

WILDFIRE RISK MITIGATION: LOCAL SOLUTIONS TO A NATIONAL PROBLEM

Jonathan Bruno

The 2017 fires in northern California (in Santa Rosa and nearby areas) teach the most conspicuous lesson to date that wildfire impacts us all. But this will not be the final lesson on fire's role in our lives. The lesson from California is that, no matter how good our firefighters are, as wildland fire professionals we cannot simply suppress our way out of catastrophe; instead, we must take a hard look not only at our existing approach to managing fires but also at mitigating against the devastating impact of wildfires.

A Rising Challenge

As fire professionals, we talk about suppression tactics, aircraft, and the armies of fearless men and women who risk their lives to save homes and lives. We hear citizens, elected officials, and the media making broad statements like “This was a once-in-a-lifetime event” or “We have never seen anything like this before and it will never happen again.”

Yet every year, we bear witness to more fires that seem different, bigger, and more disastrous than the fires last year or the year before. We see

millions of acres burned, hundreds or thousands of homes destroyed, and more lives lost. We know that if we do not act, then the downward spiral of destruction will continue unchecked, our forests (and the ecosystem services they deliver) will disappear, and our communities will suffer.

As the fire world grasps for understanding and answers, local place-based organizations are grappling with this new reality too. Firefighters have partners—from local fire districts, to nonprofit watershed groups, to forest collaboratives—who are stepping up to work for a more resilient landscape where local people lessen fires' impacts through strategic and thoughtful actions.

The Coalition for the Upper South Platte (CUSP) is one of these place-based groups. CUSP has conducted

years of successful postfire restoration work following large fires along Colorado's Front Range (such as Buffalo Creek, Hayman, and Waldo) and years of fuel reduction and wildfire preemptive work. As recognition of CUSP's work grew, various partners sought its expertise and encouraged CUSP to broaden its reach and share its knowledge at the national level. In 2014, the managers of CUSP formed Coalitions and Collaboratives, Inc. (COCO), a nonprofit organization based in central Colorado.

This story is about CUSP, COCO, and my own journey to become a national resource for wildfire risk reduction. It is intended to highlight what can work. More importantly, it is a call to everyone in the fire service to check his or her assumptions and to make lasting changes in the face of the flaming front.

Jonathan Bruno is the chief operations officer for the Coalition for the Upper South Platte, Lake George, CO, and for Coalitions and Collaboratives, Inc., Lake George, CO. He is also the chair of Fire Adapted Colorado. Jonathan has committed his professional life to creating resilient communities and saving the places we all love.



Volunteers and Air Force Academy cadets lending a hand to reduce fuels in the Colorado community of Palmer Lake. Photo: Jonathan Bruno.

CUSP—the Early Years

In 1998, the upper South Platte watershed (2,600 square miles (6,730 km²) southwest of the Denver metropolitan area) was undergoing a change. In 1996, the Buffalo Creek Fire had burned 11,700 acres (4,730 ha) in the watershed, and in the intervening 2 years over 13 “hundred-year floods” had scoured the area burned.

Meanwhile, new development from Denver and Colorado Springs was creeping westward into the wildland–urban interface. Douglas County, one of five counties within the upper South Platte watershed, was the fastest growing county in the country.

With the amazing pace of growth came increased pressure on the Pike National Forest. Thousands of weekend warriors raced to the hills every chance they got. Designation as a wild and scenic river was also on the table for portions of the South Platte River.

Denver Water, Aurora Water, and Colorado Springs Utilities depend on the upper South Platte watershed as a critical component of their sourcewater systems. As they faced increased demand on their water systems, they shared the recognition that their forested watersheds needed attention.

In response, the three utilities brought together a wide array of stakeholders and leaders, from Federal and State agency personnel to local government and nonprofit organizations, to review the options for protecting the watershed. They formed CUSP, hired a director, and completed numerous watershed studies to assess the existing condition of the area and create a list of high-priority projects for

With fire-fueled ambition and the memory of the South Canyon Fire fresh in mind, I set out to develop a chipper program that was different.

protecting the watershed. On the list were projects related to abandoned mines, sedimentation in the river, habitat, outdoor recreation, and invasive species.

But the condition of the forest drove much of the dialog and dominated the project list. Years of fire suppression, insect and disease infestations, high-grade logging, the removal of grazing, and burgeoning development across the landscape had changed the fire regime from what it had been historically. The forests—once a mosaic of meadows, high-density north slope stands, and south-facing patches of open ponderosa pine—had become a dense carpet of small-diameter trees. A new fire regime was on the horizon, and people recognized that

the Buffalo Creek Fire was just the tip of a very large iceberg.

In 2002, the concern became a reality: the Hayman Fire, started on June 8, consumed 137,000 acres (55,400 ha) of vital Front Range forests. The impacts on the watershed’s function and on the water providers’ ability to deliver drinking water resonated deeply. In 2003, I was hired by CUSP to lead the volunteer efforts in healing the Hayman burn scar and to create a broader forestry program that would work to limit the effects of the next fire.

In 2003, CUSP was invited to a watershed leaders’ conference in Glenwood Springs, CO, site of the South Canyon Fire, which killed 14 firefighters in 1994. I remember



Local volunteers with the Coalition for the Upper South Platte chip slash in Jefferson County, CO. Photo: Jonathan Bruno.



*A view from above of the Waldo Canyon Fire scar, looking east toward Colorado Springs.
Photo: Jonathan Bruno.*

hiking the South Canyon fire scar like it was yesterday. It added to my passion when I spoke about CUSP and how we had purchased a bumper-pull chipper to start the daunting task of reducing fire risk in area subdivisions.

To successfully help a place, we must “shut up and listen.”

The response was cold. As the watershed leaders heard my words, they asked in puzzlement, “Why is a watershed group chipping in neighborhoods?” Watershed groups at the time were focused on the blue lines on the map: standing in the rivers and streams they cared about and looking down. They did not own or operate chippers; they did not look up and around at the entire watershed.

With fire-fueled ambition and the memory of the South Canyon Fire fresh in mind, I set out to develop a chipper program that was different.

I did not want to create a program that would act like a contracted business, where the owner sat and watched from the comfort of a living room couch while a crew completed the work. I developed the Neighborhood Fuels Reduction Program from a simple premise: if owners and neighbors worked with the CUSP crew and each other, they would gain a deeper understanding of forest health issues, take direct ownership of the program, and build a sense of community.

It worked. From its early days, the chipper program has served homeowner associations and individuals, completing over 5,000 acres (2,000 ha) of risk reduction. The naysayers at the conference started to pay attention. Today, the chipper program is one of CUSP’s most important outreach and awareness programs. The sound of a chipper, the smell of the wood, and the volunteers high-fiving each other as they reduce their community’s risk really has an amazing way of garnering interest from others. And as residents begin engaging, they become more willing to do larger and higher impact treatments.

Moving Forward

In 2005, CUSP began developing community wildfire protection plans. CUSP created the first countywide plans in Teller, Park, and Jefferson Counties. The plans, though broad in scope, became the backbone for developing the CUSP forestry program.

In the early days, when I was first hired, CUSP had a staff of three. Since then, our programs have grown to include over 25 full-time staff. We have a local initial-attack team and fuels crew, inhouse staff for geographic information systems, and support staff. We own a tracked masticator, a whole-tree grapple feed chipper, five work trucks, and numerous saws and tools.

However, the extent of the issue on the Front Range was massive. With over 1.5 million acres (600,000 ha) in need of work to restore forest health or reduce fuels in the wildland–urban interface, CUSP began contracting out forest work. CUSP has paid over \$5 million to local contractors and annually completes about 1,000 acres (400 ha) of fuels and forest restoration work on both private and public land. We operate three slash disposal sites; until recently, we furnished biomass to a local school for heating.

CUSP has created every program and project from the ground up. With the help of a dedicated staff and support from key stakeholders, we developed everything, from contracts and bidding processes to internal policies and protocols. Best management practices, maintenance programs, internal controls, and training programs all grew from a passion for making a positive change in the watershed.

Over the years, CUSP shared what was created. Groups from adjacent areas wanted to learn more, so we met with other watershed organizations and fire departments that were interested in developing a “CUSP-like” program. Anything we developed we freely shared because it was our responsibility to ensure that other organizations did not make the same mistakes we had.

In 2012, the Waldo Canyon Fire burned over 18,000 acres (7,200 ha), destroying 346 homes in Colorado Springs. CUSP was asked to help with recovery efforts, in part because of our expertise in post-Hayman Fire recovery and in community collaboration.

The Waldo Canyon Fire, though close to home, actually occurred outside of the upper South Platte watershed. Soon after the fire, the CUSP board of directors agreed that CUSP had a duty to help. This decision, along

Local collaborative organizations have a vested interest in local place: no one has more to lose than the locals.

with increased requests for support from outside our focus area, led to the creation of COCO.

COCO Formation

COCO was formed to mentor, empower, and engage local organizations, helping them succeed. Local collaborative organizations have a vested interest in local place: no one has more to lose than the locals.

Many organizations across the country proclaim that they will work with the local community to help it reach local goals. Some organizations make a difference; however, far too often the expectations are not realistic or the motives are not aligned.

COCO is different: to successfully help a place, we know we must close our mouths and open our ears; we must strive to understand what drives people, what they care about, and what concerns them. We must “shut up and listen.”

When colleagues ask me how CUSP became so successful, I simply state that it has taken hard work; more importantly, it has taken the commitment of local people to strive for a better future. It is my belief that local citizens—from volunteer firefighters, to business owners, to students, to residents and local leaders—are the most important assets in any wildfire risk reduction strategy.

As the world continues to be compartmentalized, where input from only specialists is valued and only the largest organizations gain financial support, groups like COCO work to change the status quo. Because Federal resources are limited, place-based organizations like COCO that engage at the local level are needed. Mitigation against the impacts of catastrophic fires isn’t accomplished at the highest levels of government or in meeting rooms but rather by people who are embedded in their communities and passionate about their home place—people who are working to build resiliency in their own backyard.

COCO Activities

In 2016–2017, with support from the Forest Service, COCO developed a Cohesive Strategy Program. The program provided resources to



Volunteers and residents in Cape Ferrelo, OR, gather for a lunch and to learn from a Community Mitigation Assistance Team. The key is to engage residents where they are comfortable, whether at their firehouse or in their home. Photo: Jonathan Bruno.



Local residents take matters into their own hands and reduce the wildfire risk in Larkspur, CO. Photo: Jonathan Bruno.

several organizations and helped them hire local specialists in high-risk areas of Colorado. Based on years of experience from CUSP, COCO acted as a conduit for Federal funding to facilitate the growth of mitigation programs in high-risk areas. For example, COCO helped the town of Leadville, CO, find funding and mentorship for hiring a wildfire mitigation specialist; similarly, funding allowed the Coalition for the Poudre River Watershed to hire a forester; and funding enabled a newly formed statewide fire adaptation group, Fire Adapted Colorado, to hire a part-time coordinator.

Action follows when people come together in response to a particular cause or concern and create mutually agreed-upon solutions. The COCO method focuses on what the community cares about, helping groups take action through direct mentorship, guidance, and action. The “boots-on-the-ground

approach” will change wildfire outcomes, whereas websites and meetings will not.

At COCO, we believe that planning and adaptation are essential to success but that meetings and

**Action follows when
people come together in
response to a particular
cause or concern and
create mutually agreed-
upon solutions.**

planning should not take up most of the time for capacity-limited organizations. If you have to meet 250 times a year to make a difference on 1 acre, you might want to reassess your priorities and readjust your tactics. COCO is not about reinventing the wheel but rather

about using existing strengths to achieve the greatest results.

COCO does not spend tremendous amounts of time and money on creating the coolest websites or the flashiest brochures. Instead, we focus on listening to the needs of a community and delivering the services that will increase its ability to take action on the ground. I recommend this approach—using your limited resources in the best possible way. Take steps to reduce risk, build collaborative partnerships, and carry out projects that cross boundaries. Reduce your community’s wildfire risk from the front door to the forest.

Community Mitigation Assistance Team

Mitigating risk and helping people have driven me to achieve more. I am unsure where this drive came from—perhaps from the years I worked as a safety officer for a search and rescue team, from the traveling I have done, or simply from my personal desire to protect the places I love. Regardless of my motives, I was given a chance to expand my impact in late 2015, when Pam Leschak from the Forest Service’s Fire and Aviation Management staff called. Pam asked whether I would be interested in participating in a new Forest Service pilot program.

The Community Mitigation Assistance Team (CMAT) program grew from a desire to change the status quo and make a difference in places affected by fire. The team, for which I act as team lead, perfectly complemented my desire to make a larger impact. All of the experiences that I have gained through the creation of the CUSP forestry program are embedded within the CMAT concept. CMAT harnessed the breadth of knowledge within a

multidisciplinary team of mitigation professionals to embed themselves within a community, listen, learn, and guide positive action.

CMAT assesses the local conditions, reviews the barriers, and dives in feet first. We review what works and what does not work. The team helps the local community make the necessary connections it needs to succeed and leaves it with the tools it needs to move forward. Like COCO, CMAT does not do the work for a community; instead, we facilitate the positive actions that the community takes to succeed on its own. Sitting on the couch and watching the action from afar is not an option.

The Phoenix Rising

In mythology, the phoenix is a bird that dies in flame and rises from the ashes. As firefighters and as people who care about forests, we must rise to help communities protect our forests.

How? We need to reexamine our assumptions.

Do you think that continuing to suppress fires will get us out of the current situation? Maybe you've heard someone say:

- "Those people in that neighborhood don't care."
- "They won't participate in a mitigation program."
- "They don't have the capacity to make a difference."

Do you believe that only the largest organizations have the capacity to make a difference? If we all continue to broadly assume that suppression alone will work or that local people don't care and don't have the time to make a difference, then it is time to pack up our bags and head home.

If you want to change the future, consider looking close to home, assessing who is really making a difference, and helping them make positive change by any means possible. That "annoying" person who always comes to your meetings complaining about the forest project ... that old man you see on the tall

ladder cleaning his gutters ... that church group you notice hosting a work party every Sunday ... these are the people who matter most.

In a day and age of meetings, conference calls, and webinars, we must all strive to look beyond the PowerPoint slide to see who and what really matter. Get up from your chair, walk out the door, and hold the ladder. Talk to that "annoying" person, and you will realize that we all have something in common: we love this place and we want to make it better.

If you are interested in learning more or helping to support the development of new, effective organizations in your community, consider where your investment will make the biggest difference. Support efforts at the local level. It is amazing what a bit of time and money can do to get a community moving. ■

SUCCESS STORIES WANTED!

We'd like to know how your work has been going! Let us share your success stories from your State fire program or your individual fire department. Let us know how your State Fire Assistance, Volunteer Fire Assistance, Federal Excess Personal Property, or Firefighter Property program has benefited your community. Make your piece as short as 100 words or longer than 2,000 words, whatever it takes to tell your story!

Submit your stories and photographs by email or traditional mail to:

USDA Forest Service
Fire Management Today
201 14th Street, SW
Washington, DC 20250

Email: firemanagementtoday@fs.fed.us

If you have questions about your submission, you can contact our FMT staff at the email address above.