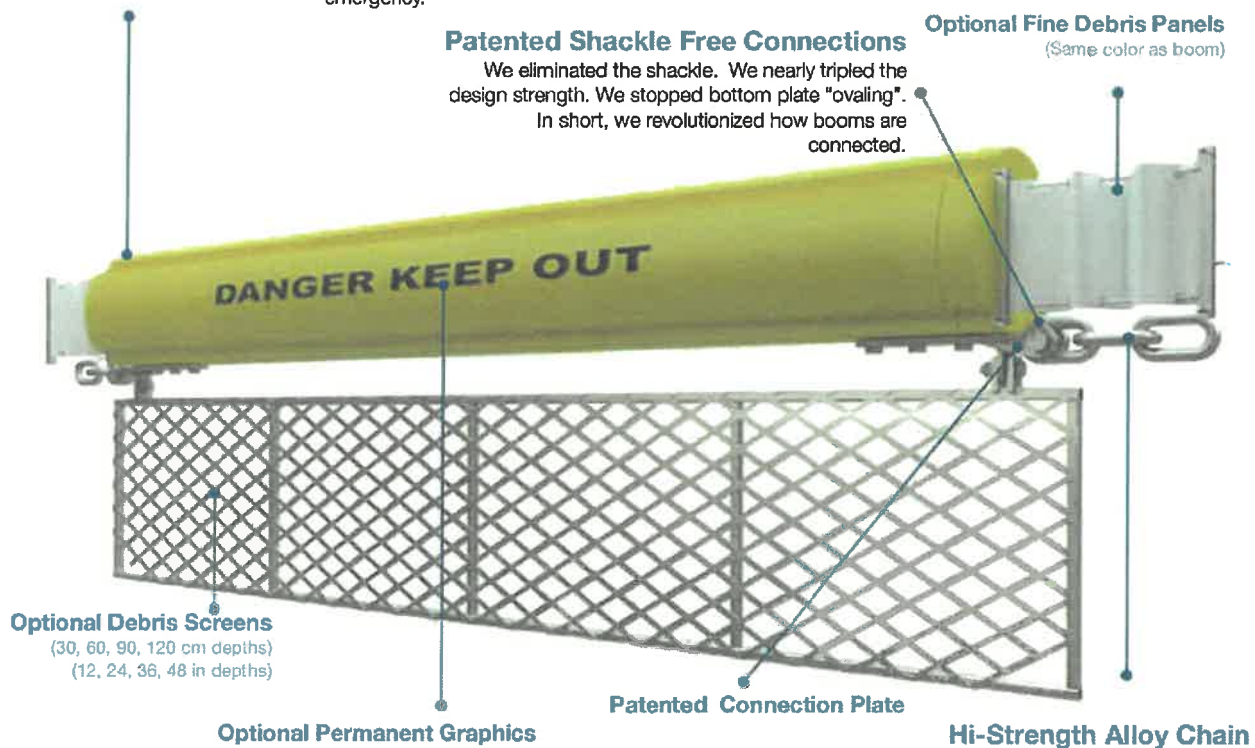
Built into each unit, these handholds were ergonomically designed so that a person in distress can grab hold of and hang on to the boom during an emergency.

### Patented Shackle Free Connections

We eliminated the shackle. We nearly tripled the design strength. We stopped bottom plate "ovaling". In short, we revolutionized how booms are connected.

### Optional Fine Debris Panels

(Same color as boom)



### Optional Debris Screens

(30, 60, 90, 120 cm depths)  
(12, 24, 36, 48 in depths)

### Optional Permanent Graphics

### Patented Connection Plate

### Hi-Strength Alloy Chain

Provides interboom connection integrity, low wear, and high load bearing capacity.

TUFFBOOM Standards	
Diameter	40.6 cm (16 in)
Float Length	305 cm (120 in)
Center to Center Length when connected to additional units	340 cm. (134 in)
Weight (dry)	64 kg. (141 lbs)
Buoyancy	317 kg (700 lbs)
Freeboard	30.5 cm. (12 in)
Design Strength	130 kips
Spacing Between Units	39 cm. (15.5 in)
Internal Construction	C4 Channel w/ EPS Foam



[www.tuffboom.com](http://www.tuffboom.com)

## Worthington | TUFFBOOM Series

Discover more with these informative YouTube videos  
<https://www.youtube.com/c/Tuffboom>



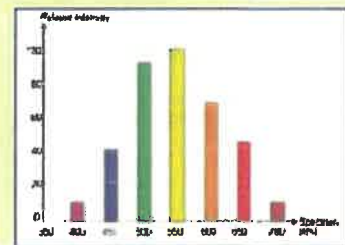
### FEATURED VIDEO

Planning for & Mitigating the Impacts of Wildfires in your watershed.



### YELLOW - The New Orange

At Worthington, we constantly ask questions because that leads to better solutions. When our researchers discovered orange is just 63% as visible as yellow. When we learned 8% of males and 2% of females are colorblind seeing orange as grayish but seeing yellow - well - as yellow. When we learned orange is hard to see in low light conditions, we took action. **Barriers made by Worthington today are safer, more visible than ever before because today's barriers are yellow - the new orange!**



1520 Wood Ave SE  
East Canton, OH 44730 (USA)  
Tel: 330-452-7400  
Email: [support@tuffboom.com](mailto:support@tuffboom.com)

[www.tuffboom.com](http://www.tuffboom.com)



## **AGENDA ITEM #6**

## CARSON WATER SUBCONSERVANCY DISTRICT

**TO:** FINANCE COMMITTEE MEMBERS

**FROM:** EDWIN D. JAMES

**DATE:** FEBRUARY 9, 2026

**SUBJECT:** Agenda Item #6 - For Possible Action – Make recommendations for the Tentative General Fund, Tentative Acquisition/Construction Fund, and Tentative Floodplain Management Fund FY 2026-27 Budgets

---

**DISCUSSION:** Review and develop balanced budgets for Tentative General Fund, Tentative Acquisition/Construction Fund, and Tentative Floodplain Management Fund.

**STAFF RECOMMENDATION:** Provide direction to staff to submit balanced budgets for FY 2025-26 Tentative General Fund, Tentative Acquisition/Construction Fund, and Tentative Floodplain Management Fund to CWSD March Board meeting.

**AGENDA ITEM #7**

**PUBLIC COMMENT**