



Watershed Watch

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

A Healthy Watershed - Now and in the Future

A Quarterly Newsletter

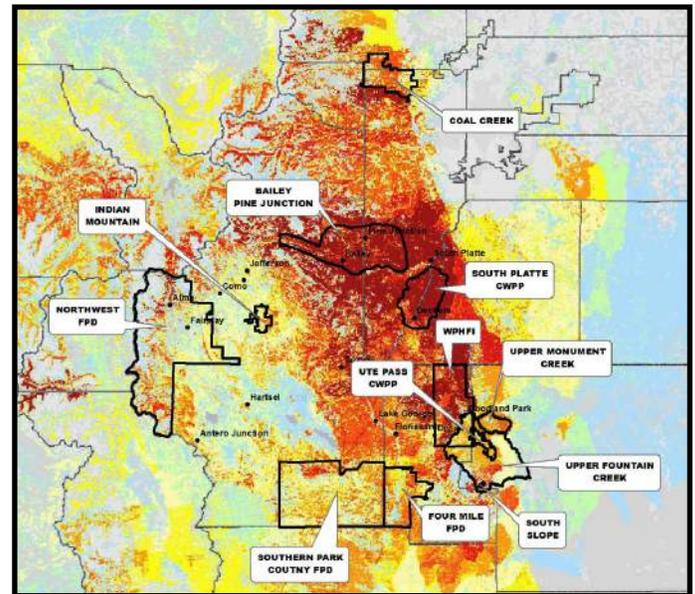
Volume 15, Number 2, Spring 2014

MOVING FORWARD

CUSP is very excited about the projects we're working on this year. We are stepping up our wildfire mitigation work with watershed communities thanks to a \$1 million grant we were awarded last year from the Colorado Department of Natural Resources. Our upcoming forest health projects will have a dual focus on continuing to bolster Community Wildfire Protection Plans by bringing stakeholders together, and implementing mitigation projects across the landscape to emulate a natural, healthy forest composition. After many years of planning with partners, we have identified 1,050 priority acres in 12 primary areas: Coal Creek; Bailey / Pine Junction; Indian Mountain; the Northwest Fire Protection District, encompassing Alma and Fairplay; Deckers; Woodland Park; Ute Pass; Upper Monument Creek; Upper Fountain Creek; South Slope near Colorado Springs; Four Mile Fire Protection District; and Southern Park County Fire Protection District. These areas were prioritized based on wildfire intensity, watersheds at risk, proximity to communities, and ability to build on previous work. The work we do this year will help reduce hazardous fuels, increase forest resiliency, empower communities to reduce their wildfire risk, and increase capacity for local biomass utilization.

As part of the biomass utilization component, CUSP is working on a project to convert the Fairplay slash site into a biomass site that will supply biomass to the Fairplay school. The school already has a heating system designed to use biomass, so this partnership will be a great way to provide the school with a sustainable heating source while putting slash from forest mitigation projects to good use!

We are also putting the final touches on the Trail Creek River Restoration Project this year. This highly collaborative project has successfully reduced erosion, enhanced aquatic habitat, and improved water quality in a stretch of river that was severely impacted by the 2002 Hayman Fire. Building on the progress in Trail Creek, we are in the planning stages of a similar restoration project downstream in Horse Creek. This South Platte tributary just outside of Deckers was also hit hard by extreme flooding following the Hayman Fire.



Fuels mitigation areas of focus. Darker red indicates higher drinking water risk from wildfires.

In another effort to protect water quality, we are helping to facilitate the development of Denver Water's Upper South Platte River Source Water Protection Plan. The plan is funded by the Colorado Department of Public Health and Environment, and will identify potential pollutant sources and effective methods to protect water quality in the Upper South Platte Watershed. The plan will provide a great starting point for regional partners to work together on some very significant projects to protect our vital water source!

We will continue working in the Waldo Canyon Fire burn scar and with surrounding communities in the upcoming year. We're working with partners in El Paso County to foster a local nonprofit based in the impacted watershed to take over some of the work we have been doing down in the Waldo. In the meantime, we will keep working to mitigate flooding and jumpstart restoration as we anticipate more flooding this year. Restoration will take decades, and we will continue to assist our neighbors around the burn scar as needed.

None of this work would be possible without your support. Thank you!

The secret of getting ahead is getting started - Mark Twain

CLEANING UP

Are you taking advantage of the warmer weather to do some cleaning? As you are sifting through the forgotten corners of your house and garage, keep in mind that some of the things you want to get rid of may be hazardous.

Hazardous wastes are defined as being dangerous or potentially harmful to human health or the environment. These products are easily ignitable, corrosive, highly reactive, or toxic. If hazardous wastes are thrown out with the regular garbage, poured down the drain, or poured out on the grass, they may pose a risk to you or nearby animals, find their way into our water supplies, or pose other dangers to our environment.



Courtesy of the U.S. Environmental Protection Agency

Clockwise from top left: batteries, pesticides, mercury-containing thermometers, & mercury-containing lights such as CFLs are all hazardous wastes

We all have hazardous items around our homes and in our businesses, and it is each of our responsibility to dispose of them properly. Common household hazardous wastes include:

- Used batteries
- Old electronics such as computers, phones, televisions, and tablets
- Unused medications
- Paint
- Pesticides
- Fluorescent light bulbs
- Solvents
- Household chemicals and cleaners
- Used motor oil
- Mercury-containing equipment such as thermometers

HAZARDOUS WASTE DISPOSAL RESOURCES

Resource	Location	Hours	Contact	Additional Info
El Paso County Household Hazardous Waste Facility	3255 Akers Drive Colorado Springs	M-F 7am-5pm 2nd Sat. 9am-1pm	719-520-7871 El Paso County website	Free for El Paso & Teller County residents
Summit County Household Hazardous Waste Program	639 CR 66 Dillion	April 1-October 31 M-F 7am-3:30pm	970-468-9263 Summit County website	Open to residents of Summit, Grand, Lake, & Park County residents
Rooney Road Recycling Center	151 S Rooney Rd Golden	Wed & Sat 8am-2pm By appt. only	303-316-6262 x 1 rooneyroadrecycling.org	Open to Jefferson County residents
Douglas County Household Chemical Roundup	3270 Redstone Pk Cir Highlands Ranch	Saturday, August 16 9am-3pm	720-200-1592 Tri-County Website	Open to Douglas County residents
Douglas County Household Chemical Roundup	175 Kellogg Court Castle Rock	Saturday, Sept 13 9am-3pm	720-200-1592 Tri-County Website	Open to Douglas County residents
Blue Star Recyclers	100 Talamine Court Colorado Springs	M-F 9am-5pm	719-597-6119 bluestarrecyclers.com	Open to the public

Colorado Department of Public Health & Environment's List of Household Hazardous Waste Collection Programs:

www.colorado.gov/cs/Satellite/CDPHE-HM/CBON/1251616594182

Medication & Pharmaceutical Disposal:

<http://www.colorado.gov/cs/Satellite/CDPHE-HM/CBON/1251626278999>

Environmental Protection Agency Hazardous Waste Information:

www.epa.gov/waste/hazard/

HYDROLOGY STRUCTURES RESTORATION IN BURN SCARS

Floods follow wildfire. Time and again we have seen the devastating relationship between these two disasters play out.

The drastic changes on the landscape after a catastrophic wildfire affect the ecosystem and how water moves across the land. High intensity wildfires scorch soil and greatly reduce the amount of vegetation on hillslopes. When rain comes down over the burn scar, these barren slopes allow water to move quickly downhill because very little stands in the way to slow down the flow or absorb the water. The steep mountainsides and highly erosive granite soils found in our region further complicate problems with flooding. As more water rushes down and picks up speed, it is collecting sediment and debris. These debris-laden floodwaters are highly destructive to anything in their path, including homes, habitats, and streams.

As the water seeks out the path of least resistance, waterways and areas on the hillsides suffer from increased erosion. The rates of sediment movement in post-wildfire environments are unsustainable and can greatly alter the hydrology of burn scars and areas downstream.

Designing projects to restore natural, stable river systems is a very effective way to address changes in water movement and erosion over the longterm. Natural Channel Design is a systematic restoration method that seeks to emulate natural processes, and has proven very effective in post-fire environments. Dave Rosgen of Wildland Hydrology developed this method and has been working with CUSP and other partners to implement his designs to address post-fire impacts in the Hayman Fire burn scar and the Waldo Canyon Fire burn scar. The structures below are commonly used in the Hayman and Waldo Canyon Fire burn scars to address erosion and post-fire flooding.

SEDIMENT DETENTION BASINS



Sediment detention basins at Flying W Ranch. USFS

These structures are designed to fill with sediment while they slow the flow of water, and once full, recreate floodplains that naturally spread water over a larger area, slowing the water and dispersing sediment.

LOG SILLS



Log sill installation near Trail Creek (Hayman Fire)



Rilling, Waldo Canyon Fire
Wildland Hydrology



Headcutting near Trail
Creek

IN-STREAM STRUCTURES



Rock & Roll structure,
Trail Creek



J-Hook structure construction,
Trail Creek

Much of the erosion and sediment movement in a post-fire environment is propagated by impaired streams. In-stream structures help stabilize streams, reduce the amount of sediment moving downstream, and improve habitat.

Log sills help reestablish alluvial fans, or areas where sediment is deposited in a fan shape. Logs are buried just under the surface to stabilize the slope and slow the flow of water. They are placed on the upper and lower ends of sediment detention basins to prevent headcut erosion, which causes a sudden drop off in elevation. Log sills are also placed along hillslopes to prevent rills, or small channels, from eroding further into deeper gullies.



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



A Healthy Watershed - Now and in the Future

Nonprofit Org
US Postage
PAID
Lake George, CO
Permit #4

RETURN SERVICE REQUESTED

BOARD OF DIRECTORS

PATRICK O'CONNELL, CHAIR
JEFFERSON COUNTY
ERIC HOWELL, VICE-CHAIR
COLORADO SPRINGS UTILITIES
GREG APLET, TREASURER
THE WILDERNESS SOCIETY
DAN DRUCKER, SECRETARY
CENTER OF COLORADO WATER CONSERVANCY
DISTRICT
TOM EISENMAN
PARK COUNTY
KAREN BERRY
JEFFERSON CONSERVATION DISTRICT
JIM BROZO
INTERESTED INDIVIDUAL
MARIE CHISHOLM
INTERESTED INDIVIDUAL
SWITHIN DICK
CENTENNIAL WATER & SANITATION DISTRICT
GARTH ENGLUND
DOUGLAS COUNTY
LYNDA JAMES
UPPER SOUTH PLATTE WATER CONSERVANCY
DON KENNEDY
DENVER WATER
DON LOGELIN
TROUT UNLIMITED- CHEYENNE MOUNTAIN CHAPTER
JOSH VOORHIS
USFS - SOUTH PARK RANGER DISTRICT
MARY DAWSON
CITY OF AURORA
MARC DETTENRIEDER
TELLER COUNTY

Go Green!

Sign up to receive your Watershed Watch Newsletter electronically rather than in hard copy at:
<http://eepurl.com/BtMy5>



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

Inside this edition

- 1 Moving Forward**
- 2 Cleaning Up**
- 3 Hydrology Structures**