

Watershed Connections

Delivering News to the Carson River Watershed Community

Photo by Justin Bedocs

A Community Forged in Water

By Justin Bedocs, Americorps, CWSD

On June 22, 2018, over 100 [Carson River Coalition](#) (CRC) partners converged on The Nature Conservancy's (TNC) [River Fork Ranch](#) (RFR) in Genoa, Nevada to celebrate the CRC's 20th Anniversary! The confluence of the East and West forks of the Carson River symbolized CRC partners coming together from all corners of the watershed to celebrate 20 years of collaboration. The CRC is a watershed-wide stakeholder group, created in 1998 in response to the 1997 floods. The Coalition guides the integrated watershed planning process and seeks holistic watershed scale solutions.



Ed James speaking at the celebration

Photo by Shane Fryer

During the event, several speakers discussed the history and creation of the CRC, its accomplishments, and future plans. Two of the CRC's founding members, Tom Baker (formerly with Senator Bryant's office) and John Cobourn (University of Nevada Cooperative Extension) spoke at the celebration about the strategic and cooperative efforts taken to create the CRC. John Cobourn affirmed, "This river is so important to this community and to all of the communities in the watershed." Creating an integrated watershed process (the CRC) was critical for finding innovative solutions to watershed issues.

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Kurt Englehart presents the CRC Certificate of Commendation

Photo by Shane Fryer



Meet Our New Watershed Partners

Darcy Phillips, Executive Director, River Wranglers

We welcome Darcy Phillips, the new Executive Director of River Wranglers! Darcy started in March and brings a variety of experience as a teacher, a non-profit administrator, and a lover of all things rivers. A native Coloradan, Darcy finds our region's variety of desert, forest, and mountains the perfect blend. Darcy has a master's degree in anthropology with concentrations in geology and non-profit management. She taught locally at Truckee Meadows Community College and has experience with numerous non-profit organizations, including Junior Achievement, the Women's Foundation of Colorado, and Colorado College. Darcy enjoys hiking, golf, painting, and writing. She and her husband are the parents of a rambunctious teenage son who enjoys archery.



Kimra McAfee, Executive Director, AWG

Please welcome Kimra McAfee as the Executive Director of the Alpine Watershed Group (AWG). Prior to joining AWG in June 2018, Kimra served as the Executive Director for Oakland's Friends of Sausal Creek since 2009, providing oversight for the organization's restoration, education, and monitoring programs. Kimra managed field staff, oversaw finances, wrote and administered grants, led other fundraising efforts, and provided leadership in community outreach. She holds a Bachelor of Arts in English from University of California, Berkeley, and a Master of Arts in Geography and Human Environmental Studies from San Francisco State University. Kimra treasures every moment with her two teenage daughters and husband, and baking all her family's bread. In her new home she hopes to have more time for playing her banjo and mandolin, gardening, and hiking.



Mo Loden, Watershed Coordinator, AWG

Mo Loden, Alpine Watershed Group's new Watershed Coordinator, grew up in Knoxville, TN adventuring throughout the Cumberland Plateau and Appalachian Mountains. Mo graduated from the University of Tennessee with a BA in Environmental Studies and GIS. During that time, she interned with the Cumberland Trail Conference developing and maintaining trails. Mo moved to California to serve as the AmeriCorps River Monitoring Coordinator with the South Yuba River Citizens League. She managed 70+ river monitoring volunteers collecting data to protect the Yuba watershed. Most recently, she worked at Sierra Streams Institute as the Water Quality Lab Manager collecting and analyzing baseline data in Nevada County's Deer Creek and Bear River watersheds. An avid outdoor enthusiast, Mo has work experience in white water rafting, snow skiing, and rock climbing across the USA, including Asheville NC, Missoula MT, and Truckee CA.



CWSD Board Adopts 2017 Carson River Stewardship Plan Update

By Brenda Hunt, Watershed Program Manager, CWSD

Carson River Coalition (CRC) partners and Carson Water Subconservancy District (CWSD) staff recently completed the 2017 Carson River Watershed Adaptive Stewardship Plan (CRWASP) 10-year update. CWSD's Board of Directors adopted the updated Plan in January 2018. This Plan serves as the overarching watershed level planning document and helps guide actions, including programs and projects consistent with the CRC's Watershed Guiding Principles and vision. The new document adds information acquired since 2007 relating to the watershed and its natural resources, with a focus on water quality. Used in conjunction with the original 2007 plan, it is a roadmap to our integrative watershed management planning and implementation process for the project categories outlined in Figure ES-1.

So what's important about this comprehensive watershed-level planning document?

- ✦ The Plan qualifies agencies or non-profit bodies to receive US Clean Water Act Section 319 grant funding through the Environmental Protection Agency (EPA) or Nevada Department of Environmental Protection (NDEP). The updated Plan meets the nine elements required to be a U.S. EPA/ NDEP certified Watershed Plan in the Nevada portion of the watershed. Agencies and non-governmental bodies can apply for Section 319 funding for projects and programs that are consistent with the goals and objectives of the Plan. The Plan can also be used to apply for other federal, state or local grant funding.
- ✦ In relation to water quality improvements, the Plan defines critical areas in the Carson River Watershed and proposes management measures that limit potential sources of non-point source pollution or polluted runoff

Original and 2017 Plan Objectives:

- a) provide an overview of the watershed and its challenges
- b) identify potential sources of nonpoint source pollution
- c) discuss short and long-term strategies and actions to address these potential sources
- d) provide a tracking mechanism for projects and programs
- e) identify future project and program opportunities
- f) address the nine criteria elements of the Clean Water Act Section 319 Program

Figure ES-1: Carson River Integrated Watershed Management Project Categories



(go to [Table 8.1.pp72](#)). Several reaches of the Carson River are US Clean Water Act Section 303(d) impaired water bodies. Specific impairment constituents include total suspended solids (TSS), total dissolved solids (TDS), turbidity, total phosphorus (TP), dissolved oxygen (DO), Zinc, temperature (T), and E. coli. Some reaches have high levels of metals from past mining activities such as mercury, arsenic, iron, and nickel. Therefore, some reaches do not meet the EPA and NDEP water quality standards and cannot support all defined beneficial uses. Please see [History of Carson River Water Quality Standards](#) for a list of beneficial uses.

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“The roof leaked. We had buckets everywhere catching water, which was kind of apropos for a water group.” - Ed James

Photo by Justin Bedocs

(Continued from page 1) CRC 20 Year Celebration

Ed James, General Manager of Carson Water Subconservancy District (CWSD), described how CWSD was asked to coordinate the fledgling group and navigate the political difficulties the early CRC faced. Ed stressed that today the CRC is an example of what we can accomplish when we work together; however, the group had to overcome suspicions and concerns. Mr. James recalled a 1999 forum at the Ormsby House: “The roof leaked. We had buckets everywhere catching water, which was kind of apropos for a water group.” From floods to roof leaks, the CRC was literally forged in water. [Eleven guiding principles](#) were created and adopted by five counties and twenty agencies/organizations. These are still the foundation of the CRC today.

Brenda Hunt (CWSD Watershed Program Manager) and Shane Fryer (CWSD Watershed Program Specialist) outlined multiple plans and projects accomplished by CRC partners. They praised CRC partners for the accomplishments made possible through their commitment, communication, and cooperation. It’s true, the river connects our communities in the watershed. Protecting it is the common cause that the CRC has rallied around for twenty years and the event celebrated the positive results achieved through collaboration during that span.

A highlight of the evening was the recognition of the CRC contributions and hard work by U.S. Senator Catherine Cortez Masto. Kurt Englehart (Senator Masto’s Regional Representative for Rural Nevada) presented a Certificate of Commendation to the CRC as a thank you for 20 years of accomplishments.



John Cobourn discussing the CRC’s Origins Photo by Julia Keane



J.B. Lekumberry grilling Ranch One burgers. Photo by Julia Keane

Darcy Phillips, Executive Director of River Wranglers, expressed her appreciation of the event: “It was perfect. I thoroughly enjoyed myself as did all of my family. Thank you!” Americorps volunteers from Carson City and Reno helped serve food catered by [J.T. Basque Bar & Dining Room](#) (Gardnerville). All natural, grass-fed beef burgers in the shape of Nevada from the adjacent [Ranch One](#) (1909) were the stars of the show. The evening festivities were capped off with juggling by [Caleb Kondor](#), music and contra dancing with the [Sierra Sweethearts](#) and cupcakes from [Artisan Cafe](#). Thanks to everyone who helped make this a stellar event. The CRC is 20 years strong and with all of you sitting at the table, here’s to 20 more!

Funding to Fight the Invader - Yellow Starthistle

By Shane Fryer, CWSD

The foothills of California's Western Sierra are besieged by yellow starthistle. This noxious plant has dominated these beautiful oak and grass landscapes for decades. If you hike the trails around Auburn or Folsom, CA, you will see yellow starthistle growing in thick, tall tangles of needled green vegetation with small, spiny yellow flowers. Land managers often use bush hogs and other masticators to keep trails clear for hikers and horse back riders.

Although Washoe County, NV has been working for years to stem the spread of yellow starthistle, this unwanted invader has only recently appeared in the Carson River Watershed. Yellow starthistle is not currently wide spread, allowing the opportunity to limit the establishment of this noxious weed. If yellow starthistle does become wide spread, it could be costly to agricultural producers, constrain recreation, and greatly impact wildlife habitats.

In response, the Carson Water Subconservancy District (CWSD) successfully attained weed management funding from the Nevada Department of Agriculture (NDA). This was achieved in collaboration with Carson City Weed Coalition (CCWC), Dayton Valley Conservation District (DVCD), Carson City, Lyon County and Storey County. To avert the establishment of yellow starthistle in the Basin, a project is scheduled to remove mapped populations of Yellow starthistle from multiple Carson River Watershed sites. The key areas of concern are the Moundhouse industrial complex and range areas that extend east to Nevada State Route 341 in Lyon County. DVCD crews will chemically treat the industrial complex three to four times to eliminate the expanse of yellow starthistle and prevent regrowth.



*yellow starthistle near
Moundhouse Industrial
Complex*

*Photo by Jacob Lassen, Dayton
Valley Conservation District*

Weed managers are seeking the help of leaseholders in the industrial complex to assist with monitoring and maintenance of this noxious weed. CWSD will create yellow starthistle information packages to assist landowners with identifying starthistle, links to web resources and contacts for assistance with its removal.



yellow starthistle

*Photo by Peggy Greb, USDA Agricultural
Research Service*

In Carson City, yellow starthistle is associated with common trucking routes. U.S. Route 50 from California is identified as a chief weed vector connected to local commercial distribution centers. Other populations of yellow starthistle are mapped along College Parkway between Walmart and Home Depot. Both DVCD and Great Basin Institute (GBI) crews will treat these sites within Carson City.

Treatments in Storey County will prevent the spread of yellow starthistle to the middle Carson River. In 2017, Storey County partnered with DVCD crews to identify and treat yellow starthistle. With this funding, DVCD will provide noxious weed control along the Gold Creek and 6-mile and 7-Mile Canyon drainages, seasonal tributaries of the Carson River.

Through watershed-wide collaboration, approximately 1,245 acres will be treated and monitored. Areas dominated by noxious weed monocultures will be restored through re-seeding and re-vegetation efforts. Other noxious weeds will also be treated, including perennial pepperweed, hoary cress, poison hemlock, Russian knapweed, musk thistle, Scotch thistle, and Canada thistle. Maintenance and monitoring will be critical to ensure any new infestations or regrowth are treated quickly and effectively.



(Continued from page 3) Stewardship Plan Update

- ◆ The Plan lists specific projects ([go to Tables 8.3-8.7, p 83](#)) per jurisdiction (county, tribal, watershed-wide) that may help implement the proposed management measures that will improve water quality in the Carson River and/or meet other integrated watershed planning and management goals. It outlines proposed CRC project and program protocol to track past, current, and future projects and programs.
- ◆ The CRWASP has not been certified as a Watershed Plan by USEPA and the CA Lahontan Water Quality Control Board for the California portion of the watershed. CWSD, USEPA, and Lahontan representatives are working toward this goal in conjunction with Lahontan's West Fork Carson River Vision Project.
- ◆ There are 37 Suggested Actions for Future Management and Implementation of the Plan ([go to Table 8.8, p 122](#)). These actions summarize directions and actions per project category and critical area to achieve plan implementation.

Benefits of the Plan are many and based in the cooperation and implementation of projects by our CRC partners:

- ◆ Over the past ten years, 29% of the river corridor between CA Stateline and Weeks Bridge (just upstream of Lahontan Reservoir in NV) has been revegetated and stabilized.
- ◆ Water quality data from 1993 - 2012 shows a decreasing trend in TP at three sampling sites along the river.
- ◆ Clear Creek, the only perennial stream along the Carson River in NV, was removed from the Clean Water Act Section 303(d) list of impaired waterways.
- ◆ Over 30% of the floodplain (*totaling over 12,000 acres*), is protected from development ([UNCE 2015](#)).

The 2017 update is a supplemental document to the original 2007 Plan and is available on the [CWSD website](#). Thank you to all who helped make this a living, breathing plan for achieving a healthy and viable Carson River Watershed. Thank you to our funders! The update was made possible through EPA/NDEP Clean Water Act Section 319 funds and matched by funds from CWSD.

2018 Water Summit

by Ed James

Nevada's recent development boom has not come without its challenges. Ongoing variation in seasonal precipitation due to climate change, coupled with an increase in demand on groundwater supply, has stressed many groundwater basins, particularly those that are already over-appropriated.

In response, the Carson Water Subconservancy District (CWSD) hosted a Water Summit on January 30, 2018 to address water supply concerns within the Carson River Watershed. State Engineer Jason King addressed the summit's 100+ participants about the potential effects to groundwater right owners, especially those with domestic wells.

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Alpine Watershed Group Revamps Education & Outreach Program

By Julia Keane

In 2018, Alpine Watershed Group (AWG) is expanding its outreach and education programs, thanks to the extra support provided by AmeriCorps volunteers. AWG works to inspire students, professionals, and community members to share their love of Alpine County's natural resources by participating in watershed restoration projects and monitoring events.

AWG recently completed their first year partnering with Diamond Valley School's (DVS) Advanced Learner Program. AWG and DVS partnered to create curriculum for an after school program specifically focused on watershed stewardship and natural resources protection. From December 2017 to May 2018, AWG's Education and Outreach Coordinator, Julia Keane, presented hands-on activities and field trips focusing on forest health, wildlife, resource competition, and more.



Julia Keane educating students

Photo Courtesy of AWG

AmeriCorps member Marina Vance, AWG's Restoration and Monitoring Coordinator, analyzes citizen science data and coordinates volunteer efforts. Environmental education and citizen science go hand in hand, when engaging communities to understand the natural world.

AWG is partnering with the Woodfords Washoe Tribal community and the Washoe Environmental Protection Department (WEPD) to develop summer youth educational opportunities. Potential projects include community garden days and presentations at the Woodfords Indian Education Center (WIEC).

If you are an educator or youth program coordinator and would like to get involved, please contact Julia Keane at awg.snap.ed@gmail.com or 530-694-2327. You can also visit AWG's website at www.alpinewatershedgroup.org to learn more.

(Continued from page 6) Water Summit

Although a domestic well does not need a water right, it is often that these wells are the most junior in priority in their groundwater basin. Many municipal groundwater rights are in the same situation. If the State Engineer was to issue a pumping curtailment by priority, many domestic wells and municipal groundwater rights could be first in line to see restrictions.

To deal with the over-appropriation of groundwater basins, the State Engineer and his staff are considering ways to bring pumping amounts in line with annual recharge without impacting groundwater right holders. These new measures include developing stakeholder groups and "Drought Management Plans" for over-appropriated basins. Mr. King concluded by discussing his recent letter informing Lyon County that all new developments within Silver Springs must demonstrate they have a reliable water right before the development can be approved.

Other summit speakers included USGS scientists, Mike Dettinger and Wes Kitlasten, to address projected changes in seasonal runoff. Mr. Dettinger presented on how a warming climate allows for earlier spring snowmelt. Mr. Kitlasten explained how surface and groundwater are affected by early snowmelt. Bruce Holmgren, Division Chief of NDEP, discussed possible changes to water reuse regulations. Finally, Benjamin Hatchett of Desert Research Institute presented his study on snow line rise in the Sierra and its impact on water supply and the ski industry. Most presentations and videos of the summit are available on [CWSD's website](http://www.cwdsd.org).



★The AMERICORNER★

CWSD Welcomes New AmeriCorps Member by Justin Bedocs



Kayaking on the Carson River Photo by Shane Fryer

I enjoy playing guitar, golfing, and gardening. I've only been here for a few months, yet I have already met so many amazing professionals! It has been a great pleasure working together with everyone for our common watershed cause and I hope to continue this meaningful work after my term of service is complete. CWSD is partnering with the [Truckee Meadows Parks Foundation](#) as a host site for my AmeriCorps term.

Hello! I am CWSD's new AmeriCorps member, Justin Bedocs. Hailing from the flat lands of Ohio, I am CWSD's Watershed Program Technician. I focus on outreach and education while also assisting with planning and coordination efforts.

I earned my Master's of Environmental Science (water resources) from Miami University (OH). I also hold a BA in Anthropology and an AAS in Archaeology. As such, I am interested in the ways that people interact with the world around them.

My passion for environmental conservation began while conducting a service-research project in southeast Ohio on historic coal mining. I learned how Acid-Mine Drainage from abandoned coal mines can impact streams and habitat. I was struck by how it altered local children's perceptions of how a normal stream should look, with many of their nature drawings depicting bright orange streams.

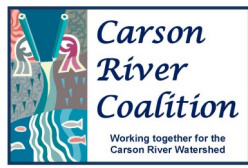
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CWSD's focus is to work within existing governmental frameworks to promote cooperative action for the watershed that crosses both agency and political boundaries.

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Thanks to Contributors!
Justin Bedocs
Shane Fryer
Brenda Hunt
Ed James
Julia Keane
Darcy Phillips



Upcoming Events

July-August, 2018

Summer Concert Series-Dangberg Ranch Historic Park, Minden, NV.

Visit: <https://www.dangberghomeranch.org/events/>

July 28, 2018, 9am-12pm

Safety Day-Fuji Park, Carson City, NV

Visit: chichesterl@unce.unr.edu

August 11, 2018,

AWG Water Monitoring day & Other Events

Visit: http://www.alpinewatershedgroup.org/get_involved

September 8, 2018, 9am-2pm

Markleeville Creek Day-Markleeville Library Park

Visit: <http://www.alpinewatershedgroup.org/creek-day>

October 11-12, 2018, 8am—4:30pm

"Get on the Bus" Carson River Watershed Tour

Visit: www.cwsd.org for information and registration