



Figure 1. USGS hydrologic features map of the Carson River watershed and surroundings.

# The Flow

News of the plans, projects and people of the Carson River Watershed

Winter 2011—2012

## CRC Nevada Day Parade Float Wins First Place!



Great Job! Mary Kay Wagner spearheaded float construction, Pat Fried and her team at Great Basin Sports supplied the van and trailer. Laura Milton did fantastic skirt artwork, Megan Walsh painted a wonderful Alpine mural, and Alpine Signs created the superb banners.



The annual Nevada Day Parade was held on October 29<sup>th</sup>, and this year's theme *Enjoying Nevada's Great Outdoors* offered a perfect opportunity to bring watershed awareness to a gathered audience of parade attendees. The Carson River

stewardship and was thrilled when the float was awarded first place in the Community category!



Even Mother Nature joined the group!

Coalition (CRC) - Education Working Group entered a float in the parade to promote watershed

The float's eye-catching banners conveyed the message: Explore ~ Conserve ~ Celebrate, encouraging people to discover the wonderful Carson River Watershed. An enthusiastic group of 35 dedicated Carson River stewards, dressed up to do their favorite watershed outdoor activity, walked alongside the float. Stewards carried hand-held signs reading "I ♥ my Carson River Watershed", and distributed approximately

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## Carson River Watershed Forum: 2011 & Beyond

**February 9, 2012, 9:00 a.m.—3:30 p.m.**

Nevada Room at the Nevada Governor's Mansion, 606 Mountain Street, Carson City, NV 89703  
 Carson River Coalition and Carson Water Subconservancy District invites you to join us for an informative day sharing 2011 programs, projects, and studies accomplished throughout the watershed. Hear about noxious weeds, aquatic invasive species, river projects and what's on the horizon! For more information, visit [www.cwsd.org](http://www.cwsd.org)

**No Charge for Forum ~ Lunch is included, but you must register!**

**To register: Email [kathi@cwsd.org](mailto:kathi@cwsd.org)**



*Job Well Done!*

In late October 2011, Carson Clear Water Revival (CCWR) team members converged at Mike Jones' and Millie Carol's home to install erosion control Best Management Practices (BMPs). When the homeowners applied to the CCWR BMP contest, their main objective was to address stormwater runoff that inundated their driveway and yard with sediment and other debris. They also wanted to tackle the "worn out" gravel that was a haven for cheat grass along Timberline Drive. The Nevada Tahoe Conservation District (NTCD) staff designed a plan that



After bushes were thinned and the rocks removed, Jim Groth created a swale.

met the contest winners' goals. The plan incorporates the infiltration of stormwater on-site and the reduction of flammable vegetation including cheat grass, junipers and scotch broom. The homeowners got busy and removed a few scotch broom plants and trimmed back their junipers. The team then came in and excavated the cheatgrass-infested gravel and created a rock lined swale within the right-of-way between the homeowners' property and Timberline Drive. The swale infiltrates stormwater run-off and helps trap suspended sediment. Any excess water run-off is directed



Cinderlite delivers the rocks which will line the swale.

across the driveway (in a low spot) to a parking pad with perforated pipe. An infiltration basin captures any remaining run-off. The BMPs were designed to infiltrate run-off from a two-year/24-hour storm. UNR Cooperative Extension (UNCE) staff provided advice to the homeowners on plants that will assist in capturing and using stormwater and will be visually interesting. This vegetation will be planted in Spring 2012. The Carson Water Subconservancy District would like to



Robb Fellows compacts the dirt next to the road.

thank everyone on the CCWR team that helped make this possible. We would also like to thank our sponsors, Jim Groth Excavation for providing excavation expertise and a backhoe; Spherion, Inc. for providing three laborers for a tough day of work; Cinderlite for rock and hauling of excavated soil; and Green House Garden Center for providing a gift certificate for plants this spring. With teamwork, this great project was done in **ONE LONG TOUGH DAY!**



Finished project!

- Carson Clear Water Revival Project Team:**
- Carson City Public Works
  - Carson Water Subconservancy District
  - Nevada Fire Safe Council
  - Nevada Division of Environmental Protection
  - Nevada Tahoe Conservation District
  - University of Nevada Cooperative Extension

## *Caring for the Carson at Conserve Carson River Work Days*

*by Linda Conlin*

Ashlyn said "What I enjoyed most of all was planting willows because I have never in my life planted a tree."



During autumn, as tree leaves take on brilliant color, local school groups were at the Carson River participating in the 17<sup>th</sup> annual Conserve Carson River Work Days. This watershed event involves volunteers working on the Carson River banks from the headwaters in Alpine County to the Carson Sink in Churchill County.

River Wranglers worked with conservation districts in Douglas, Carson, and Lyon counties to develop conservation projects for youth volunteers. In 2011, 150 youth mentors came from Douglas High School FFA, Silver Stage High School chemistry classes, Dayton High School zoology and environmental science classes, and Silver State Charter High School to teach elementary kids about the Carson River watershed!

Addison, a Gardnerville Elementary 4<sup>th</sup> grader wrote, "Two new things I learned about the river are that the willow grow roots and hold on the soil and hold the bank together."

and Silver Springs elementary schools eagerly met their youth mentors and, journal in hand, headed off for a day of hands-on learning. The mentors who once participated as elementary students are now teaching the program, and in time their children will be participating on this field trip and learning to *care for the Carson!*

A Silver Springs Elementary 4<sup>th</sup> grader wrote his youth mentor, "Thank you Casey for giving the best day ever. I had fun in nature. I loved planting the trees and lunch!!! Your friend, Alex."

Thanks to the Carson Water Subconservancy District and Nevada Division of Environmental Protection who provide funding to River Wranglers for Conserve Carson River Work Days.





# Clear Creek Watershed Council

## Some Relief for the Creek!

Soil erosion caused by stormwater or snow melt run-off is considered a natural process in any watershed. However, in the Clear Creek watershed, erosion has been increased through human influences which include road building and construction. This erosion has caused degradation of the Clear Creek Watershed, such that it is listed as an impaired waterway by Nevada Department of Environmental Protection.

Paul Pugsley, Carson Valley Conservation District (CVCD) Watershed Coordinator, has been working closely with the Nevada Department of Transportation (NDOT) on placements of best management practices (BMP) for erosion control along Highway 50. Erosion control was not considered during the construction of the original highway in 1928 and over time, severe erosion from sheet water flow off the highway caused gullying and substantial non-point source pollution issues for Clear Creek. In

Before: Erosion was causing severe sediment loading to Clear Creek.  
 After: Erosion of channel controlled & bank is stabilized.  
*Photos courtesy of NDOT.*



Before: Severe gullying at work.  
 After: Backfilled & lined with rock.  
*Photos courtesy of NDOT*

early 2000, several agencies sponsored a study to assess erosion issues in the Watershed. They determined approximately 8.3 miles of the 43.7 mile creek channel has experienced moderate or severe erosion. Several erosion control projects were identified and begun in 2005 to mitigate the past impacts. The projects aim to limit or stop sediment and other pollutants from reaching the Creek and washing further downstream toward the Carson River.

To date, with the help of several crews from the local prison, Great Basin Institute and Nevada Division of Forestry, the CVCD and NDOT have completed many of the projects along Highway 50. The work in Clear Creek offers an example of all that can be accomplished with effective inter-agency coordination and project management.

### Clear Creek Watershed Council Calendar

- January 12—Leadership meeting; New leadership meeting times: 2nd Thursday of every other month
- Full Council Meetings will occur three times a year, Dates & Times TBA



Watershed stewards included teachers, students, water professionals and volunteers from several disciplines.

*Continued from cover*

1,500 watershed maps and Extra Extra newsletters to parade spectators. The maps were a hit with all the kids! The CRC consists of a number of local agencies, concerned stakeholders, watershed stewards, and numerous working groups, including the Education Working Group. Thanks to all who participated in making this experience a great success!!

**Thanks to these business parade sponsors:** Meeks - Lumber skirting; Kelly Moore - paint; Great Basin Sports - logistical support.

## River Conditions Captured on Snapshot Day

The 6th annual Snapshot Day on the Carson River was held on October 14, 2011. This field event provides a “snapshot” in time of the ecological conditions of the river system. Volunteers from throughout the Carson River watershed participate in gathering water quality information in the form of visual assessments, photos, and water quality data at 10 locations along the Carson River. The event has been held annually since 2006 in the fall of each year after irrigation season.

Specifically, volunteer monitoring teams led by water resource professionals conduct field tests for dissolved oxygen, conductivity, pH and temperature. Water samples are collected for laboratory analysis of nutrients, sediment and bacteria. Volunteers also complete a visual habitat assessment and conduct photo monitoring at each site. The event provides community members the opportunity to participate in science-based, environmental education outreach activities. Numerous school groups throughout the watershed participate in the event each year. Between the preparatory work leading up to Snapshot Day, the event itself, and after the event, teachers are able to expand educational opportunities and provide hands-on experience to their students.



Students collect water samples at the Hangman’s Bridge site in Alpine County.



Lorraine Craik with student volunteers.

This collaborative effort is planned and coordinated by the Nevada Department of Environmental Protection (NDEP) with assistance from the Carson River Coalition Education Working Group. A special thank you to Mary Kay Wagner, NDEP, for all of her hard work in organizing this event! Funding for CRC activities is provided by the Nevada Division of Environmental Protection (NDEP) and the Carson Water Subconservancy District (CWSD).

Do you have events or articles that you would like to have published in "The Flow"?

Please send email to [debbie@cwsd.org](mailto:debbie@cwsd.org).

**Editor:**

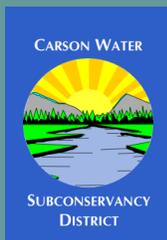
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This newsletter has been developed in part with Clean Water Act 319 (h) funds from the Nevada Division of Environmental Protection.

## Upcoming Events

### **Truckee River Water Quality Standards Review**

January 12, 2012, 3:00 – 5:00 PM

Nevada Department of Wildlife Conference Room, 1100 Valley Road, Reno, Nevada 89512

Contact: Randy Pahl (775) 687-9453, [rpahl@ndep.nv.gov](mailto:rpahl@ndep.nv.gov) or John Heggeness (775) 687-9449, [jheggene@ndep.nv.gov](mailto:jheggene@ndep.nv.gov)

### **Carson River Film Festival**

January 19, 6:00 pm: Ormsby Room, 911 Musser Street. Contact Sue Donaldson (775) 336-0242 or [donaldsons@unce.unr.edu](mailto:donaldsons@unce.unr.edu).

### **Carson River Watershed Forum**

February 9, 2012, 9:00 am—3:30 pm

To Register: [kathi@cwsd.org](mailto:kathi@cwsd.org).

### **Nevada Water Resources Association Annual Conference**

March 6-8, 2012: Las Vegas. Download a registration form at [www.nvwra.org](http://www.nvwra.org)

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by receiving a digital copy of newsletter!  
Email [kathi@cwsd.org](mailto:kathi@cwsd.org) to switch. Thanks!



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