



Watershed Watch

A publication of the *Coalition for the Upper South Platte*

A Healthy Watershed ~ Now and in the Future

A Quarterly Newsletter

Volume 14, Number 1, Summer 2013

CHANGES AT CUSP

Over the past few months we've seen a lot of changes here at CUSP. When we started, we never thought we would grow to a staff of 23! As we've welcomed new employees, we've also had to say goodbye to a few of our longtime staff. CUSP is nothing without our people, so I'd like to offer a fond farewell to a few that are moving on.

Marti Cambell - Forester

We wish Marti all the best upon her retirement. Marti started with CUSP in 2002, months after the Hayman Fire. She has been an instrumental facilitator during the Community Wildfire Protection Plan (CWPP) planning process. She has worked closely with communities across four counties to network with agencies and forest professionals to gather the data and resources they need to develop local CWPPs. Raised in El Paso and Teller Counties, Marti is a forestry graduate of Colorado State University. In her career, Marti has focused on her strong commitment to healthy forests and keeping residents safe in the mountains she loves. Now she will focus more on her children and grandchildren, get in some travel with her husband, Joe, and work part time with Colorado State Forest Service on statewide outreach campaigns.



Mark Herndon - Deputy Operations Director, Field Crew Manager

After a decade of being one of the most visible and respected "faces of CUSP", Deputy Operations Director, Mark Herndon is moving on. Mark started with CUSP in April of 2003, coming to us as a wildland firefighter to work on Hayman recovery and fuel mitigation projects across the watershed. While he has many fond memories of his time at CUSP, some of the projects that stand out for him include the work he did at Burning Bear in Guanella Pass, working with Up With

People, and working with the United Methodist Church (UMC) groups from Joplin, Missouri. He is also proud of the opportunity he had to give back to Joplin, MO, when he and other CUSP staff went to Joplin in 2011 to help with relief efforts after the town was devastated by a catastrophic tornado.

He has enjoyed being a part of the local fire department and working in all aspects of fire management from mitigation to suppression to recovery work.

Mark is moving on to work in forestry and project management for a local business, Seed Masters, with whom CUSP regularly contracts, so we will still get to see and work with him. Good luck Mark!

Jara Johnson - Deputy Operation's Director of Habitat and Monitoring Coordinator

We also bid a fond farewell to Jara as she moves on from CUSP to work as a Field Geologist in the Geoenvironmental Division of the Environment and Water Group at SCN-Lavalin. This Canadian-based company is internationally recognized as an engineering and construction leader.



After completing her Master of Science at Colorado School of Mines, Jara came to CUSP seeking an internship in March of 2010. Recognizing her stellar academic success, I instead offered her a staff position, in which she has overseen a wide variety of projects, including our abandoned mines assessment, the Oil & Gas baseline study in South Park, and working on watershed assessments in and around the watershed.

Jara is a native of Alma and her new office is located there. Though she will be traveling quite a bit, we feel certain we can lure her back to CUSP for a volunteer project or two!

Carol Ekarius

NOXIOUS WEED WATCH

Noxious weed season is upon us. Colorado noxious weeds cost property owners over \$10 million annually in lost productivity and decreased property values. CUSP has facilitated treatment cost-sharing, public education and monitoring of noxious and invasive species in and adjacent to the Upper South Platte Watershed for over a decade and will continue to assist land owners, as funding allows, to maintain the integrity of existing management plans and increase active participation.

Early detection and eradication are an annual priority. The Colorado Department of Agriculture created **The Watch List**, consisting of species like meadow hawkweed and purple pampasgrass that pose a 'threat to agricultural productivity and

environmental values' of our state lands. To review this list or report sightings of these new invaders, go to www.colorado.gov and search 'noxious weed list', visit www.uppertsouthplatte-weeds.org or email weeds@state.co.us.



Volunteers remove Musk Thistle

Noxious populations in the Upper South Platte Watershed and neighboring watersheds are prolific this year due to the late snow season. Canada and musk thistle, the knapweeds and spurges appeared in July in the high country.

Populations of the escaped ornamentals such as oxeye daisy, scentless chamomile, orange hawkweed, and especially yellow toadflax (butter & eggs) have been sighted in the foothills and burn areas.

What You Can Do:

- Education and vigilance are key!
- Be proactive by familiarizing yourself with the local invasive species.
- Protect yourself by understanding which noxious weeds are toxic to humans and livestock.
- Help your community by reporting newly discovered plants to the appropriate organizations.
- If you're a past or potential client of CUSP, contact the office to let us help you plan your fight against noxious weeds in our watershed.

Resources for Identifying, Reporting, Treating Noxious Weeds:

- www.colorado.gov (search for noxious weed management program)
- www.conps.org (for info on invasive species found in seed mixes or nurseries)
- www.cwma.org (for news and spotter reporting throughout Colorado)
- www.uppertsouthplatte-weeds.org (for CUSP's focus weeds & to report sightings in the Upper South Platte Watershed)

IMPACTS OF NOXIOUS WEEDS

- destroy thousands of acres per year
- loss of native plant communities
- some are **toxic** to livestock and wildlife
- some are potentially harmful to humans
- displace wildlife habitat
- spread rapidly to urban areas and damage landscaping
- lower property values

THE LAW
Colorado state law CRS 35-5.5 requires property owners to control noxious weeds on their land.

TELLER ENERGY SAVINGS

A few energy projects in Teller County have yielded big results! The Energy Management Assistance Program through the Governor's Energy Office provided a free energy audit for the town of Victor and the Cripple Creek/Victor RE-1 School District. These audits identified energy efficiency retrofits for lighting, weather sealing, insulation and heating, ventilation, and air conditioning. Black Hills Energy also provided a Small Business Direct Install lighting upgrade incentive. The cities of Victor and Cripple Creek, as well as 7 hotels and casinos (the Wildwood, Gold King Mountain Inn, Big Jim's, Bronco Billy's, Johnny Nolon's, Double Eagle and Carr Manor) took advantage of the program to upgrade their lighting to use more efficient light-emitting diode (LED) light bulbs. Other efficiency measures include a Wildwood Casino air handler retrofit, compact fluorescent lamp (CFL) upgrades in the Triple Crown Casinos, over 12,000 gallons of diesel fuel savings in the Teller County fleet, and upgraded thermostat control in Teller County buildings and five more businesses in Woodland Park. **All totaled, the 2012 energy efficiency measures taken in Teller County resulted in well over 3,000,000 kWh equivalent savings per year and over \$400,000 in expenditures saved per year.** This will save 2,117 metric tons of carbon dioxide annually, or the amount produced by burning 237,293 gallons of gasoline, or sequestered by 1,795 acres of forest!

WATER FOR BEER

A CONVERSATION WITH A DENVER BREWER

By Amy Kennedy

Beer is big business in Colorado, especially along the Front Range. Craft breweries have sprung up in record numbers, making Colorado a destination for beer lovers. Why so many breweries on the Front Range? Ask a beer aficionado, and he or she will likely tell you it's the water.



Andy Brown, Head Brewmaster at Wynkoop Brewing Company

I sat down with Andy Brown, Head Brewmaster at Wynkoop Brewing Company, to better understand the burgeoning brewery scene in Colorado and the role water quality plays in this thriving industry.

As the first brewpub in Colorado, the Wynkoop has a long history of making tasty beer in Lower Downtown Denver. When they opened their doors in 1988, the Wynkoop founders saw a lot of potential for beer brewing in Denver and across the state. At the time, Coors

Brewing Company had already been operating out of Golden for over 100 years and helped the Wynkoop get on their feet. Coors had discovered and shared with the Wynkoop what brewers across the Front Range now know - the water here is great for making beer.

What makes Front Range water so great for beer? As Andy put it, "Water is the canvas we paint on", and this canvas is particularly light. The water delivered to Denver, about half of which is derived from the South Platte River, has a low mineral content. This softer water gives brewers more latitude to create different flavors and styles of beer because it is much easier to add minerals that change the taste of the final product than to take minerals out.

Another reason Denver's water provides such a great base for beer is the water is very high quality, consistently meeting and exceeding water quality standards. This combination of soft and clean water means brewers in Denver do not need a lot of fancy equipment to treat the water before they begin brewing. At the Wynkoop, brewers simply boil the water the night before brewing to cleanse the water and eliminate any excess disinfectants. If making beer outside of Denver, in a

mountain town or some other states, brewers often need to add in more expensive and potentially wasteful filtration processes, like reverse osmosis, to start with a clean foundation.

Because water is the main ingredient in beer - the Wynkoop has a water to beer ratio of 5 to 1 - having a clean source is essential for brewers to make the variety of unique brews we've come to enjoy in Colorado.

The quality of the water that ultimately ends up as beer begins at the source. Through CUSP's dedication to the water quality of the Upper South Platte Watershed, our projects help protect this source from degradation.

Much of the water that is eventually piped down to Denver and into its many breweries first runs through the forest. A healthy forest acts as a natural water filtration system, which is why CUSP collaborates on a variety of projects to actively manage forest health in the watershed. A healthy fire regime must also be part of a robust forest system. Impacts from catastrophic fires can compromise water quality and be especially detrimental to the brewing community. CUSP's wildfire risk reduction and impact mitigation activities are extremely important to prevent ash and sediment from clogging reservoirs and impairing the quality of source water.

When water systems do become degraded, CUSP's river restoration efforts help the network of water channels that flows through the watershed heal. In concert with our water quality monitoring programs, all of CUSP's projects ultimately contribute to a healthier system that produces high quality water for many areas along the Front Range.

So next time you sit down to enjoy a beer from the Wynkoop or another local brewery, take a minute to appreciate where the water that went into your beer came from, and consider the work that goes into making Denver's water such a fine canvas for brewing.



WATER QUALITY

We are doing some very exciting projects to assess and monitor water quality in our watershed. These projects to understand what the water quality looks like today and monitoring it into the future provide useful information to our communities, inform our programs, and help us fulfill a core part of our mission – to protect water quality. Jara Johnson, our former Habitat and Monitoring Coordinator, was working on 3 major projects for the last few years: the South Park Baseline Water Quality Study; the Mine Assessment Program; and Nutrient Sampling in 11-Mile Canyon.

South Park Baseline Water Quality Study

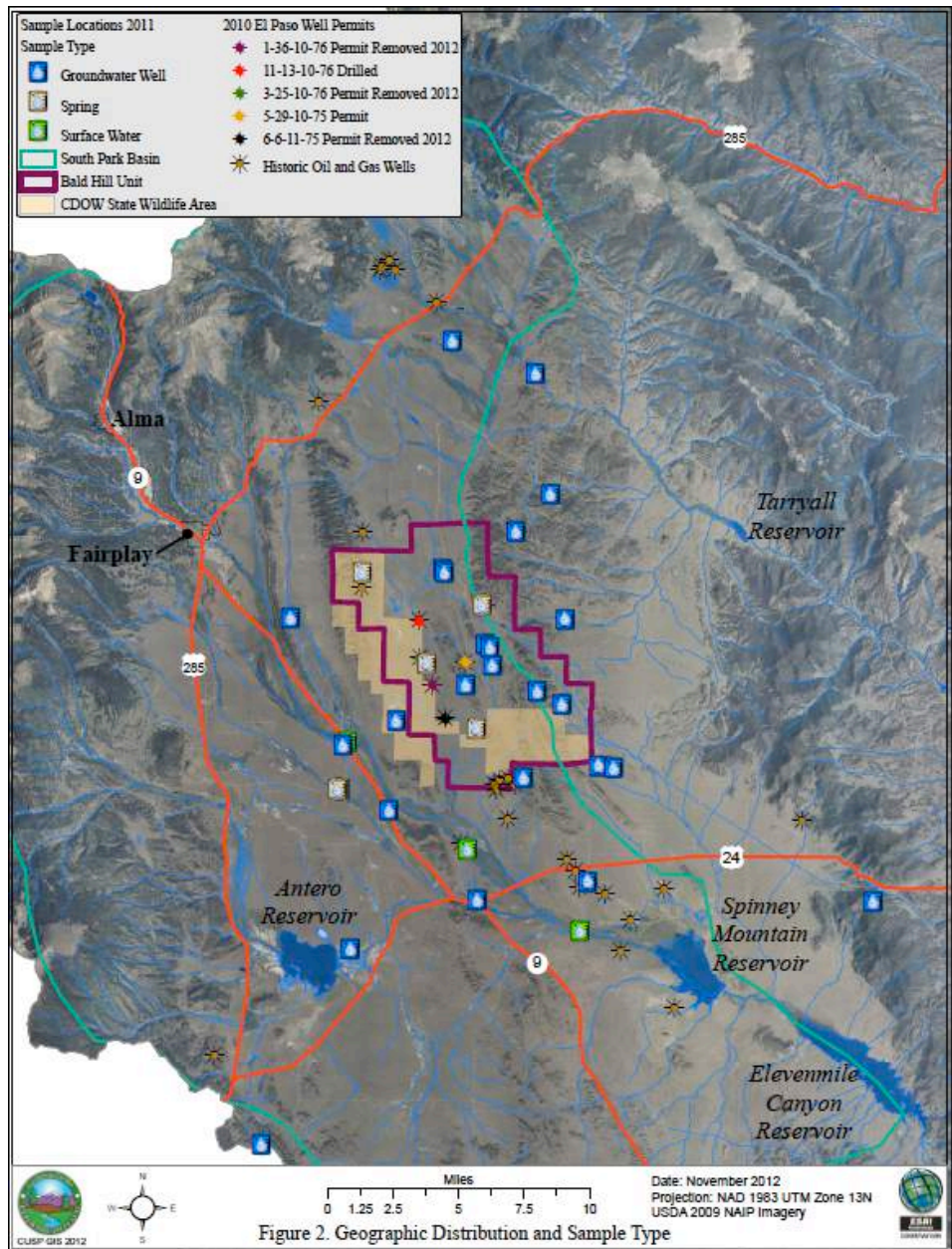
In the fall of 2010, as interest in natural gas exploration and drilling increased in the South Park area, individuals and partners approached CUSP to address potential water quality impacts from exploration and development. As a non-advocacy watershed group, we believed our best role was to provide third party testing to help build the background knowledge that will allow the county, its citizens, and other interested parties to have the information they need to properly assess natural gas development and the potential impacts to surface and groundwater quality.

- Sampling Locations**
- Surface Water
- Middle Fork of the South Platte near Garo, CO (2011 & 2012)
 - Middle Fork of the South Platte at Badger Basin near Hartsel, CO (2011 & 2012)
 - Main Stem of the South Platte above Spinney Reservoir (2011 & 2012)
 - Fourmile Creek at the Division of Water Resources gauging station near Garo, CO (2011 & 2012)
 - 5 springs in the South Park area (2011 & 2012)
 - Michigan Creek near Hwy 285 (2012)
 - Tarryall Creek near Hwy 285 (2012)
- Groundwater
- 27 domestic and stock water wells owned by residents of the South Park area

When CUSP began the baseline study in 2011 with financial support from the Park County Land and Water Trust Fund, the main goal was to collect data about water quality conditions prior to any natural gas development in the area. This data will serve as a basis for comparison with any data collected in the future. Supporting this goal, the scope of work completed under the study included:

1. Development of sampling and quality assurance document
2. Creation of a cost-share program to encourage increased participation in domestic well sampling
3. Sampling of domestic wells and surface water locations
4. Data management of field observations, chain of custody documentation, sample results, and result analysis
5. Summary reporting for individual domestic well samples and final project reporting

In 2011, CUSP collected 51 water samples from the South Park area. Both surface water and groundwater sites were tested to assess baseline water quality. To account for water quality variability by season and geography, samples were collected in both fall and spring and sites were located throughout the South Park area.



Sampling in 2012 built upon 2011 data to give us a more complete picture of water quality in the area. Along with the 2011 sites, additional surface water sites were sampled in 2012 to capture data from significant tributaries, streams near historic oil and natural gas wells, and streams located in geographic and geologic areas not sampled in 2011. Groundwater sites for 2012 were chosen to ensure coverage of all primary aquifers in the area.



We found manganese, iron, sulfate, and uranium most often exceeded drinking water standards at the sample sites over the 2 years of sampling.

Methane was detected in several samples, both surface and groundwater, and concentrations were highest in the Hartsel area. For full results, the Groundwater Baseline Report from 2011 is available on CUSP's website.

In addition to water sampling, CUSP initiated a South Park Hydrogeologic Scoping Study in partnership with the U.S. Geological Survey and the Colorado Geological Survey in 2012. The study aims to identify, drill, and collect data from representative monitoring wells in the greater South Park area and develop a framework to better understand how the geology of South Park influences water movement and quality. Well drilling began this spring and summary reports will be available later this summer on the CUSP website.

Together, the water sampling and scoping study will provide valuable data to the South Park community and give everyone interested in natural gas exploration a better understanding of how oil and gas development may influence water quality throughout the area.

Mine Assessment Program

Mining, traditionally an important economic engine within the Upper South Platte Watershed, has left its mark: runoff from waste rock, tailings, and discharging adits may result in environmental degradation and water contamination. From very early on, CUSP has identified mining issues as a priority. In this vein, CUSP began work in 2010 on the Mine Assessment Program. In



partnership with federal, state, and local groups, CUSP laid the groundwork for ongoing mine reclamation projects in the watershed.

The initial assessment was carried out over 3 years in an effort to determine potential impacts of abandoned and inactive mines and prioritize sites for future monitoring and reclamation. The assessment involved building relationships and working closely with government agencies and private landowners. Through these relationships, CUSP was able to collect water-quality samples and data points in areas affected by historic mining activity on both public and private land. Water quality samples were analyzed to detect contaminants and heavy metals and GPS mapping tools were employed to create detailed maps pinpointing mines of interest. With this information, we prioritized those historic mines with the greatest impact on water quality and began to plan and carry out remediation projects.

The assessment is vital as federal agencies proceed with abandoned and inactive mine monitoring and reclamation work in the watershed, work CUSP continues to support and participate in.

Nutrient Sampling in Eleven-Mile Canyon

Excess nutrients such as phosphorous, nitrogen, and sediment can promote unchecked growth of algae. These algae blooms deplete oxygen in the river and can lead to fish and



other aquatic animal die-off while increasing the release of nutrients and toxic chemicals from sediment. To better understand the sources of excess nutrients in a problematic stretch of the South Platte River, we began water quality sampling this spring in Eleven-Mile Canyon.

In 2011, CUSP received funding from the USDA Resource Advisory Committee to replace 4 vault toilets in Eleven-Mile Canyon State Park after sampling indicated the old toilets were releasing excess nutrients that were contributing to algae blooms in the South Platte River. The USDA grant also provided funds for the sampling program. In addition to collecting data to see if the new toilets have reduced nutrient loading in this stretch of the river, sampling will also focus on sediment runoff. The 2012 Springer Fire burned in Eleven-Mile Canyon within 2 miles of the South Platte River, increasing concerns of runoff from the fire and sedimentation in the river. By testing locations upstream and downstream of potential nutrient sources, the sampling program will increase our understanding of water quality impacts associated with recreation, fire, and sediment runoff in Eleven-Mile Canyon.

EARTH WEEK FUNDRAISER WITH KOSCOVE METAL

During Earth Week this year, our friends at Koscove Metal in Colorado Springs sponsored a fundraising campaign for Waldo Canyon Fire recovery and restoration. With their help, CUSP raised **\$6,000** that will be used for urgent projects in the burn scar and as matching funds for additional grants. The week-long campaign kicked off on April 16th, with Koscove encouraging the community to give generously through a multitude of incentives provided by Koscove and other local businesses.

Koscove came up with the Earth Week fundraiser when they started thinking of ways to become more engaged in the community above and beyond donating to local organizations. Having been in the recycling and sustainability business for almost 100 years, hosting the fundraiser during Earth Week aligned with Koscove's mission and created the opportunity for them to raise awareness around issues they cared about. As the staff looked for potential beneficiaries of the fundraiser, they sought to find a small, local organization where donations and the extra exposure would have a significant impact.

The Waldo Canyon Fire affected Koscove Metal on multiple levels. Last summer as the fire raged above Colorado Springs, several Koscove employees lost power and had to evacuate their homes. Located near the underpass of West Colorado Ave at I-25, business slowed at Koscove Metal as the smoke from the blaze limited the essential outdoor work of collecting and sorting metals. In the aftermath of the fire, Koscove saw first hand how devastating the fire was to those directly affected as people began bringing in metal debris and burnt possessions to be recycled.



Drawing from these experiences, Koscove felt CUSP's Waldo Canyon Fire recovery effort was a meaningful cause local businesses and the community would support and, ultimately, see direct benefits from. Koscove's staff did an incredible amount of legwork to organize the Earth Week fundraising event and engage other businesses and community members. Phone calls were made, outreach emails and letters were sent, and customers were told about the event as they came in the door to recycle. Along with Koscove's generous offering of Koscove gear, free lunch with a donation, and up to a \$5,000 match, they also enlisted 20 other businesses to participate by donating incentives as encouragement for the community to give throughout the week.

CUSP is extremely grateful for Koscove Metal's support and we look forward to working with Joe and Suzie Koscove and their staff on future projects!

EARTH WEEK BUSINESS DONORS - THANK YOU!

Koscove Metal	Double Eagle Hotel & Casino	Manitou Cliff Dwellings
The Hub Car Wash & Diner	Fargo's Pizza	The Mason Jar
Borriello Brothers	Fox & Hound Bar & Grill	Meineke
Cave of the Winds	Independent Records & Video	Paradise Sales
CityROCK	Kiddie Cutters	Rudy's BBQ
Crystal Park Cantina	King Pin Lanes Bowling	Sky Sox Baseball
CS West Bikes	La Casita Mexican Grill	Western Omelette

THANK YOU DONORS

JOSEPH HENRY EDMONDSON FOUNDATION

CUSP recently received a \$10,000 grant from the Joseph Henry Edmondson Foundation! These funds will help us purchase much needed supplies, including new hardhats, shovels, gloves, and other equipment. In addition to the supplies, we will also leverage this money as matching funds for future grants - making the generosity of the Joseph Henry Edmondson Foundation go further. Thank you for your support!



FEDEX

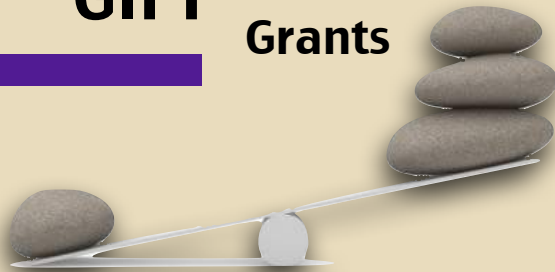
FedEx generously donated \$30,000 to CUSP to aid in Waldo Canyon Fire recovery efforts! In conjunction with these funds, which will be leveraged for additional grants, FedEx employees from the local Colorado Springs office volunteered their time to help with several critical recovery projects in and around the burn scar. Thank you for your gift; your support will go a long way to help the community and land heal!



ANNUAL FUNDRAISER

THE POWER OF YOUR GIFT

Expanding the value of your donation as leverage for Federal, State, Local, and Foundation Grants



CUSP is committed to ensuring the Upper South Platte Watershed and connecting watersheds are healthy so our community can enjoy these areas for generations to come. We value your support and will make your donation go further by bringing people together to achieve this common good.

Donate today at
www.ubbersouthplatte.org/donate.html
 or mail checks to
 PO Box 726 | Lake George, CO 80827

A gift of \$100 yields \$350 when leveraged for Federal, State, Local, & Foundation Grants

WALDO CANYON FIRE FUNDRAISING

Thank you to Nosh for hosting a 9 week fundraiser for Waldo Canyon Fire restoration and flood mitigation work! With the generosity of Nosh and their Wednesday night patrons, \$225 will go toward critical projects in the burn scar and can be used as matching funds for additional grants.

WEDNESDAY WING NIGHT

\$8⁰⁰ **6 HUGE WINGS**
 Tatanka, Sweet Garlic, Crispy Korean, Teriyaki

\$29⁹⁵ **BIRDS & BREW**
 2 orders of wings, 1 pitcher of beer

May 15 - July 10 Wing Nights
 We are helping with Waldo Canyon fire damage recovery & flooding prevention

DONATING \$1 PER ORDER OF 6 WINGS
DONATING \$2 PER ORDER OF BIRDS & BREW

nosh WEDNESDAYS 3-CLOSE
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BRISTOL BREWING KARMA HOUR

Join us **Tuesday, June 18** for a pint at Bristol Brewing Company!

\$1 per pint will be donated to the Coalition for the Upper South Platte to support **Waldo Canyon Fire recovery**.

Where Bristol Brewing Company
 1604 South Cascade Ave
 Colorado Springs, CO
 719.633.2555

When Tuesday, June 18
 5:00pm - 9:00pm

Why The Waldo Canyon Fire had an immense impact on our community and will for years to come.
 The Coalition for the Upper South Platte is working on projects to heal the land and reduce post-fire flooding risks throughout the burn scar.

www.ubbersouthplatte.org

Thank you to Bristol Brewing for hosting us at their new Ivywild School location for Karma Hour! With \$1 from every beer purchased plus the additional donations collected the night of Karma Hour, \$519 will go toward critical projects in the burn scar and can be used as matching funds for additional grants.



CUSP

PO Box 726, Lake George CO 80827
719.748.0033 www.uppersouthplatte.org



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Go Green!

Sign up to receive your
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electronically rather than in
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CUSP seeks to protect the water quality and ecological health of the Upper South Platte Watershed, through the cooperative efforts of watershed stakeholders, with emphasis placed on community values and economic sustainability

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