



Education Working Group
Meeting Notes
February 28, 2024
9:30 - 11:30AM

*These notes were gathered via AI without a recording of the meeting. If you have additions or corrections, please contact us.

CRC Education Working Group Vision:

A Carson River Watershed community that believes their behavior impacts watershed wellness and applies their knowledge to act in ways that benefit the entire watershed.

Attendee Name	Title	Acronym	Organization
Kristina Burnette	Environmental Scientist	WEPD	Washoe Environmental Protection Dept.
Rebecca Feldermann	Executive Director	RW	River Wranglers
Sarah Fichtner	Floodplain Mapping Coordinator	NDWR	NV Division of Water Resources
Brenda Hunt	Watershed Program Manager	CWSD	Carson Water Subconservancy Dist.
Ed James	General Manager	CWSD	Carson Water Subconservancy Dist.
Rachel Kieffer	Headwaters Coordinator	AWG	Alpine Watershed Group
Erin Larsen	Volunteer Coordinator	CCPROS	Carson City Parks, Rec & Open Space
Lindsay Marsh	Water Resource Specialist 1	CWSD	Carson Water Subconservancy District
Debbie Neddenriep	Water Resource Specialist 2, CFM	CWSD	Carson Water Subconservancy District
Kelly Nicholas	Watershed Tech, AmeriCorps	CWSD	Carson Water Subconservancy District
Cale Pete	Environmental Manager	WEPD	Washoe Environmental Protection Dept.
Kristin Sanderson	Park Interpreter, Fort Churchill State Historic Park	NVSP	Nevada State Parks
Erin Smith	Carson City Outreach & Education partner	RCI	Resource Concepts Inc.
Christy Sullivan	District Clerk	LVCD	Lahontan Valley Conservation District
Courtney Walker	Stormwater Program Manager	DC	Douglas County Public Works
Sydney Wirkus	Program Coordinator	RW	River Wranglers

ROUND ROBIN UPDATES:

Erin Smith, RCI: The EPA is releasing a new maximum contaminant level (MCL) for per- and polyfluoroalkyl substances (PFAS) in drinking water. The zero-tolerance policy is four parts per trillion and will affect public water systems and manufacturers throughout Nevada. She emphasized the Carson River is non-detect for PFAS, but doesn't know who took the water samples; she'll investigate. She also notes education and maintaining non-detect levels in the watershed are important. \$2B in funding is to be distributed but it is unclear how. Ed suggested that although there's a non-detect in the river, wastewater plants may contribute to groundwater sources; science does not yet fully understand contaminant transportation. The grant application process is unknown currently. Tribal entities may be able to apply for grants.

Courtney Walker, DC: Provided stormwater master plan updates, including a follow-up meeting with an agricultural group and a revised plan with a new title.

Cale Pete, WEPD: Mentioned upcoming outreach events, including Earth Day on May 4 at their Carson Colony gym.

Sarah Fichtner, NDWR: DWR still has an open floodplain manager position and upcoming community assistance calls for cities throughout Nevada. They have a high-water mark event for June 5, a Flood Awareness Week meeting on March 26, and Water University on March 13.

Christy Sullivan, LVCD: They have a forest conservation poster contest for K- 12 students. They also have invasive species education and offer help with tagging trees and other tasks. The district is involved with the national invasive species program, with local classes starting in March.

Kristin Sanderson, NVSP: The parks are facing vacancy challenges that are continuing to impact the ability to conduct community outreach and events. She requested if anyone knows people looking for seasonal jobs to send them to the [Parks website](#) to apply and also this group to assist in advertising available positions.

Rebecca Feldermann, RW: They have upcoming events and workdays, including a trout release postponed due to storms. She also discussed upcoming floodplain management outreach events.

Erin Larsen, CCPROS: Introduced herself as the new volunteer coordinator. She discussed upcoming events with River Wranglers and an Arbor Day event Apr. 26.

Lindsey Marsh, CWSD: Is immersing herself in River Wrangler events and high-water mark meetings.

Rachel Kieffer, AWG: AWG received a Whale Tail grant for environmental education, which will enable field trips for Diamond Valley School. Markleeville will start its farmer's markets on Saturdays May-Sept. AWG will be participating in an April BioBlitz for the endangered [Carson Valley monkeyflower](#). AWG will be participating in the [Woollystar Music Festival](#) in June, the [Death Ride](#) in July, and two events in September: Washoe Mountain Gathering and [Creek Day](#).

Debbie Neddenriep, CWSD: Seeks public input for the floodplain management plan and mentions a high watermark unveiling event at Morgan Mill.

Kelly Nicholas, CWSD: Working on the Watershed Forum, which is March 5 and 6. Also, she helped create slash piles at the Dresslerville community and asked Cale and Kristina for photos of the willow burn. She will be updating the back side of the Watershed map and wants to update the website. Plans to update educational resources and logos on website, with dependencies on partner organizations. CWSD wants to add educational resources, regenerative ag, and recreational opportunities to the website.

Updates – Grants

DC LID and CRC Coordination grants

Brenda updated the group on the status of the I Am Carson River Watershed campaign.

Update of Physical and On-line Watershed Maps. As we received limited update comments, be ready to provide additional feedback and discuss proposed updates.

Map: CWSD recommends a combination of geographical locations, animals, and water features for the scavenger hunt, and suggests continuing to cultivate a relationship with the Children's Museum of northern Nevada. Cale Pete from the Washoe Environmental Protection Department requests a copy of the map for the scavenger hunt; John Warpeha might have an outdated version. CWSD ponders how to address questions on the physical map, suggesting a scavenger hunt for answers. The list of natural disasters in Alpine County should expand, and the map should include 2023 low-elevation flooding and the 2017 Six Mile Canyon washout. CWSD considers adjusting the layout of the physical map to make it more readable, possibly by running the river diagonally. CWSD suggests alternative term to "challenges" for managing invasive species, preferring "stewardship" or "managing." CWSD seeks design feedback, focusing on improving the visual consistency and clarity. CWSD is considering using a Google Spreadsheet for real-time collaboration and commenting on the map design, but this will require data entry after the forum.

Recent grant applications with educational components:

DC LID Phase II CWA 319 – Courtney Walker and River Wranglers submitted a grant proposal for a storm drain project at Carson Valley Middle School, hoping to expand their outreach and education efforts. Douglas County and [the school district? CWSD? CVCD?] would be partners on the project, with Courtney providing time and match funding for the outreach and coordination.

TNC Grant apps to CWSD and 319 – CWSD’s grant funding supports Laurie Leonard's 319 project, including regenerative ag practices and a riparian habitat proper functioning condition workshop in May at River Fork Ranch.

~~CVCD Application (Education nexus) CWSD and 319~~

CWSD applications: Soil Health/Regenerative Ag & Map to the Stewardship Plan, 319 – CWSD submitted two 319 grant applications supporting soil health and regenerative ag projects in Carson City and Dayton?they are in Fallon and Lyon Co., Silver Springs technically. They plan to continue facilitating the introduction of regenerative ag practices, including cover cropping and rotational grazing, along seven miles of river on Break-a-Heart Ranch. They are also developing a “roadmap to the stewardship plan” to address EPA's potential concerns about the CRASP and to better understand what they want to see changed in the plan.

AWG East Fork CA 319 - Alpine Watershed Group applied for 319 funding to conduct a geomorphological assessment and sediment transport study of the Carson River from the headwaters to the state line. The EWG hopes eventually to receive similar funding on the Nevada side, thus enabling prioritization for river/restoration projects.

WEPD – They seek 319 funding for post-fire restoration and erosion control projects directly through USEPA.

Other – There are food insecurity grants available that offer potential collaboration with UNCE and USDA, with focus on water scarcity in Sparks. Ed could potentially work on legislation for that.

Upcoming Events/Other Items

WEPD AWG? will host a river monitor training and a volunteer appreciation picnic.

Debbie mentioned the Fallon Paiute Shoshone Tribe's Earth Day event on April 20 at Oats Park in Fallon, with live music and vendors.

Cale Pete from WEPD mentioned the Washoe Mountain Gathering on September 13-15 and the creek day event on September 21st, as well as the Death Ride and Woollystar Music Festival dates.

CWSD is planning its Watershed Forum for next month. A variety of speakers will present, including floodplain managers, engineers, planners, and water purveyors. Keynote speaker Adam Sullivan discusses role as state engineer, new court findings, and future watershed health.

River Wranglers will be at the FPST Earth Day and a field day at Pioneer High School.

CWSD seeks contributions for the June newsletter.

Cale and Kristina mentioned there were red mites in the water at Hobo Hot Springs on the tribe's Stewart ranch parcels.

Watershed and Enviroscope Model Training

Debbie, Lindsay and Kelly demonstrated the floodplain model and the enviroscope nonpoint-source pollution model so partners who don't have the models onsite can use them if CWSD staff aren't available for events.

Floodplain model: Wetlands, Parking Lot, Parking Lot with Detention Pond

Explain watershed model to students, highlighting river's path from mountains to desert. Show watershed map.

- a. Nevada at one time had more wetlands than it does now. Wetlands are areas of land that are very wet and support a lot of plant and animal life. They absorb water and just like sponges – slow floodwaters, filter pollutants, recharge groundwater. Nevada is the driest state but still frequently floods!
- b. It's important for communities to consider water in their ordinances and standards since building on wetlands and/or floodplains causes 6 x more damage than if left undeveloped. When speaking with public, CWSD supports open floodplain lands/ wetlands.

Carson City has purchased 71% of the special flood hazard areas, including the Carson River Canyon and corridor, to conserve open spaces and reduce flooding risks.

Agricultural producers in the floodplain often bear the brunt of flooding in open spaces, and CWSD works with counties to promote water-sensitive infrastructure and ordinance updates.

- c. While natural floodplain provide the optimum benefit, let's think about water when we build. By thinking about water before a construction project occurs, impacts of flooding save \$6 for every dollar spent to reduce flooding the best mitigation we recognize that when constructing the Engineers have created retention (keep/hold onto for a long time) and detention (keep for a short time) basins that mimic, or act like, wetlands. Some are lined with material that resembles sponges. This model has a fixed outlet – it doesn't change size – so that when water flows out it does so at a predictable rate.
 - Behind the eagle statue at 395 @ Hwy 580
 - Maverick gas stations

Flood safety:

Respect water when it is flooding.

- One inch of water can cause \$25K in damage to a house.
- One foot of water can sweep away a small vehicle.
- DON'T: walk or bike through flood water

Enviroscope: Describe what nonpoint vs. point-source pollution is (using factory and wastewater treatment plant and pointing out other elements of model)

- Livestock waste by the river

- Pet waste from dog walks
- Fertilizer from lawns
- Oil/coolant from cars
- Erosion from wildfire on mountains (remove a couple trees)
- Dust from farming
- Litter from construction crew lunch

These are demonstrated using brightly colored sugar-free drink powder and cocoa. We've used sesame seeds too.

- Make it rain. YUCK! What can we do???
- Livestock waste – fix the fence
- Pet waste from dog walks – pick it up and throw it away
- Fertilizer from lawns – don't apply so much, read and follow directions
- Oil/coolant from cars – fix the cars, use other transportation
- Erosion from wildfire on mountains (remove a couple trees) – be fire-aware*, seed flowers and plant trees after
- Dust from farming – Plant a cover crop
- Litter from construction crew lunch – throw it away, take out trash
- Fire: *When is a fire out? WHEN THE FIRE IS COLD. Put your hand ON it when you think it's out (hover hand above and lower). If it's at all warm at any point it's *not* out. DO NOT LEAVE A LIVE FIRE UNATTENDED

Next Quarterly Meeting: May 15, 2024, 9:30 – 11:30am



Creeks and Communities:

A Continuing Strategy for Accelerating Cooperative Riparian Stewardship

2024 Trainings

Riparian proper functioning condition (PFC) assessment uses common terms, definitions, and methods to identify opportunities for positive change from reasonable investments, enhance local management, and solve problems by people most affected. Integrated Riparian Management uses PFC assessment to prioritize needs for adaptive management with monitoring for riparian objectives and strategies. Trainings are available to landowners, Federal, State, and local agency personnel, tribes, industry, conservation interests, and others. Instructors are from Nevada Creeks and Communities Team. There is no cost for classes.

Please share this announcement within your networks.

CLASSES

PFC Assessment for Integrated Riparian Management – February 26-29 by Zoom - The Zoom class will feature an optional day of participant-provided practice or problem solving about class concepts.

PFC Assessment for Integrated Riparian and Grazing Management – May 20-24, River Fork Ranch, 381 Genoa Lane, Minden, NV 89423.

PFC Assessment for Integrated Riparian and Grazing Management – June 3-7, Eureka Opera House, NV

PFC Assessment for Integrated Riparian and Grazing Management – July 15-19, Humboldt County Cooperative Extension, Fairgrounds Winnemucca, NV.

PFC Assessment for Integrated Riparian and Grazing Management – July 22-26, Great Basin College, Elko, NV.

For PFC class reservations or questions: Sherman Swanson (775-233-6221 swanson@unr.edu) with name, affiliation, address, phone, e-mail, and interest, discipline, role or area of expertise.

You are welcome for the parts of the class you need or want (1-5 days). After requesting a reservation, an agenda will provide a timeline. All classes begin with learning about and participating in PFC assessment, step 1 in the integrated riparian management process (IRMP). Presentations on steps 2-7 of IRMP - riparian values, riparian area/reach prioritization, goals and objectives, management and/or restoration, monitoring, and adaptive management. PFC-IRMP and Grazing management classes include more about grazing management concepts and engagement with a case study for application of IRMP concepts.

PFC Assessment and/or Integrated Riparian Management -- Coaching field sessions are available for small groups such as interdisciplinary or collaborative teams beginning in May.

For reference materials go to <https://nevada.box.com/s/3yI93wvg9pakyyndy4c7izxoi4bowtqg> AND <https://www.blm.gov/learn/blm-library/agency-publications/technical-references> Be sure to scroll down the page and expand the riparian area management section.