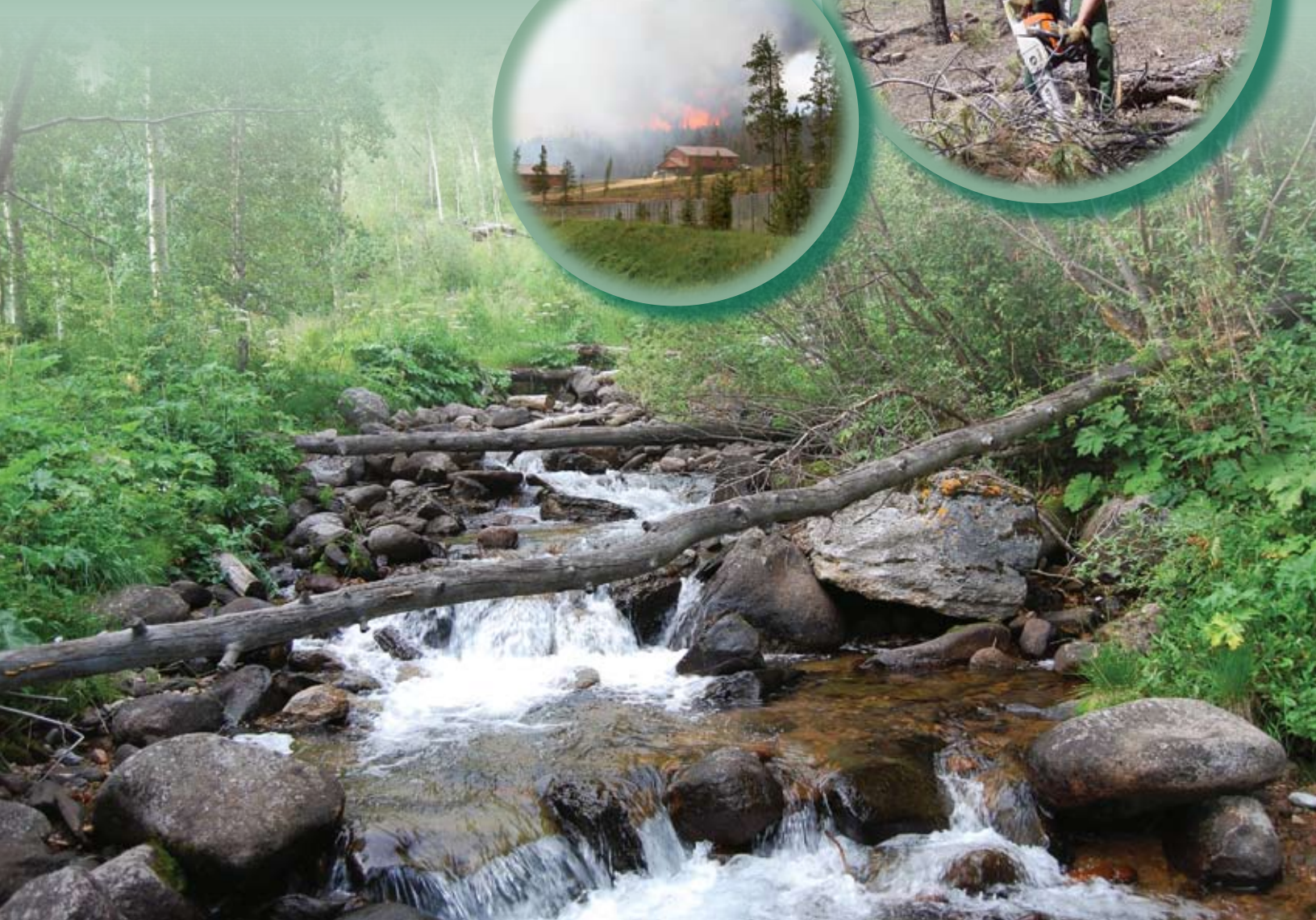


Colorado State Forest Service

2008 – 2009 Accomplishment Highlights



Acknowledgements

The Colorado State Forest Service extends its gratitude to the Colorado General Assembly, Colorado Congressional Delegation, U.S. Forest Service, Bureau of Land Management and many others who have provided the funding and support that make it possible for us to provide for the stewardship of Colorado's forest resources. The accomplishments highlighted in this report would not have been possible without your support and the contributions of landowners, communities and other interested stakeholders who have invested countless time and significant resources to help shape Colorado's present and future forests.

The CSFS also extend its sincere thanks to the dedicated staff in our State Office for their program leadership, and to the personnel in our 17 district offices for extending their knowledge about forestry and providing technical forestry assistance that leads to "on-the-ground" accomplishments.

The CSFS also thanks Judy Serby and Katherine Timm for managing production of this report; Judy Serby for her creative design skills; and Amanda Bucknam, Shawna Crocker, Donna Davis, Jan Hackett, Kathryn Hardgrave, Ryan Lockwood, Naomi Marcus, Lisa Mason, Andy Perri, Tim Reader, Gaylene Rossiter, Judy Serby, Katherine Timm, Scott Woods for contributing to the content of this report.

Director's Message

Declining budgets and greater competition for funding due to economic challenges throughout the country has proved daunting for many, including universities and natural resource organizations. Despite these challenges, however, the Colorado State Forest Service (CSFS) continues to work toward accomplishing its mission to “provide for the stewardship of forest resources and reduce related risks to life, property and the environment for the benefit of present and future generations.”

The CSFS continues to compete successfully for federal grant funds because of our dedicated and knowledgeable workforce, demonstrated success in working with diverse stakeholders, on-the-ground forestry work, and reputation for managing limited resources.

This report describes projects accomplished with funds the CSFS has received through the U.S. Forest Service (USFS), Federal Emergency Management Agency (FEMA), American Recovery and Reinvestment Act (ARRA), American Forest Foundation (AFF) and others. Whether the funds are used directly by the CSFS to implement forest management projects, develop and deliver information and education programs, assist communities with the development of Community Wildfire Protection Plans (CWPPs), or provide pass-through grants to forest landowners, the end goal is forest stewardship and protection of life, property and the environment.

During 2008-2009, an average of 68 percent of the CSFS budget was derived from federal funding sources, primarily in the form of competitive grants. However, the CSFS also continues to receive extensive support from the Colorado General Assembly, which passed legislation to provide funding that helps address Colorado's most pressing forest health challenges. For example, in 2009, the state legislature passed HB-1199, the Colorado Healthy Forests and Vibrant Communities Act. HB-1199 provides funding to the CSFS to expand our ability to provide technical assistance to forest landowners, increase the capacity of the wood products industry, provide assistance to communities to develop and implement CWPPs, and create a one-stop shop for forestry information via the CSFS website.

The following pages of this report provide a snapshot of the important forestry work that is occurring and

the benefits that are being derived from that work – none of which would occur without funding provided through federal grants and state legislation that authorizes funding to the Colorado State Forest Service.

The CSFS makes wise and efficient use of these taxpayer dollars, and we hold ourselves

to the highest standard of accountability to ensure that funding is directed where it will achieve the greatest benefit. Providing pass-through funding via a competitive grant process is one way to accomplish that. Because most pass-through funds offered by the CSFS require a 50-percent match, a significant multiplier effect is generated by granting funds to private forest landowners, homeowners' associations, communities, forestry collaboratives and others that have a stake in managing forestlands.

Since passage of the Healthy Forests Restoration Act in 2003, which extends a variety of benefits to communities with a wildfire protection plan in place, the CSFS has assisted communities with the development of CWPPs. Currently, Colorado has more than 150 CWPPs in place, many of which are in various stages of implementation. Two examples of successful CWPP efforts described in this report illustrate what can be accomplished when communities combine their resources and approach forest management on a cross-boundary, landscape scale.

As a service and outreach agency of the Warner College of Natural Resources (WCNR) at Colorado State University, information, education and technology transfer serve as the foundation for our work. The CSFS works with social science researchers from the WCNR and USFS research stations to develop methods to translate scientific findings into language that can be used by forest practitioners and our various publics – a process known as knowledge transfer.

From Colorado's "Are You FireWise?" Program that provides forest landowners with information about how to mitigate fire risk, to publications about forest



Jeff Jahnke, director, Colorado State Forest Service.

insects and diseases, to Project Learning Tree (PLT), one of the country's premier environmental education programs, the CSFS reaches thousands of Coloradans with timely, relevant forestry information every year. PLT alone reaches 500-800 teachers annually through workshops around the state that teach them how to deliver natural resources content wrapped in best-practices pedagogy.

Providing information is only one tool used to provide for the stewardship of forest resources and reduce related risks to life, property and the environment. To truly meet the intent of our mission, the CSFS uses the best available science and a variety of other tools to help determine where comprehensive forest management is most needed and beneficial, including the annual forest health aerial survey and forest health report, field observations, collaboration with place-based forestry collaboratives and interagency partnerships.

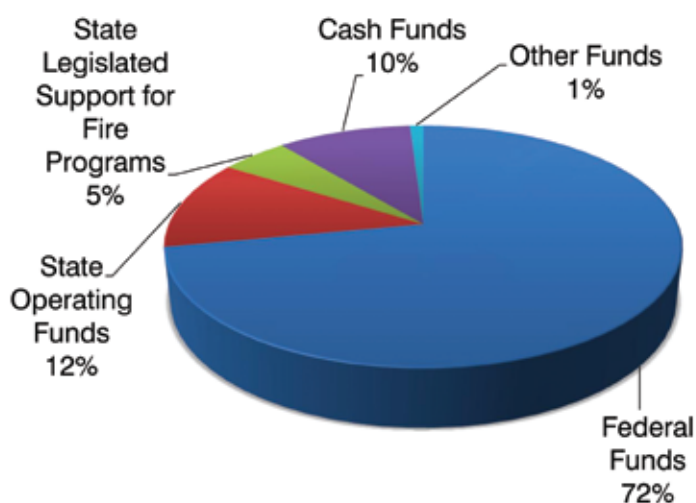
For example, the Front Range Fuels Treatment Partnership (FRFTP), an interagency effort that was launched following the 2002 fire season – the worst in Colorado's recorded history – involves the Colorado State Forest Service, U.S. Forest Service and National Park Service. The FRFTP was established to reduce wildland fire risk through sustained fuels treatment in Colorado's 10 Front Range counties. From 2004-2009, the CSFS accomplished fuels reduction and forest restoration work on 74,414 acres. Funding provided through the FRFTP also has been used to help implement the Harris Park CWPP. Since implementation began, project partners have treated 3,096 acres within the Harris Park CWPP and

have demonstrated how seamless landscape-scale treatments can result in more effective results on the ground.

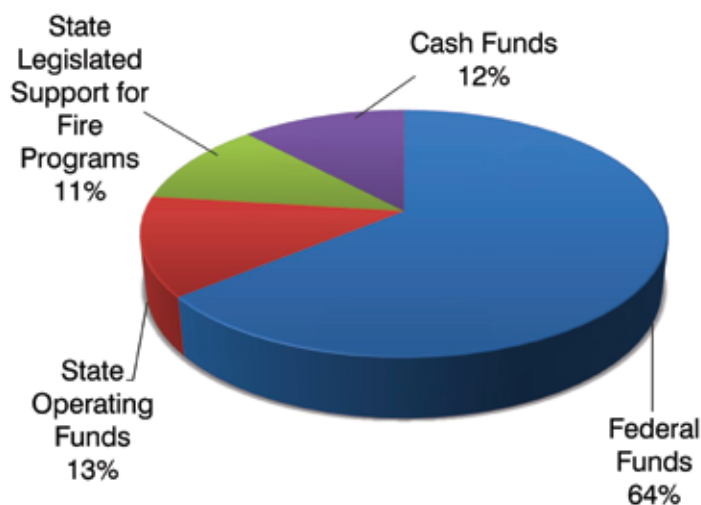
As we look ahead, we have a new tool that will help the CSFS provide for the stewardship of forest resources. In December 2009, the CSFS completed the Colorado Statewide Forest Resource Assessment, which was initiated in response to a mandate from the U.S. Forest Service and contained in the Forestry Title of the 2008 Farm Bill.

Statewide assessments are a key component of the USFS State and Private Forestry Redesign Initiative launched in 2008. These assessments will provide a science-based foundation to assist state forestry agencies and their partners in identifying the areas of greatest need and opportunity for forests across their states, and developing a subsequent long-term strategy to address them. Collectively, the assessment and strategy will help guide the CSFS and other forestry stakeholders as we work together to develop a landscape-level approach to leveraging limited resources where they will achieve the greatest benefit. Both of these documents can be found at <http://csfs.colostate.edu/pages/statewide-forest-assessment.html>

We look forward to reporting on the accomplishments associated with the assessment and strategy in future reports. In the meantime, I hope you enjoy reading about the important forestry work that is occurring in Colorado. I also invite you to join me in thanking the dedicated individuals and organizations that are helping the Colorado State Forest Service achieve forest stewardship for present and future generations.



*Total CSFS 2008-2009 FY Funding
~\$24,050,000*



*Total CSFS 2009-2010 FY Funding
~\$29,000,000*

State Fire Assistance Grants

Reducing Fire Risk in the Wildland-Urban Interface

The primary purpose of federally based State Fire Assistance (SFA) funding is to mitigate wildfire risk in areas where human development is adjacent to wildland fuels, often collectively referred to as the wildland-urban interface (WUI). SFA funding is available and awarded through a competitive process.

To be considered for SFA grant funding, a project must meet one or more of the following criteria:

- *Reduce hazardous fuels/restore fire-adapted ecosystems:* Fuel treatments in or adjacent to identified fire-prone communities to reduce the threat of catastrophic wildfire. Includes fuelbreaks, defensible space, thinning and prescribed fire.
- *Improve prevention/education in the WUI:* Leadership to coordinate, develop and distribute WUI education programs on wildfire risk mitigation. Includes "Living with Fire" newspaper inserts, the CSFS "Are You FireWise?" Program and pamphlets, and brochures or handouts on wildfire risk mitigation.
- *Planning:* Creation of Community Wildfire Protection Plans (CWPPs) or the implementation of priority projects identified in existing CWPPs.

In addition to meeting the above criteria, SFA grant applicants also must be willing to match the allocated grant amount using a non-federal source (a 50/50 match requirement, using actual dollars, donated equipment/labor, or a combination thereof). Applications go through a rigorous review process, and ultimately are ranked by the CSFS and members of the Western State Fire Managers based on the applicant's ability to meet the required criteria, provide measurable results and collaborate with partners. Projects with the highest ranking receive grant funding, though not always the full amount requested.

The CSFS awarded a total of \$2.3 million in SFA grant funds in 2008-2009. These funds are being used to treat nearly 6,500 acres, inform more than 140,000 Colorado citizens about the importance of fire risk mitigation and support communities in the development of CWPPs.

Year	Treated Acres (Target)	Total SFA Funding	Number of Citizens Reached*
2008	2,145	\$ 888,010	15,970
2009	4,332	\$ 1,452,450	124,350
Total	6,477	\$ 2,340,460	140,320

*Estimate. Includes those reached through education, outreach or project work.

Grand County Wildfire Demonstrates Effectiveness of SFA-Funded Projects

In the early summer of June 2007, three teenagers playing with gasoline and matches on the YMCA Snow Mountain Ranch near Granby, Colo., started an intense forest fire. The fire quickly jumped into the tinder-dry crowns of the surrounding beetle-killed lodgepole pines and was poised to burn a huge footprint into history.

Yet the fast-moving Y Fire ultimately would consume only 50 acres, sparing the YMCA's cabins and all other structures in the area – including 100 homes in an adjacent subdivision. The fire died down as quickly as it ignited because a 200-foot-wide fuelbreak was finished only weeks before.



Recent tree cutting to reduce forest fuels at the ranch and a fast, coordinated response by firefighters kept people and buildings safe during the Y Fire. (Photo by Paul Mintier)



Fuels treatment on the YMCA property.

“When the Y Fire reached the fuelbreak, it dropped to the ground and firefighters were able to get a handle on it,” said CSFS Granby District Forester Ron Cousineau. “The fire behaved exactly as we hoped it would.”

The fuelbreak at the YMCA ranch was largely funded by State Fire Assistance (SFA) grants – tangible proof that these grants are helping to protect lives, property and forestlands in Colorado.

“If this work had not been completed, we likely would have lost some, if not all, of our buildings in the immediate area of the fire,” said Julie Watkins, center director for the 5,000-acre Snow Mountain Ranch.

The Y Fire not only proved that previous project work funded by SFA grants was successful, but also motivated Watkins to seek additional SFA funds in 2008 and 2009 to continue improving forest health on the ranch. Paul Cada, forester on the CSFS Granby District, says the ranch continues to compete successfully for funding each year because of a proven ability to efficiently complete projects using grant money, and a track record of exceeding the required 50-percent SFA match every year.

“The YMCA also has been a leader in implementing treatments aimed at reducing the impact of mountain pine beetle in Grand County,” said Cada.

The CSFS Granby District serves in an advisory role to Snow Mountain Ranch regarding the use of SFA funds, helping Watkins and her staff identify areas in highest need of forest treatments and recommending treatments that follow an established forest management plan.

“Partnering with professionals from the CSFS and contracting with outside loggers to do the work provides the best outcome for our forest and allows YMCA staff to focus our energy on providing a great experience for our guests,” said Watkins.

A Grand County company, Rocky Mountain Grading and Excavation, Inc., completed the 2008-2009 SFA-funded logging on the ranch by running

operations year-round. The YMCA treated the resulting slash through pile-and-burn operations, while some timber was processed as firewood or utilized in lumber markets ranging from saw timber to post and pole.

Fire mitigation projects completed at the ranch in 2008 and 2009 were funded by several CSFS grants. The YMCA has matched these grants with its own private funds, sometimes more than doubling the required 50-percent match. SFA grant funds helped pay for operations such as logging, grinding stumps, burning slash and planting trees. Cada says that clearcuts have been favored over forest thinning operations at the YMCA because they result in better lodgepole pine regeneration. Openings provided by



Forest management treatments continue at the ranch for fuels reduction and encourage the next lodgepole pine forest.

clearcuts allow ample sunlight to reach the ground, which lodgepole seedlings require in order to grow. Merely thinning lodgepole pine stands also can lead to major windthrow problems.

“The trees left standing often will blow over or snap off the first year after thinning if a wind event occurs because of their direct exposure to the wind,” said Cada. “Lodgepole pines have a shallow root structure, so when you thin them you make the stands more vulnerable to high winds.”

The benefits of SFA-funded projects on the ranch over the past two years include safer emergency routes used for evacuation of guests and staff; more defensible space near structures and facilities; far fewer hazard trees along miles of trails; and the establishment of a fuelbreak between the YMCA property and an adjacent subdivision to prevent the spread of wildfire.

“The work that the YMCA has completed will help protect life and property on the ranch from fires that may start either on or adjacent to the ranch,” said Cada. He said that before years of treatments

occurred, the forest on the YMCA ranch was a homogenous, even-aged lodgepole pine forest that was ideal for fueling an intense wildfire.

Watkins says the 2008-2009 SFA grant projects have been completed, resulting in 157 newly treated acres on the ranch. The projects have resulted in defensible space around the Homestead Museum and a water treatment plant, and hazard tree removal along the trail system. Since 2006, the ranch has completed fuels mitigation treatments on 765 acres of the 5,000-acre campus.

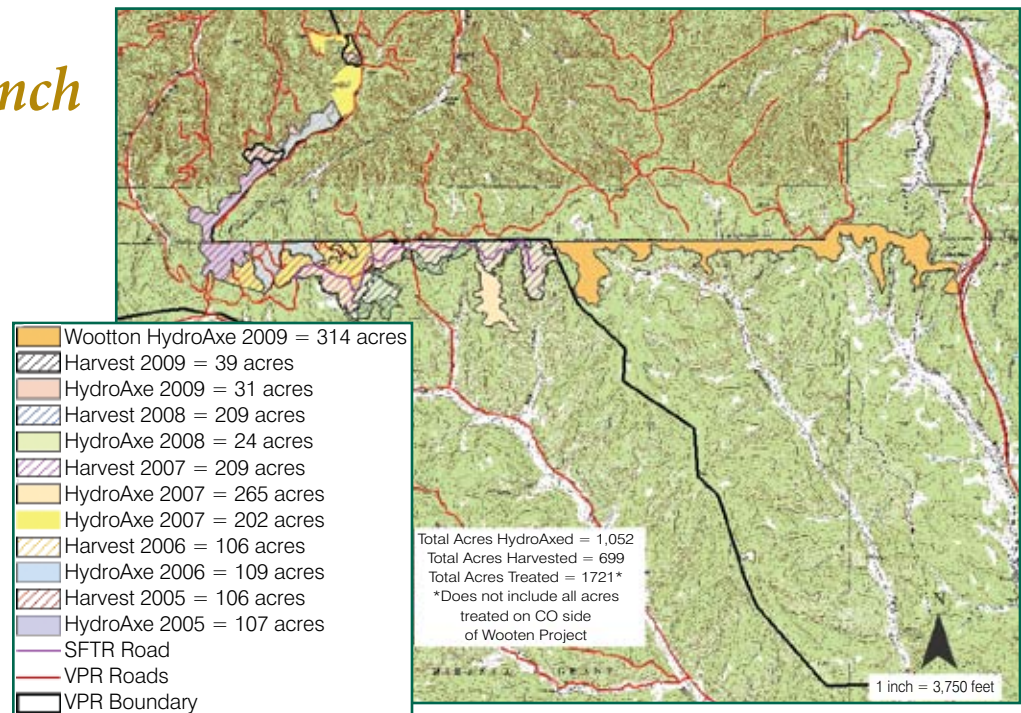
The ranch currently is in the process of treating additional acreage using grant funding. In 2009-2010, the ranch will continue to widen the boundary-line fuelbreak to offer more protection to both the YMCA and the adjacent subdivision. Cada says he expects the ranch to continue actively managing its forests in the future, possibly using CSFS grant funds.

“The YMCA staff have a great knowledge base to draw from and they know what they need to do,” Cada said. “They are a leader in forest management, and will benefit from these SFA projects for years to come.”

A Community Wildfire Protection Planning Success Story

Santa Fe Trail Ranch

Santa Fe Trail Ranch (SFTR) is a 17,000-acre subdivision in southern Colorado near Trinidad. I-25 forms the eastern boundary of the subdivision, Trinidad Lakes subdivision lies to the north, Vermejo Park Ranch borders the south and west, and Wootton Ranch lies to the south. Piñon-juniper forests dominate the north end of the community and ponderosa/mixed conifer forests dominate the south. Significant amounts of Gambel oak and New Mexico locust also dot the landscape.



Fuels treatment work on Santa Fe Trail Ranch from 2005 – 2009.

In 2004, the Forest Health and Wildfire Mitigation Committee of the SFTR Property Owners Association, working with C.K. Morey, CSFS La Veta District forester requested Colorado's "Are You FireWise?" Program staff to provide defensible space training to area residents and volunteer firefighters. At that time, presenters also introduced the concept of CWPPs.

"CWPPs are valuable tools to help communities address local wildland fire risks in a positive, comprehensive way," says Lisa Mason, outreach forester for the CSFS. CWPPs bring together diverse local interests to discuss public safety, community sustainability and natural resources. The CWPP process encourages communities to examine local firefighting capability; prioritize fuels reduction projects around subdivisions; create defensible space around homes, and; identify other structural ignitability issues. It also helps communities determine how and where to prioritize land management activities on federal and non-federal land.

Additional educational seminars, community tours of FireWise properties and tours of work in progress on the SFTR shaded fuelbreak also helped reinforce the importance of wildfire mitigation for the entire community.

From Community Protection to Boundaryless Management

Following the development and adoption of a CWPP in 2006, the committee began working with the head forester of Vermejo Park Ranch (VPR) to create a shaded fuelbreak on the boundary between SFTR and VPR. A shaded fuelbreak is an easily accessible strip of land 300 feet or more in width where fuel density is reduced, which provides firefighters with improved access to help them control fires. Fuelbreaks force crown fires to the ground so that firefighters can safely attack the fire directly. Thinning also reduces tree-to-tree competition for sunlight, water and nutrients, which enhances vigor in individual trees and improves overall forest health.

In 2007, the Forest Health and Wildfire Mitigation Committee obtained non-profit, 501(c)(3) status and extended its mission beyond the borders of SFTR to other forest communities in southern Colorado. The new organization became the Forest Health Coalition (FHC), whose mission is to actively promote fire hazard mitigation and advance ecologically sound forest management practices by heightening awareness, fostering education and mobilizing property owners to support goals and objectives that promote a safer and healthier forest environment.



SFTR neighbors schedule days for access to a bullhog to clear underbrush.

The FHC began working across state boundaries with Colfax County in New Mexico by sharing defensible space demonstration sites on individual properties at SFTR and conducting a tour of the shaded fuelbreak on the VPR boundary. Completion of the Wootton Ranch portion of the fuelbreak brings total acres treated to approximately 1,700. This extends the fuelbreak along the south border of SFTR and anchors it to I-25 near the subdivision's eastern border.

In early 2008, the coalition assisted Spirit Mountain Ranch and Trinidad Lake Estates in developing their CWPP grant proposals. In July 2008, Spirit Mountain Ranch completed its CWPP. In 2009, the FHC also facilitated the completion of a CWPP for Blackhawk Ranch located on the Las Animas/Huerfano County line.

The Benefits of Partnerships

Over the past five years, the coalition has coordinated defensible space treatments on more than 120 of the 454 privately owned lots, which are 35 acres or more. Most of the work was done using a bullhog for mechanical mastication. Property owners performed additional limbing and cleanup work, which was used as in-kind match. Treatments were accomplished

through approximately \$75,000 in State Fire Assistance grant funding through the CSFS, although most of the work was done by private property owners at their own expense. Approximately \$225,000 of the labor on private property was captured as in-kind match. A substantial portion of the work to create a shaded fuelbreak along the south and west borders of SFTR was accomplished through additional federal and state grants. VPR and SFTR property owners donated time to work on the project, which was used as in-kind match.

The SFTR Property Owners Association works with many partners to update

and maintain its CWPP, including VPR, CSFS, Wootton Ranch, Colorado Division of Wildlife, Natural Resources Conservation Service, Fishers Peak Fire Protection District and the Las Animas County Fire Marshal. The coalition also partners with the Culebra Range Community Coalition, New Mexico Forestry Division, Sugarite Canyon Watershed Protection Project, Cimarron and Canadian Watershed Alliance Groups, Colfax County Coalition of Firewise Communities (NM) and Firewise Communities/USA to expand their understanding of current issues and generate interest in developing and implementing CWPPs in southern Colorado and northern New Mexico.

Since 2004, CSFS has provided technical and educational assistance resulting in more than \$775,000 in grant funding; between 2,400 and 2,500 acres of wildfire mitigation treatments; approximately \$790,000 - \$850,000 of in-kind contributions; an approved CWPP; and Firewise Communities/USA recognition.

An active group from the start, the coalition has been able to educate, inspire and motivate property owners to embrace forest health restoration resulting in significant participation in fuels reduction and habitat improvement projects on private lands.

The Forest Restoration Pilot Program

Protecting Our Watersheds

Colorado's Forest Restoration Pilot Program allows the state to fund projects that demonstrate a community-based approach to forest restoration. Projects funded by this program focus on protecting water supplies and related infrastructure, as well as restoring ecosystem function in forested watersheds. Forest management efforts range from thinning and fuels reduction to replanting trees.

To be eligible for funding through this program, projects must include a diverse group of stakeholders in project design and implementation, and must be located in an area with an approved CWPP. Every Forest Restoration Pilot Program project must address one or more of the following objectives:

- Reduce the threat of high-intensity wildfires and/or the negative effects of excessive competition between trees;
- Preserve old and large trees of ecological or scientific value;
- Replant trees in deforested areas;
- Improve the use of, or add value to, smaller-diameter trees.

With the passage of House Bill 07-1130 in June 2007, the CSFS issued its first request for Forest Restoration Pilot Program grant proposals and announced the first grant awardees that August. The CSFS received 43 applications for HB-1130 funding and 12 projects were awarded. The funded projects received more than \$975,000 to treat 3,115 acres; communities and their partners contributed another \$1.36 million in matching funds to accomplish their respective management objectives – far exceeding the required 40-percent match. All 12 HB-1130 projects were completed by April 30, 2009.

Senate Bill 08-071 was authorized in 2008 to

extend the forest management efforts of HB-1130 and continue demonstrating community-based approaches to forest restoration across Colorado's watersheds. Through Colorado's Severance Tax Fund, the state is providing \$1 million annually through 2012 to fund these forest restoration projects. SB-071 currently is providing \$970,000 that, leveraged with an additional \$1 million in federal funds, amounts to \$1.97 million for the implementation of 29 projects that will be completed by September 30, 2010. As a result of the Forest Restoration Pilot Program, more than 5,300 acres will be treated with this funding for a total of more than 8,400 treated acres in 2008-2009.

Pilot Forest Restoration Program Funding 2008-2009

Type	# of Projects Funded	Total Awarded	Matched Funding	Acres Treated
HB1130	12	\$ 977,345	\$1,355,004	3,115
SB 71	29	\$ 1,970,000	\$2,070,000*	5,316
Total	41	\$ 2,947,345	\$3,425,004	8,431

*Anticipated upon completion



The Southwest Youth Conservation Corps assisted with treatments in Dalla Mountain Park.



This portion of Dalla Park is representative of local conditions prior to restoration treatments.



Restoration practices involved removing Gambel oak and Rocky Mountain juniper understory, thus encouraging historic ponderosa pine ecosystem conditions.

City of Durango Protects Local Watershed Using Forest Restoration Pilot Program Funding

The water winding its way down Junction Creek, a scenic tributary of the Animas River to the north of Durango, Colo., doesn't end its journey there. After the creek meanders past the ponderosa pine forests of Durango's Dalla Mountain Park, it transports runoff to the Animas River, which in turn flows into the larger San Juan River.

This watershed provides recreation, irrigation and fresh water to many Four Corners communities in southwest Colorado. As a result, forest management activities conducted near Dalla Mountain Park have in part focused on minimizing negative impacts to the watershed. To protect a forested watershed, catastrophic wildfire must be prevented; this was a challenge in an area primed for such a fire.

"Dalla Park is in a historic high-frequency fire regime, but we've missed a lot of fire cycles there," said Fire Mitigation and Education Specialist Craig Goodell of the San Juan Public Lands Center. Despite a history of regular, low-intensity fires, he says no large wildfires have burned in the area for over 125 years.

Intense wildfires lead to severe runoff and soil erosion due to the resulting lack of ground cover and hydrophobic and sterile soils. These high rates of runoff and erosion can greatly lower water quality in nearby streams, and ultimately clog reservoirs downstream with sediment.

Yet the risk for heavy post-fire runoff and sediment erosion into Junction Creek – not to mention the immediate wildfire risk to Durango residents – recently has been reduced as a result of wildfire mitigation efforts in Dalla Mountain Park. The work was funded by the Forest Restoration Pilot Program.

A High Risk for Wildfire

Durango residents use Dalla Mountain Park for hiking, walking dogs, mountain biking and rock climbing. Sandwiched between Bureau of Land Management (BLM) acreage to the northeast and private land to the southwest, the 176-acre park sits in a classic wildland-urban interface (WUI) zone. Until recently, the park was cloaked in a thick understory of flammable Rocky Mountain juniper and Gambel oak – vegetation that could have set the stage for a catastrophic wildfire.

Officials with the City of Durango Parks and Recreation Department, which manages the park,

knew they needed to implement fuels reduction projects in the park to protect the community and water supply. The city began fuels reduction efforts in the park using BLM grants in 2006, but was only able to treat a fraction of the targeted acreage. The next year, the city applied for Forest Restoration Pilot Program grant funding through the CSFS and in 2008 received a Community Forest Restoration award to reduce fuels in the park along its trail system. With additional grant funding in 2009, the park used more than \$46,000 in Forest Restoration grants in 2008-2009. The grant was matched with more than \$25,000 from the city and another \$10,000 from the BLM.

"With the economic downturn heavily impacting local budgets, the City of Durango must leverage local resources with outside funding in order to continue to undertake fuels reduction and healthy forest initiatives around the community," said Kevin Hall, the city's parks, open space and trails development manager.

Goodell says one reason Dalla Mountain Park was awarded grant funding was that the project complements an adjacent BLM project in which 700 acres of forest are being thinned to reduce potential fire intensity. The similar Dalla Park project next door increased the potential effectiveness of this BLM project, according to Goodell.

"We get more bang for our buck when we treat across boundaries," he said.

Going Light on the Land

The city contracted the Southwest Youth Conservation Corps to complete the Dalla Mountain Park treatments, employing hand crews to minimize soil disturbance in the watershed. Although non-mechanized thinning is more expensive and time-consuming than operations using heavy equipment, CSFS Durango District Forester Kent Grant says that it has a much lighter impact on the ground, which is important when watershed protection is one of the ultimate project goals.

The corps hand-thinned the scrub oak and juniper beneath the ponderosa pine overstory, and pruned or removed some pines. Cut wood was donated to La Plata County's underserved population, chipped by city workers or gathered in slash piles. The CSFS Durango district burned the piles in a demonstration for the community, with assistance from the Durango Fire & Rescue Authority and San Juan Public Lands.

"This was an important milestone because it was the first time the city had done a prescribed burn on its

mountain park or open space properties. The burn went smoothly, so prescribed fire will likely be used again in the future when appropriate to do so," said Grant.

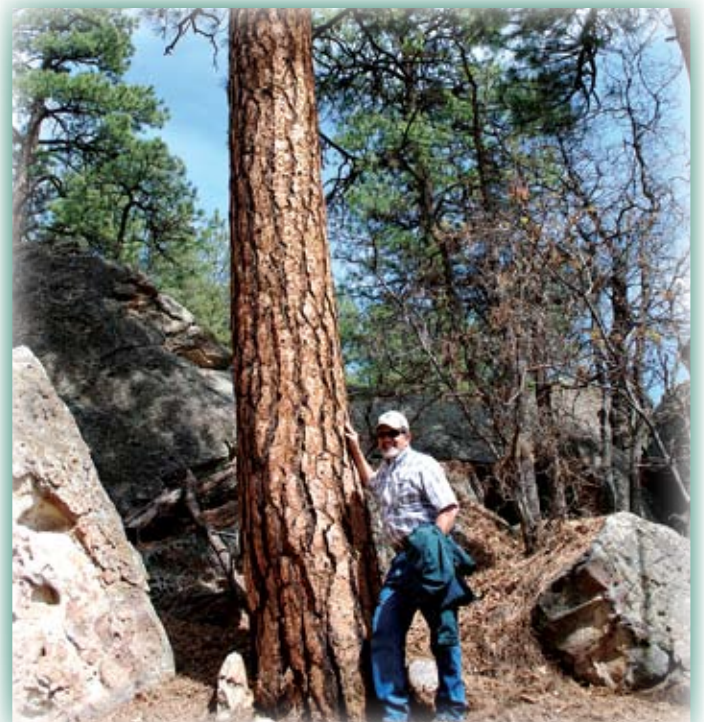
In 2008-2009, more than 37 acres were treated at Dalla Mountain Park using Forest Restoration Pilot Program funding. More acreage is slated for treatment in the next one to two years.

Watershed Now Braced for Fire

"If there is a significant wildfire in Dalla Mountain Park, it should now be less intense and less likely to become a devastating crown fire," said Grant. "Hence it would have a limited impact on the Junction Creek and Animas River watersheds."

Hall says that the Forest Restoration Pilot Program grants have been critical to completing the Dalla Mountain Park project, and that the City of Durango intends to continue using grant funding to prevent local watersheds from experiencing an excessive build-up of fuel. Grant agrees that maintaining a more open, historical forest composition is essential for Durango's rural parkland.

"Trees and especially brush will come back in, and dry fuels will keep accumulating on the forest floor," said Grant. "It's important to keep up what we've done to ensure effectiveness over the years."



CSFS District Forester Kent Grant leans against a healthy ponderosa pine in Dalla Mountain Park.

Emergency Preparedness

The CSFS Engine Crews



The CSFS Engine Crews staff Type 6 and Type 4 engines.

In 2006, the General Assembly directed the creation of a Wildfire Preparedness Fund in the State Treasury to address the risk of wildfire in Colorado's wildland-urban interface. Senate Bill 06-96 recognized the daunting challenge wildfire poses to public safety, fiscal management and natural resource integrity in the state.

The significance of SB-96 is the consistency it provides to acquire long-term aviation contracts, staff wildland fire engines, support National Guard resources, and train and use Colorado Department of Corrections State Wildland Inmate Fire Teams. In wildland fire management, consistency in the availability of resources leads to increased efficiencies and effectiveness in response to wildland fires.

Prior to SB-96, funding for the availability of state preparedness resources was not specifically dedicated and therefore not consistently available for long-term contracting or staffing of wildland response resources.

As part of this effort, an annual Wildfire Preparedness Plan is developed by a collaborative group consisting of the state forester, a representative of the County

Sheriffs Association of Colorado, a representative of the Colorado State Fire Chiefs' Association, director of the Division of Emergency Management, and the Adjutant General or his or her designee. The CSFS implements the plan, drawing on the Wildfire Preparedness Fund.

One of the many successful efforts following the passage of SB-96 was the formation of the CSFS engine crews in 2007. Located at the CSFS Cañon City, Boulder, Golden and Fort Collins districts, these crews staff Type 6 and Type 4 wildland fire engines.

"We have come a long way in developing the program so that it is far beyond what we ever expected," said Matt

Branch, engine boss located with the crew at the Fort Collins District. Although the Fort Collins crew performs preparedness and response activities, they are very interested in wildland fire education and training. "We don't have enough qualified personnel, even nationally," said Branch. "Developing the next generation of wildland firefighters is critical because more of the professionals are retiring and fewer people are becoming trained according to National Wildfire Coordinating Group qualifications."

One effort to address the lack of qualified personnel was an internship program that the Fort Collins district and engine crew added in 2009. The program is targeted at Front Range Community College and Colorado State University students to give them the opportunity to gain firefighting experience and other critical skills pertaining to wildland fire and forestry. Students take part in formal chainsaw, pumps, and map and compass training throughout the summer. Four paid internship positions were created, which began in mid-May. Interns are on call and ready to spend extended periods of time fighting fires in Colorado and elsewhere.

CSU offers five credits for the completion of the internship program. In order to earn these credits,

students must keep a written journal, write an agency background paper and develop a special project that will benefit the CSFS.

As Branch says, “Fire is an interrelated part of all natural resource disciplines. Students from many disciplines would benefit from learning about fire and developing critical thinking and leadership skills.”

The local district offices provide daily supervision and project work. When not fighting fires, crews participate in projects that pertain to the management of Colorado’s forests. Project work includes mountain pine beetle mitigation, wildland fire hazard reduction, timber stand improvement, preparedness and fire prevention education programs. The crews also are available for fire suppression assignments at the district, state, regional and national levels.

When the engine program began in 2007, the program was new and in uncharted waters. Since then, the responsibilities of the crews have evolved in several innovative directions. Depending on the needs of the local CSFS district and the strengths of individual crews, personnel concentrate on thinning forests on state lands adjacent to private property; using prescribed fire as a tool for fuels reduction and forest management; or providing training and education as a way to encourage the development of much-needed human resources to fight fires and to educate the public on wildland fire.



The Fort Collins Engine Crew and interns hone their skills on the Slide Fire near Durango in August 2009.



Education and outreach are an important part of the Fort Collins Engine Crew’s innovative approach. The crew appeared at the Larimer County Fair in 2009, posing with Colorado State University’s mascot, Cam the Ram.

Project Learning Tree

Leading the Way in Environmental Education

Project Learning Tree (PLT), a national program of the American Forest Foundation, is widely recognized as one of the premier environmental education programs in the world. The Colorado State Forest Service coordinates this program in Colorado.

Through hands-on, interdisciplinary activities, PLT helps young people learn how to think, not what to think, about complex environmental issues. Correlated to meet state and national standards, PLT provides the tools educators need to bring the environment into their classrooms and their students into the environment. PLT stays on the leading edge of educational quality through continuous review, revision and evaluation.

Colorado PLT has more than 100 volunteer facilitators who lead 40-50 workshops annually for 500-800 educators. Colorado PLT works closely with state and local natural resources education communities to deliver natural resources content wrapped in “best-practices” pedagogy to educators. PLT uses trees and forests as a window to the natural world, helping students learn about the world around them, their place within that world, and their responsibilities to it.

PLT workshops are located in individual schools throughout Colorado. The local-level approach provides opportunities for place-based learning, inquiry-based local investigations, service learning projects and partnerships with local resource professionals. It also allows schools to adapt the program to meet local needs. The impacts of the workshops on schools and communities are evident all over the state. Following are just a few examples of PLT projects and activities in Colorado that are made possible through National PLT competitive grants, State Fire Assistance grants, and other state and local funding sources.

- In 2008, all 115 teachers in the Town of Durango took a PLT workshop and can now incorporate PLT into their curriculum. The 41 elementary and middle school teachers in Telluride also are PLT-certified.



- Since 2001, PLT has organized and hosted an annual Fire Ecology Institute (FEI) in various regions of the state. This weeklong, intensive training institute for teachers and natural resource education professionals explores fire and forest ecology, fire science, fire mitigation, fire suppression, fire ecology and forest restoration. Annually, approximately 25 4th- through 12th-grade educators take away ideas, hands-on experiences, strategies, tools and materials that they can use in schools and communities. The institute is taught by natural resource scientists, educators and firefighters to provide exciting, practical and essential information about the interrelationships that affect forest health.

- The National PLT Program selected the Denver metro area as one of five regions to participate in year two of the Corporation for National and Community Service's Learn and Serve STEM Grant. Five metro-Denver area schools were selected to participate in a two-day GreenSchools! training, which provides training and funding for students and teachers to investigate environmental issues at their school and engage with their community in service-learning projects that create healthy, green learning environments. The five participating schools in the Denver metro area are participating in environmental audit investigations of their schools' energy and water use, waste, landscaping and other environmental issues. Teams attended a two-day training in November 2009 conducted by national PLT leaders to learn how to investigate environmental topics of concern at their schools. Each school receives equipment and materials valued at \$1,000 to explore energy and water use, waste and recycling, landscaping and outdoor features, and overall environmental quality. Schools then decide on a problem or issue they would like to improve and create an action plan. Each team will receive a \$6,000 GreenWorks grant to implement their plan. The Colorado PLT Program received \$3,000 to help coordinate the program and work with these schools.



The week-long, intensive Fire Ecology Institute for educators is taught by natural resource scientists, educators and firefighters.

- PLT and GreenPrint Denver's Mile High Million (MHM) Initiative have created a partnership to deliver workshops designed to teach an appreciation and understanding of trees and the ecosystem services they provide. In 2008-2009, more than 460 educators participated in workshops, contributing \$11,575 directly to the Colorado PLT program to provide additional training and materials for educators. The MHM Initiative is an ambitious tree-planting Program to add 1 million new trees in the metropolitan Denver area by the year 2025. By supporting tree planting efforts, the MHM Initiative helps foster community stewardship among individual citizens, neighborhood organizations, schools, nonprofits and businesses.



Sara Davis, program coordinator of Tree by Tree - The Mile High Million for GreenPrint Denver, shows workshop participants the correct way to plant a tree.

Front Range Fuels Treatment Partnership

Collaborating to Help Protect Front Range Communities and Natural Resources

Following the record 2002 wildfire season, forest management agencies in Colorado created the Front Range Fuels Treatment Partnership (FRFTP) to collectively reduce wildland fire risks along the Front Range through sustained fuels treatments.

The FRFTP, primarily funded through State Fire Assistance grants, consists of representatives from the Colorado State Forest Service, Rocky Mountain National Park, Florissant National Fossil Beds, Arapaho and Roosevelt National Forests, Pike National Forest and the Rocky Mountain Research Station.

The FRFTP encompasses 10 Colorado Front Range counties: Boulder, Clear Creek, Douglas, El Paso, Gilpin, Grand, Jefferson, Larimer, Park and Teller.

In addition to aggressively treating acres, the FRFTP also created the Front Range Roundtable, a group of more than 40 stakeholders who created a strategy to promote fuels treatment, protect communities from wildland fire and restore forests on the Front Range.

From 2004 through 2009, the FRFTP has treated 74,414 acres to mitigate fuels along Colorado's Front Range.

CSFS Acres Treated by Year (state and private land)	
2004	16,625
2005	9,284
2006	13,846
2007	11,952
2008	11,139
2009	11,568
TOTAL	74,414

The Harris Park CWPP

In 2004, the CSFS and South Platte Ranger District invited multiple stakeholders to devise a comprehensive approach for the development of the Harris Park CWPP. The core stakeholder group that completed this process included the CSFS Golden District, Elk Creek Fire Protection District (FPD), Jefferson County Emergency Management, Park

County Land Use Planning, Platte Canyon FPD and the South Platte Ranger District of the U.S. Forest Service.

The core stakeholder group joined private landowners to create a broad geographic initiative that reached across traditional jurisdictional boundaries. This shared initiative, along with multiple sources of financial support, illustrates how seamless landscape-scale treatments can result in more effective results on the ground.

The CSFS and partners designed the Harris Park CWPP to protect 22 wildland-urban interface communities, and more than 5,000 homes and associated values at risk from wildfire. The project is within the CSFS Golden District service area southwest of Denver along U.S. Highway 285 between the communities of Conifer and Bailey. It overlaps portions of Jefferson and Park counties, includes Staunton State Park and borders the Pike National Forest.

Since implementation began, project partners have treated 3,096 acres identified in the Harris Park CWPP. A breakdown of fuels treatment accomplishments by land ownership and funding source are provided in the next section. This data represents a composite of activities that have occurred from 2006-2009.

Fuels Treatment Acres Completed through 2009:

Staunton State Park: 1,020 total acres

- 668 acres were treated with FEMA Pre-Disaster Mitigation Grant funds at 75 percent; Colorado State Parks provided a 25-percent match through Great Outdoors Colorado (GOCO) funds.
- 352 acres were treated with Front Range Fuels Treatment Partnership (FRFTP) funds at 50 percent; Colorado State Parks provided a 50-percent match through GOCO funds.

Platte Canyon FPD: 920 total acres

- 920 acres were treated with FRFTP funds at 50 percent; Platte Canyon FPD provided a 50-percent match.

State Land Board: 246 total acres

- 246 were treated with FRFTP funds at 50 percent; State Land Board funds provided a 50-percent match.

Private Land: 120 total acres

- 120 acres were treated with FRFTP funds at 100 percent.

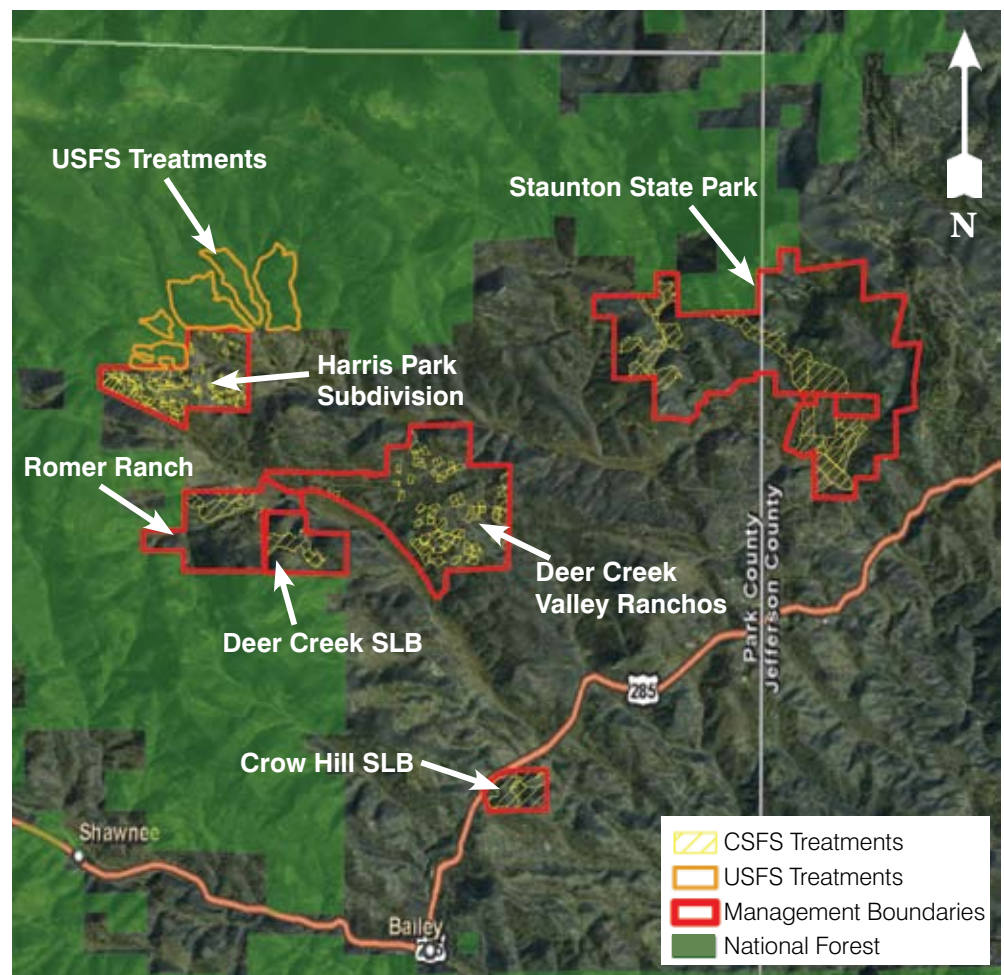
USFS: 790 total acres

- 790 acres were treated with federal funds at 100 percent on the Pike National Forest adjacent to communities in the Harris Park CWPP.

As fuels treatment acreage accomplishments indicate, the first four years of the Harris Park CWPP implementation phase have been successful. Partners are engaged in an ongoing educational effort to encourage continued participation at all stakeholder levels. FRFTP and FEMA funds provided a substantial boost to implementation efforts and the partners hope to successfully compete for additional funding into the future. The Harris Park CWPP partners realize a long-term commitment is required to continue to coordinate and communicate efforts that lead to further implementation.

Throughout the CWPP development process, core stakeholder group partners conducted several meetings to:

- Identify and gain public consensus on the landscape boundary included in the plan
- Inform communities about risk and associated hazard-reduction options
- Integrate the USFS planning process into the CWPP process
- Identify options to treat large private and state-owned lands with the Harris Park CWPP boundary
- Brief commissioners, adjacent fire districts and other county entities about the process and intent of the plan



The CSFS Golden District worked with Colorado State Parks to host community meetings regarding treatment options and resultant fuels reduction/forest health improvements on Staunton State Park. The CSFS also collaborated with the State Land Board to identify treatments on the Deer Creek and Crow Hill properties, and established projects on private lands.

Interagency fuels treatments accomplished throughout the Harris Park CWPP have leveraged efforts of the individual agencies and have helped with successful implementation of cross-boundary fuels management projects. The partnership also enhances future funding capabilities that increase the efficiency and scale of the entire project. Additionally, speaking with a cohesive voice to local residents and other key stakeholders about proposed fuels treatments on federal and non-federal lands adds credibility to the partnership and promotes understanding of the benefits of forest management.

American Recovery and Reinvestment Act Grants

Creating Jobs, Protecting Communities, Restoring Forests



In 2009, the CSFS received American Recovery and Reinvestment Act (ARRA) funding from the U.S. Forest Service through a competitive grant process. The CSFS received a \$6.25 million grant to create or retain jobs that help implement high-priority forest restoration and fuels mitigation projects. A portion of the funds also are being used to create and retain jobs in Colorado's wood products industries. In addition, the CSFS received a second grant for \$4.465 million to help fund jobs affiliated with developing and implementing Community Wildfire Protection Plans.

Interested organizations competed for sub-grants by writing project proposals, per guidelines and requirements set forth in the Requests for Proposals. Interdisciplinary review panels evaluated project proposals and selected the following to receive ARRA funding.

High-Priority Forest Restoration and Fuels Mitigation Grant

Rocky Mountain Timber Products, Inc.

Award amount: \$500,000

County affected: Rio Grande

Rocky Mountain Timber Products plans to create 14 new jobs for 22 months. The funding will allow them to restart their business and retain customers that already have made commitments to purchase their product. They also will be in a better position to capitalize on opportunities that will increase their business capacity and allow them to serve markets well beyond the grant period.

Colorado Division of Wildlife

Award amount: \$393,045

County affected: La Plata

The Colorado Division of Wildlife will create eight jobs for the duration of the grant period and will reduce fuels on 1,339 acres in the Perin's Peak State Wildlife Area located in Durango's wildland-urban interface. In addition, they will plant 30,000 ponderosa pine seedlings to jump-start the reforestation of 10 acres.

The work in the wildlife area will complement projects being implemented on federal lands.

Colorado Youth Corps Association

Award amount: \$647,400

Counties affected: El Paso, Gilpin, Jefferson, Park, Jackson, Routt, Eagle and Dolores

The Corps will create 12 16-week jobs for young adults and retain six 2-year jobs. The 271-acre project involves landscape-level forest restoration, and beetle-kill and fire mitigation work on forestlands. These lands include nine state parks, state wildlife areas, State Land Board property, and private and municipal properties. Treatments will help protect 31 mountain or wildland-urban interface communities.

Denver Mountain Parks

Award amount: \$275,000

Counties affected: Denver and Clear Creek

The project will create one new job for 18 months and six jobs for 14 months. The project involves treatment of hazardous fuels, and wildlife habitat and forest health improvement on 200 acres. As a result of the treatments, Denver Mountain Park lands will be more resilient to fire and insect outbreaks. Combined with work planned on federal, state and private lands, the projects will help protect the communities of Evergreen, Lookout Mountain and Genesee from wildfires.

El Paso County Sheriff's Office

Award amount: \$428,950

County affected: El Paso

The El Paso County Office of Emergency Management will retain one half-time position and four full-time positions for two or more years. In partnership with the Southwestern Highway 115 Fire Protection District, the El Paso County Office of Emergency Management will reduce fuel loads on approximately 145 acres that create bottlenecks or block emergency evacuation routes. Project funds will help jump-start neighborhood-based mitigation efforts and provide the momentum to continue the work after the project ends.

Focused on the Forest, LLC

Award amount: \$250,000

County affected: Jackson

Focused on the Forest, LLC, will use project funds to create three new jobs, which they hope to retain after the grant ends. They also will use grant funds as a catalyst to expand the company's ability to utilize forest products. Expanding the business will strengthen the demand for wood in the area, which will make treatment on forest acres more economical.

Intermountain Resources, LLC

Award amount: \$500,000

County affected: Montrose

Intermountain Resources, LLC, will create 11 new jobs and rehire six long-term employees. As the last large sawmill in Colorado, Intermountain Resources is vital to large forest management projects in a multi-state area that must be completed in a short timeframe. The vast majority of dead trees removed from the Hayman Fire were transported to Intermountain Resources to be made into wood products. As a result, the wood was salvaged and utilized, and the amount of blowdown and concentration of fuels in the Hayman burn area was significantly reduced.

M S Forest, LLC

Award amount: \$1,000,000

County affected: Las Animas

This project will allow M S Forest, LLC, to hire four new employees for the duration of the grant period and retain nine other jobs. The goal of the project is to treat 750 acres to help protect the North Lake Watershed, Trinidad's primary source of drinking water. The watershed also provides water for the communities of Stonewall, Weston, Valdez, Segundo and Cokedale. Project benefits include fuels reduction on private and state land, including campgrounds, ranches and residences.

Delta Timber Company

Award amount: \$500,000

County affected: Delta

The receipt of ARRA grant money will allow Delta Timber Company to diversify their lumber product line, increase overall production, increase their overall sawmill and planing production, and acquire



Fuels mitigation treatments reduce hazardous forest on private and municipally owned lands in the Steamboat Springs area.

timber contracts for adequate volumes and quality of spruce or lodgepole timber. They expect to use the grant money to pay as many as 20 positions for two and one-half months and then retain those positions beyond the grant period. Some of these employees are being rehired after being previously laid off.

City of Steamboat Springs

Award amount: \$1,000,000

County affected: Routt

The Steamboat Springs project will implement a variety of forest fuels mitigation treatments in order to substantially reduce hazardous forest fuels in high-risk wildland-urban interface areas on private and municipally owned lands in the Steamboat Springs area. They expect to create or retain multiple positions over the course of the grant period that will result in 17 full-time equivalent positions.

Community Wildfire Protection Plan Development and Implementation Grant

Anchor Point Group, LLC

Award amount: \$1,745,583

Counties affected: Boulder, Gilpin, Grand and Larimer

The Anchor Point Group, LLC, project will facilitate the implementation of high-priority fuels reduction projects in Gilpin, Boulder, Larimer and Grand counties, as detailed in their respective Community Wildfire Protection Plans. The Anchor Point Group anticipates the creation of five jobs internally for 22 months. In addition, as many as 46 jobs will be created and retained to perform project work for a shorter time during the grant period. Anchor Point Group expects to sustain these and other internal positions beyond the grant period.

Boulder County

Award amount: \$102,700

County affected: Boulder

Boulder County will create a three-quarter time position for 18 months and a seasonal or temporary position to assist with data collection for the development of a countywide CWPP. The plan will identify fire hazards and risk to help protect communities within Boulder County. The countywide plan will not replace existing CWPPs; rather, it will help fill in the gaps and link existing plans.

Coalition for the Upper South Platte

Award amount: \$1,183,711

Counties affected: Douglas, El Paso, Jefferson, Park and Teller

The Coalition for the Upper South Platte (CUSP) expects to create or retain at least 15 jobs that will be hired by CUSP or local cooperators and businesses over the next two years. The new positions will focus on creating or updating at least 12 CWPPs and implementing at least 600 acres of CWPP treatments across a five-county area.

Perry Park Metropolitan District

Award amount: \$700,000

County affected: Douglas

The Perry Park Metropolitan District expects to create or retain 18 jobs for two years to perform hazardous fuels mitigation on at least 346 acres within the district's defined wildland-urban interface through implementation of the Perry Park CWPP.

Town of Winter Park

Award amount: \$159,172

County affected: Grand

The Winter Park Railroad Easement Thinning Project will focus on thinning fuels along the railroad easement where it runs through the Town of Winter Park. The Town of Winter Park anticipates the creation or retention of eight jobs for a period of six months to complete this project.



Boulder County received ARRA funding to complete development of a countywide CWPP.

Volunteer Fire Assistance Grants

Supporting Rural Fire Departments

Wildfires can occur almost any time in Colorado, so it's important to have trained firefighters and equipment available throughout the year. In the United States, 75 percent of the 35,000 local fire agencies are volunteer. These volunteer organizations are the first responders on approximately 80 percent of wildfires.

In addition, volunteer fire departments provide wildfire protection and emergency response services to residents in rural areas with populations of 10,000 or less.

Each year, federal funds are available through Volunteer Fire Assistance (VFA) grants administered by the CSFS. The grants allow fire departments to buy fire equipment, pay for training or training materials, or cover the cost of department organization. VFA funds are granted on a 50/50 matching basis. In order to help volunteer fire departments, which often are strapped for funds, only departments in rural areas may apply for these funds.

In 2008, 150 fire departments in Colorado received grant funding; in 2009, 126 departments received grants. The average grant awarded is \$3,000, however, they can range from \$100 to \$10,000.

The CSFS La Junta District serves Cheyenne, Kiowa, Crowley, Otero, Bent, Prowers and Baca counties in southeastern Colorado. Three federal agencies manage land within the district – the U.S. Forest Service manages the Comanche National Grasslands; Bent's Old Fort National Historic Site and the Sand Creek Massacre National Historic Site are managed by the National Park Service; and the Bureau of Land Management manages several parcels of land. In 2008-2009, the following 11 fire departments in the area served by the CSFS La Junta District were awarded more than \$35,000 in VFA funding:

- Campo Volunteer Fire Department - \$978
- Cheyenne Wells Fire Protection District - \$4,282



Many rural fire departments use VFA funding to support firefighter training.

- Fowler Fire Protection District - \$2,473
- Hasty-McClave Volunteer Fire District - \$3,777
- Holly Fire Department - \$2,482
- La Junta Fire Department - \$6,335
- Las Animas/Bent County Fire Protection District - \$1,644
- Prowers County Rural Fire Department - \$5,404
- Springfield Volunteer Fire Department - \$1,104
- West Cheyenne Fire Protection District and Kit Carson Volunteer Fire Department - \$4,086
- Kim Volunteer Fire Department - \$2,413

"The great thing about VFA grants is that they help smaller fire departments with limited budgets. Even a \$500 grant request will double their spending power. Many of the smaller departments are funded by donations and fund raisers," said Donna Davis, CSFS La Junta District forester.

Each fire department can use the funding for equipment, training or organizational costs. The Fowler Fire Protection District used the funding to purchase a wildland slip-on unit for a smaller fire engine. Slip-on units have a water tank, pump, hose reel and storage for tools and appliances.

The Hasty-McClave Volunteer Fire Department used its funding to purchase supplies such as personal protective gear – nomex coveralls for their volunteer firefighters, along with wildland respirators for lung protection from smoke and heat. They also shared costs for training in a National Wildfire Coordinating Group basic sawyer course.

The majority of the communities on the CSFS La Junta District have populations of 500 or less. This means many fire department volunteers wear several different hats within their community. Having a simple two-page grant application helps local fire departments develop proposals.

“Fire volunteers are on call 24 hours a day, and literally put their lives on the line. They make significant contributions and personal commitments to their communities, so it’s a pleasure to support any funding that helps these men and women protect themselves and their communities. What they do is greatly appreciated,” said Davis.

Federal Excess Property Program Benefits Rural Fire Departments

In 2008, the Town of Walsh received a new 2½-ton, 878-gallon, 6x6 fire engine. The CSFS Fire Equipment Shop builds approximately eight new Federal Excess Property Program (FEPP) engines each year, which are then assigned to local fire departments throughout the state.

When CSFS Fire Equipment Shop personnel delivered the engine, they gave Walsh Fire Department firefighters a briefing and instructions in the use and minor maintenance of the new Type 4 fire truck. Walsh Fire Department Chief Lance James said, “We’re excited to receive the new equipment, and particularly excited by the water tank design, which allows for lower weight distribution of the vehicle. This newer design is safer than the older design for firefighters. There is also additional room on the flatbed for equipment.”

An equipment agreement between the State of Colorado, Colorado State Forest Service and the Town of Walsh was effective

on October 1, 1990. Signed by the mayor, county sheriff and county commissioners, the agreement allows placement of fire equipment for the benefit of emergency use within Baca County.

The Walsh engine is one of 140 engines maintained in Colorado and authorized by law under the Cooperative Forestry Assistance Act of 1978. This Act provides a mechanism for federally owned equipment to be used locally for emergency and fire-related protection.

This beneficial agreement provides for the loan of fire equipment to be used for fire duties within the town and county, an annual maintenance inspection and repairs from normal wear and tear. The town pays a \$200 per year inspection fee. In return, Walsh officials agree to only use the equipment for fire protection or other emergency situations when life or property are threatened; maintain the equipment in good operating condition with a minimum of tools and hose on the engine; provide adequate year-round equipment housing; pay for all operating costs and minor maintenance; maintain liability insurance; and submit national fire reports. If available, the engine also may be dispatched for emergency mutual aid or initial attack responses outside its normal jurisdiction.

Other fire agreement engines in southeastern Colorado are located at Campo, Eads, Hasty-McClave, Kim, Sugar City and Wiley.



The Walsh Fire Department is proud of their “new” engine. This federal excess property was rebuilt into a wildland fire vehicle by the CSFS Fire Equipment Shop,

Colorado Wood Utilization and Marketing Program

Supporting Forest Management and Local Economies

In 1998, the Colorado State Forest Service dedicated staffing and resources to provide technical, business and marketing assistance for Colorado's forest products. Initially, the CSFS worked on a cooperative basis with Arizona, New Mexico and Utah to help staff the program. In 2003, the Colorado Wood Utilization and Marketing program (CoWood) was officially launched and now includes three full-time staff, two part-time graduate student assistants, and two small-business and marketing consultants.

In 2008-2009, CoWood competed for and received a significant amount of funding in the form of grants, contracts and agreements from a variety of public and private entities, including the Western Governors Association, U.S. Forest Service, USDA Rural Development, USDA Renewable Resources Extension Act, Bureau of Land Management and the Colorado Governor's Energy Office. In addition, CoWood provided low- to no-cost assistance to a variety of communities, local governments and private businesses, generating more than \$1 million for woody biomass harvesting and manufacturing infrastructure in Colorado. Following are program accomplishment highlights for 2008-2009.

Facility Heating Assessments

CoWood staff provided facility heating assessments on county government buildings, schools and community centers in support of the Governor's New Energy Economy. CoWood bridges the gap between foresters; forest landowners; environmental quality advocates; renewable energy policy advocates; and building facility managers, engineers and designers regarding the challenges and opportunities of utilizing woody biomass as a renewable energy resource. CoWood also assists in determining the realities and benefits of pursuing woody biomass-based heating or electrical power facilities, and helps ensure that resources are invested in economically smart, realistic and sustainable projects.

2008 Woody Biomass Utilization Short Course

After its debut in 2007, the Colorado Wood Utilization and Marketing Program officially launched a new

offering to enhance its existing wood-products continuing education program. The program targets working professionals in the field of forest-products harvesting, manufacturing and marketing. In 2008, the Wood-to-Energy Woody Biomass Utilization Short Course provided a comprehensive, integrated course curriculum in energy and non-energy forest biomass utilization and conversion technologies that use woody biomass. The two-week course at Colorado State University in Fort Collins provided intensive training for more than 20 attendees who learned how to appraise and establish biomass utilization projects and facilities. Offered again in 2009, the course has received international attention and has been adopted as a framework for a national effort at other universities.

Expanded Colorado Forest Products™ Education and Outreach

Colorado Forest Products™, a marketing and education campaign designed to promote the use local wood and forest products produced from forest management activities on Colorado's public and private land, has expanded its efforts to reach and educate more of Colorado's wood-products consumers. CFP program staff have developed promotional materials, attended public outreach events and offered workshops to help educate Coloradans about the implications of our state's reliance on imported wood products, which negatively impacts forest health and rural forest-dependent economies.



Technical and Business Assistance Workshops

CoWood, in collaboration with Colorado State University Extension, the U.S. Forest Service and other partners, has offered a variety of workshops

around the state on such topics as wood-utilization opportunities, forestry business development and retention, contracting and financial assistance. These workshops provide an opportunity for business owners and representatives from local and state government, non-profits and others to exchange information, network and connect with local and statewide wood-based interests.

Colorado Renewable Resource Cooperative

The Rocky Mountain Union Cooperative Development Center in Greenwood Village, Colo., provided the Colorado State Forest Service a contract to conduct and complete a Woody Biomass Feasibility Study for the Colorado Renewable Resources Cooperative, Inc. (CRRC), in Park County, Colo. As a legally structured business cooperative, the CRRC and its membership represent a non-traditional approach to the challenges of public and private forestland management and woody biomass utilization in Colorado. To support the establishment and

development of the CRRC and its membership, the CSFS, through CoWood, has completed a Woody Biomass Feasibility Study and Business Plan for the organization.

Forest Policy and Biomass Energy Conference

In February 2008, CoWood partnered with the Department of Forest, Rangeland and Watershed Stewardship in the Warner College of Natural Resources at Colorado State University to host a one-day conference regarding the use of forest biomass for energy. *Can Forests Meet Our Energy Needs? The Future of Forest Biomass in Colorado* attracted more than 300 attendees who learned about near- and long-term renewable energy challenges from nationally renowned speakers, including U.S. senators Ken Salazar and Wayne Allard. The event brought together a wide variety of stakeholders, including representatives from industry, the academic community, non-governmental conservation organizations and forest-dependent communities to discuss the future opportunities and challenges of woody biomass use in Colorado.

Piñon-Juniper Commercialization Project

CoWood and the Colorado State Office of the Bureau of Land Management have entered into a multi-year partnership to investigate and develop forest-product utilization and marketing opportunities that will enhance the ecological and economic opportunities affiliated with Colorado's piñon-juniper forests. Based on a similar project centered in northern California, Oregon and Washington, the Beyond Firewood and Fenceposts Project seeks to expand commercial product and market opportunities for piñon-juniper – Colorado's largest forest type, based on acreage.

Small-scale Heating Projects

CoWood works with high-elevation mountain communities struggling for a way to utilize wood from local forest health, hazardous fuels and/or Community Wildfire Protection Plan project implementation. Small-scale wood-heating appliances, such as cordwood systems used for heating applications, represent an economically viable option for woody biomass use in communities that rely on traditional forms of heating from nonrenewable resources. CoWood staff provided performance evaluations and demonstrations of small-scale wood-heating systems, and tested air-quality emissions on commercially available units.



Many challenges exist for public and private forestland management and woody biomass utilization. Photo courtesy of DanBihn.com.

2008-2009 Forestry-Related Legislation

Colorado values healthy, resilient forest landscapes, and the state's legislature is willing to invest funds in the stewardship of these resources.

In 2008 and 2009, the Colorado General Assembly passed 14 bills and three joint resolutions addressing forest health, fuels mitigation and public safety.

This level of legislative activity is evidence of the importance and value of Colorado's forests. The legislation is aimed at promoting healthier, more diverse forests that are resilient to insect and disease epidemics for the benefit of present and future generations.

Bill #	Bill Name – 2008	Bill Summary
HB 1110	Income Tax Deduction	Five-year program that allows a landowner to deduct the actual costs of wildfire mitigation up to \$2,500.
HB 1269	Sales and Tax Exemptions for Beetle-Killed Trees	Exempts beetle-infested logs and products made from such logs from state sales and use taxes.
HB 1318	Mitigating the Effects of the Pine Beetle Infestation	Establishes a beetle mitigation fund that allows the public to make voluntary donations that can be used to treat beetle-infested state-owned lands.
SB 71	Extend the Forest Restoration Pilot Program	Extends for five years the Community Forest Restoration Grant Program that was established in 2007 through the passage of HB 1130. Grants are available to communities for fuels mitigation and restoration.
SB 221	Watershed Bonding for Forest Health	With proper authority and agreement, bonds can be issued for forest health and watershed protection projects.
SB 232	CSU Agency Line Item Authorization	Authorizes the General Assembly to appropriate funds directly to the Colorado State Forest Service, Agricultural Experiment Station, and CSU Extension.
SB 39	Training Directors of Fire Protection Districts in the WUI	Directs the Division of Fire Safety to develop a pilot education program for Board members of Fire Protection Districts in the wildland-urban interface.
HJR 1033	Colorado Forest Health	Promotes active management in national forests impacted by bark beetles.
SJR 10	Concerning Stewardship Contracting	Requests that the U.S. Forest Service, Bureau of Land Management, and CSFS work together to identify and implement up to three long-term stewardship contracts.
SJR 25	WUI Interim Committee	Creates an eight-member interim committee to hold hearings on issues related to the WUI, fuels mitigation, firefighting, tree mortality from bark beetles, and incentives for forestry-related industry.

Bill #	Bill Name – 2009	Bill Summary
SB 001	Community Wildfire Protection Plans	CSFS will establish guidelines and criteria for counties to consider in preparing community wildfire protection plans (CWPPs) to address wildfires in fire hazard areas within the unincorporated portion of a county.
SB 013	Civil Immunity to Persons Engaged in Emergency Response Activities	Enacts the "Marc Mullenix Volunteer Firefighter Protection Act", providing limited civil immunity for fire departments and other entities that donate surplus firefighting equipment for later use; volunteer firefighters, their commanders, and the organizations that employ them; and incident management teams, in connection with fires and other emergencies.
SB 020	Responsibility for Responding to Wild Land Fires	Creates a systematic, proactive approach to the management of wildland fire incidents in Colorado, regardless of cause, size, location, or complexity.
SB 021	Incentives for Volunteer Firefighters	Creates a fund in the division of fire safety to provide tuition vouchers to qualified volunteer firefighters who are enrolled in full-time or part-time study and who agree to serve as volunteer firefighters for 4 years after completing their education.
SB 105	Removal of Statutory Limit on the amount that may be raised for the purpose of fighting fires	Removal of the statutory limit on the amount that can be raised in a year by a special property tax levied by a board of County Commissioners for the purpose of fighting specified types of fires in a county.
HB 1162	Intergovernmental Cooperation for the Purpose of Mitigating Wildfires	On or before a specified date, requires each local government that owns any land area that is located either entirely or partially inside the territorial boundaries of a county and that contains a specified percentage of forest land or land that constitutes a wild land area to enter into an intergovernmental agreement with the county for the purpose of mitigating forest land or wild land fires affecting the contiguous land areas of the local government and county.
HB 1199	Colorado Healthy Forests and Vibrant Communities Act of 2009	Increases efforts to address wildfire risk, and provides resources to the Colorado State Forest Service to augment its technical outreach capabilities and provide loans and grants for market-based and forest treatment solutions to reduce wildfire risk.





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