

Colorado Wildfire Mitigation Plan 2007 Update

The risk of wildfire in Colorado's wildland-urban interface poses a daunting challenge to public safety, fiscal responsibility and natural resource integrity in the state.

A century of aggressive fire suppression, combined with cycles of drought and changing land management practices, has left many of Colorado's forests unnaturally dense and ready to burn.

At the same time, the state's record-setting growth has driven nearly a million people into the forested foothills of the Front Range and West Slope— the same landscapes that are at highest risk for large-scale fire. This movement of urban and suburban residents into the wildland-urban interface (WUI) significantly increases the values-at-risk from wildland fire – the most critical of these being human life.

The cost of suppressing large and destructive fires in the complicated environment of the WUI with focus on public and firefighter safety has forced state and local government to shift limited fiscal resources from other programs to cover suppression costs.

In 2001 a Governor appointed diverse working group of local, state and federal leaders to explore the WUI situation in Colorado, identified opportunities for improvement and made recommendations for change.

Over a six-month period, the working group identified several areas of concern:

- Wildfire suppression in the interface stretches the capability of response personnel in terms of safety, training, and equipment and challenges the ability of local and state governments to cover related costs. Interface protection also demands a higher level of interagency communication and coordination than currently exists.
- Mitigation of hazardous fuels in the interface is not occurring on a landscape scale, across ownerships. The implementation of planned mitigation projects is complicated by costs to private landowners, availability of a trained work force, compliance with federal requirements, and the lack of options for utilizing removed materials.
- Efforts to combat wildfire risk are complicated by a lack of awareness and/or support from local communities and the urban public.

Out of the working group's deliberations came the recognition that, in the wildland-urban interface, failure to prepare, communicate and respond in an interagency manner could result in devastating consequences.

The recommendations of the working group and current status of implementation during the past 6 years are addressed below.

Recommendations

1. Strengthen Local Capacity in Wildland Fire Preparedness, Suppression, and Mitigation.

- Provide state-supported technical and cost-sharing assistance to counties for the development and implementation of expanded Annual Operating Plans (AOP).
2007 Status: CSFS facilitates Annual Operating Plans between 47 counties and the interagency wildland fire community.
- Increase State Disaster Emergency Fund to provide for wildland-urban interface contingency needs and for a fuels mitigation cost-sharing program.
2007 Status: The 2006 Colorado General Assembly passed SB 096 that provides for an Annual Wildfire Preparedness Plan, the formation of a state to state Wildfire Compact, and for hazard fuel mitigation work. The Wildfire Preparedness Plan is supported with a five year appropriation of \$3.25 million annually. The 2007 Colorado General Assembly passed HB 1130 and appropriated \$1 million for a Colorado Forest Restoration Grant Program.
- Develop state-level wildland-urban interface training program for local fire service personnel.
2007 Status: Wildland Urban Interface training is offered at both the Colorado Wildfire College in January of each year and at the Colorado Wildfire Academy offered in June of each year. CSFS offers financial assistance to fire departments to attend these sessions through Volunteer Fire Assistance grants.
- Institute state contribution to Emergency Fire Fund (EFF).
2007 Status: Participating Counties have increased their contributions to the EFF to \$1 million annually. Additionally, the Colorado General Assembly has made available the authority and funding for reimbursement to counties for the first aerial retardant drop and the first two days of handcrew use. This has increase rapid initial attack of wildfires and helped in keeping many fires from becoming large costly fires.

2. Enhance State Leadership and Coordination in Interagency Wildland Fire Response.

- Coordinate and fund the development and implementation of a statewide, county-by-county wildfire risk assessment.
2007 Status: CSFS supports Community Wildfire Protection Planning through technical and cost share assistance. Planning is done at both county level and community level. Additionally, CSFS completed a state wide fire risk assessment in 2002 and has a contract to update that assessment in 2007. The assessment and supporting data will be available to counties to use in their assessments and plans.
- Provide statutory clarification of wildland fire roles and responsibilities held by County Sheriffs, Fire Protection Districts, and related local response personnel.
2007 Status: There has not been legislative action on this recommendation but CSFS provide technical assistance to sheriffs, fire protection districts, and local response personnel through training sessions.

- Clarify in state Master Agreement interagency roles and responsibilities for wildfire protection in the wildland urban interface.
2007 Status: the Interagency Cooperative Fire Management Agreement was reviewed and updated in 2006. Guiding Principles for Cost Share in the WUI was signed by federal and state partners. WUI is addressed in each County AOP.

- Provide state-level support for expanded state participation in zone dispatch centers and in the extended attack phase of wildfire suppression.
2007 Status: CSFS has established Area Fire Management Officer positions that communicate with interagency zone dispatch centers. The Division of Emergency Management, the Division of Fire Safety, CSFS, and other partners are instrumental in the Colorado Mobilization Plan implementation and in the identification, establishment, and training of local Type 3 Incident Management Teams.

- Coordinate interagency implementation and allocation of funds related to the National Fire Plan, the Ten Year Comprehensive Strategy, and related efforts.
2007 Status: A Colorado Wildfire Leadership Council has been formed to coordinate interagency focus on hazard fuels reduction.

3. Improve Statewide Public Awareness Regarding the Role of Fire in Colorado Landscapes and Tools for Wildland Fire Prevention.

- Provide state leadership in delivering coordinated interagency messages to homeowners, landowners, land management agencies.
2007 Status: Partnership have been formed around the state to deliver coordinated messages. Examples are: Front Range Fuel Treatment Partnership; Colorado Bark Beetle Coalition.

- Encourage the development of a professional outreach and information campaign to targeted audiences within the state.
2007 Status: Rockymountainfire.info was established as a clearing house for information.

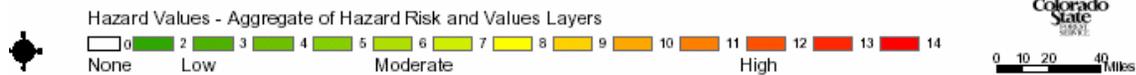
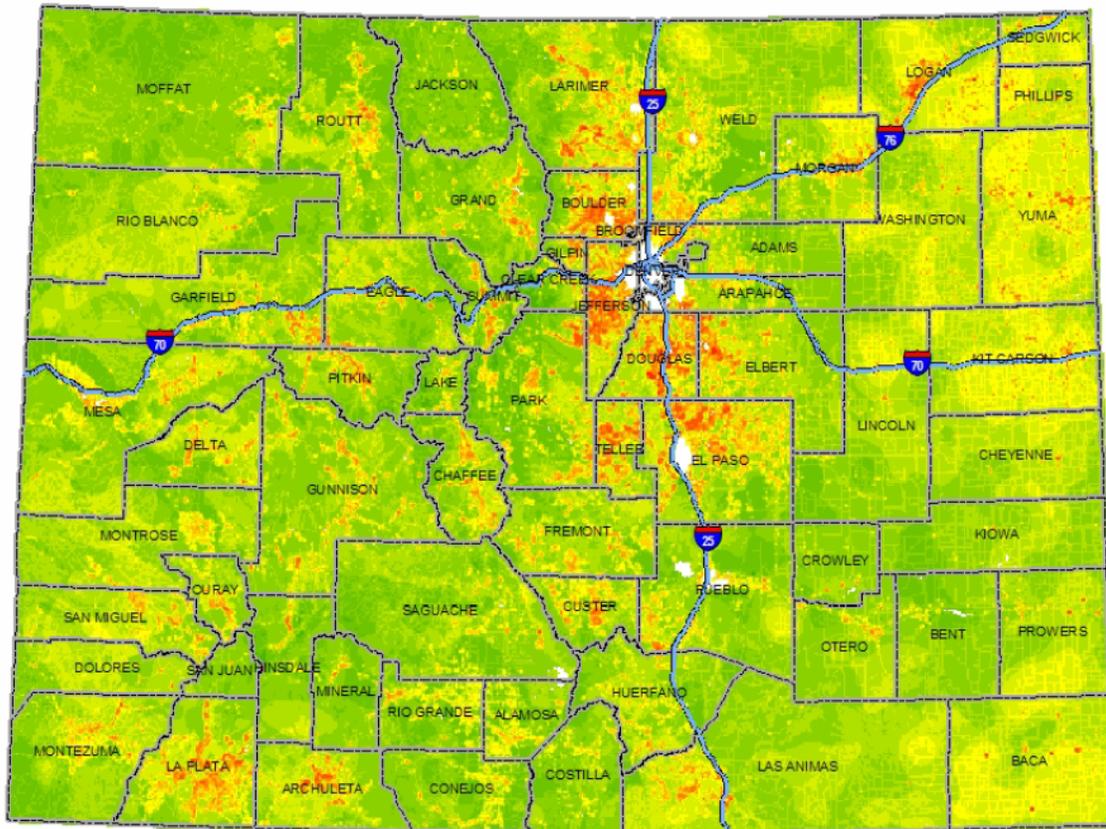
Summary

Significant progress has been made on the recommendations made in the 2001 report to the Governor on the Wildland Urban Interface.

However, during the same period, Colorado has experienced an upward trend in the average number of fires, acres burned, and costs of wildland fires.

Wildfire Mitigation efforts need to be a continued focus issue for Colorado and they need to be addressed through strong positive relationships at all levels of government, within the private sector, and with the individual landowner. The 2007 updated wildfire hazard mitigation plan should continue efforts to address wildfire through prevention, preparedness, mitigation, and swift initial attack. Current programs and new initiatives should compliment each other with emphasis toward increasing efficiencies and economies.

Colorado Wildland Urban Interface Hazard Assessment



The Front Range Redzone Project was one of the first attempts to map the fire hazard along Colorado's Front Range, incorporating slope, aspect and fuels. The project centered on the areas of highest housing density, the Front range. The scope was later expanded to include the remaining lands in Colorado. This State level project was called the Midlevel Assessment. The Midlevel assessment assessment took a more detailed look at the State and included more accurate information on fuels, population growth and distribution. The final product displayed above incorporates housing density, risk, hazard and value to define the areas of concern. This project is a joint effort of CSFS, USFS, BLM, NPS, and other interested parties. There is currently a contract being executed to update the assessment in 2007.

Colorado Preparedness 2007



Support from the Governor and General Assembly allowed the Colorado State Forest Service to contract three Single Engine Air Tankers during the 2007 fire season.



Support from the Governor and General Assembly has allowed State owned Wildland Urban Interface Fire Engines to be available for local, county, and national response. These engines will be available to compliment local resources in combating wildland fires in interface areas and to assist in hazard fuels mitigation work.



Support from the Governor and General Assembly has allowed the establishment of 3 Colorado SWIFT (State Wildland Inmate Fire Team). They operate out of Correctional Facilities in Canon City, Rifle, and Buena Vista. In 2007 the program was revised to allow crews to respond to wildfires in neighboring states. When not suppression fires, the crews are available for hazard fuels mitigation projects.

COLORADO WILDFIRES

STATE AND PRIVATE LANDS (As Reported by Fire Departments to CSFS)

Calendar <u>Year</u>	Number <u>Wildfires</u>	Acres <u>Burned</u>
1978	362	13,085
1979	869	3,139
1980	1,724	18,828
1981	1,537	9,835
1982	1,127	10,184
1983	831	11,752
1984	631	12,913
1985	985	25,343
1986	1,337	30,247
1987	1,194	24,208
1988	1,722	33,037
1989	1,767	56,732
1990	1,475	9,825
1991	1,449	6,576
1992	1,048	4,158
1993	1,267	3,526
1994	3,158	52,125
1995	2,224	32,011
1996	2,499	49,498
1997	1,605	16,703
1998	1,349	10,282
1999	1,987	33,256
2000	2,043	76,288
2001	2,966	45,816
2002	3,409	244,252
2003	2,471	23,308
2004	1,826	15,239
2005	2,014	14,446
2006	3,294	201,809

AGENCY PROGRAMS

NAME Richard Homann

AGENCY Colorado State Forest Service

What mitigation programs has your agency administered in years 2004 through 2007 (please note whether federal, state, or other funding)? Important - Please note why your program(s) is/are effective so we can cite this in the plan. It is a specific requirement. 1. National Fire Plan State Fire Assistance Competitive Grants, federal funding through USDA FS State and Private Forestry Branch, very effective. Approximately \$2 million per year matched 1 to 1 with non-federal funds. Pass through awards for projects on individual, homeowner associations, fire departments, county and state lands. Requires a 1 to 1 match of non-federal funds at a minimum. Projects include Community Wildfire Protection Planning; Fuels Hazard Reduction in the form of defensible space, shaded fuel breaks, general thinning, slash disposal, prescribed fire; information and education to the public through forums, brochures, publications, meetings, and public events. 2. Colorado Preparedness Fund allows hazard fuels mitigation projects with state Department of Correction inmate crews. All state funds. Approximately \$200K annually for mitigation work. Work is focused on non-federal public land to implement fuel breaks that protect communities. 3. FEMA Watershed Protection grant to treat critical watersheds from threat of fire. Requires state match. Very successful. Three year grant period. 4. State funded fuels mitigation. 2007 legislation appropriated \$1 million for awards to property owners and groups to implement hazard fuels mitigation. Awards are selected through a competitive process.

What mitigation activities has your agency undertaken with respect to state property from 2004 through 2007? Collaboration with State Land Board; State Department of Natural Resources; Divisions of Wildlife and Parks and Recreation to implement projects of shaded fuel breaks, defensible space, and public information and education on state land that focus on public and community protection. Use of inmate crews and private contractors to implement practices.

What mitigation activities has your agency undertaken with respect to other property from 2004 through 2007?

1. Technical assistance to landowners, homeowner associations, fire departments and fire protection districts, counties, and state agencies in the program areas of planning and assessment, fuels treatment, cost share incentives, information and education related to Hazard Risk reduction in the wildland urban interface.

Please list any new hazard-related laws, regulations, authorities or policies we should include in the plan update (2004 through 2007). Also, please let us know if the plan didn't cover laws, regulations, authorities or policies from prior years.

<http://www.dola.state.co.us/dem/mitigation/excrevision04.pdf> (pages 15-17)

Senate Bill 06-96, Colorado Wildfire Preparedness Plan and Fund

House Bill 07-1130 Colorado Community Forest Restoration (CFR) Grant Program

**Wildfire Suppression
Emergency Support Function # 4a
Colorado State Emergency Operations Plan**

LEAD AGENCY: Colorado State Forest Service.

SUPPORTING AGENCIES: Governor’s Office; Division of Emergency Management; Division of Fire Safety; Department of Corrections; Department of Military Affairs; Department of Natural Resources; Department of Transportation; Colorado State Patrol.

I. PURPOSE

The purpose of this ESF is to provide procedure for the response to wildfires within the state that exceed the capabilities of local and county resources to manage.

II. SCOPE

The scope of this SEF is to describe the general response of the Colorado State Forest Service and other supporting agencies in response to an emergency wildfire incident in Colorado.

III. SITUATION

Wildfires occur as unscheduled emergency events in wildland fuels (prairie or forest vegetation) and also in fuels that include a combination of wildland and man introduced fuels (houses and improvements). Wildfires involve or threaten human life, residential housing, other improvements, and natural resources. Due to natural fuels build-up and increased population in wildland urban interface areas, wildfires that exceed the control efforts of local and county resources are becoming more common and more complex. Wildland firefighting in Colorado is interagency in nature involving state, county, local, federal, and tribal partners. Colorado State Forest Service is the organizational bridge between federal agencies and county/local partners.

IV. PLANNING ASSUMPTIONS

- A. Wildfires which exceed the capabilities of local and county resources will occur.
- B. Wildfires will threaten lives, property, and natural resources.
- C. Successful management of catastrophic wildfires will require organized interagency cooperation at all levels of government.
- D. Agreements are in place between local, county, state, federal, and tribal entities that define cooperation, roles, and access to resources. (List of Documents, Section XI)

v. CONCEPT OF OPERATIONS (also see flow chart following text)

- A. Wildfires that exceed county capabilities and/or pose significant threat to the state

will be managed by the Colorado State Forest Service within the protocol of existing local, county, state, federal, and tribal agreements. (Agreements are listed in Section XI)

- B. CSFS will utilize all resources available under existing agreements and with assistance of the supporting state agencies to this ESF 4a to safely, efficiently, and effectively manage wildfires.
- C. Ordering and tracking of resources is accomplished through six (6) Interagency Dispatch Centers and one (1) Interagency Regional Coordination Center. Agreements are in place that provide access to resources throughout the nation.

VI. ESF ACTIONS

In preparation for and execution of its fire management mission, ESF #4a will:

- A. Preparedness
 - 1. Maintain current agreements.
 - 2. Provide for the implementation of the State Wildfire Preparedness Plan.
 - 3. Provide for the training and equipping of fire departments within the limitations of available funding.
 - 4. Participate on regional and national Incident Management Teams as appropriate.
 - 5. Participate in Interagency wildfire preparedness meetings and exercises.
- B. Response
 - 1. Receive Fire Information, Fire Response or other appropriate fire information that relates to potential for CSFS fire response.
 - 2. Provide for notification of Fire Division, Area Forester, District (s) and/ State Forester or his designee of all matters that pertain to potential fire incidents and information pertaining to all fire related activities, as appropriate.
 - 3. Provide for notification of Division of Emergency Management (DEM), Federal Emergency Management Agency (FEMA), Office of the Governor, and Division of Fire Safety of all information concerning the reported incident based on potential of incident to exceed county capabilities to manage or as directed by the Fire Division or State Forester. Notification of other ESF 4a supporting agencies as needed.
 - 4. Facilitate the determination to accept incident as an EFF incident.
 - 5. Coordinate with Federal, State, Local Government Agencies and Dispatch Centers including Rocky Mountain Coordination Center on all appropriate issues and information related to fire restrictions or closures as situation warrants.
 - 6. Take requests for Single Engine Air Tanker (SEAT) pre-positioning and relay to SEAT Coordinator. Pursues requests and brings to closure any issue that pertains to pre-positioning or safety issues concerning SEAT.
 - 7. Advise state forester of CSFS personnel assigned to incidents by instate or out of state assignments. Track the number of and the potential need of additional CSFS personnel being assigned to incidents on a scheduled basis or as requested by State Forester, for response and or coverage needs statewide.
 - 8. Provide for participation on Rocky Mountain Area Multi-agency Coordination Group (MAC) to set suppression priorities, designate the use of potential

suppression resources, and coordinate and represent in the absence of other local governments their suppression resources.

9. Assess the need for support to area, district, state office, and Area Dispatch centers during suppression efforts.
10. Keep all CSFS Area's, Districts, Divisions, and projects informed of activities, situations, and the need for support or assistance from ESF 4a supporting agencies on any incident as needed.

C. Recovery

1. Provide for the turn-back of incident to local authorities as complexity levels fall within local capabilities to manage the incident.

D. Mitigation

1. Facilitate after action report.

VII. RESPONSIBILITIES

A. Colorado State Forest Service

1. Identify, train, and provide CSFS personnel for wildfire response.
2. Tasks personnel, as necessary, to accomplish support responsibilities.
3. Provide assistance to local jurisdiction fire organizations, counties, state agencies, and federal partners as requested.
4. Notify, as needed, ESF #4a supporting agencies upon activation.
5. Maintain database inventories of wildfire service facilities, equipment, and key personnel throughout the state.
6. Monitor status of all wildfire service operations and provide updates to SEOC.
8. Arrange for direct liaison between fire chiefs and incident to coordinate requests for firefighting assistance in wildfire protection operations.
9. Document and report emergency disaster-related expenditures to qualify for state or federal reimbursement.
10. Contributes to the incident after-action report.

B. Governor's Office

1. Execute annual FEMA/State Agreement
2. Implement Disaster Emergency Fund for Executive Order Suppression Declarations
3. Provide Colorado National Guard Activation
4. Execute annual Preparedness Plan

C. Division of Emergency Management

1. Provide liaison to regional wildfire Multi-Agency Coordination Group
2. Assist in coordination of National Guard activation and assistance
3. Coordinate evacuation and sheltering between local authorities, Division of Emergency Management, and Incident Management Team
4. Track and maintain list of Fire Restrictions and Fire Bans
5. Assist in and provide for back-up Rocky Mountain Interagency Coordination Center operations facilities
6. Manage wildfire Executive Order funds for transfer to CSFS

D. Department of Corrections

1. Provide trained and qualified wildfire suppression handcrews
2. Provide trained and qualified wildfire mitigation handcrews

E. Department of Military Affairs

1. Provide Colorado NG Air Resources for wildfire suppression
2. Provide Colorado NG personnel for wildfire transportation, security, and suppression needs

F. Department of Transportation

1. Coordinate permanent and mobile electronic road signs as needed for prevention, evacuation, road closure, response, and mitigation activities
2. Provide as equipment as needed and available

G. Division of Fire Safety

1. Coordinate structural protection between Incident Management Team, local authorities, Division of Emergency Management using established Interagency Wildland Dispatch Protocol and State Mobilization Plan procedures

H. Department of Natural Resources

1. Provide Department resources as necessary for inter-department communication and incident support.

I. Colorado State Patrol

1. Provide for evacuation from wildfire areas in coordination with local authorities
2. Provide for road closures as needed during fire suppression efforts

X. Finance Management

- A. Follows protocol established in local, county, state, federal, and tribal agreements.
- B. CSFS follows Colorado State University Business and Finance protocol.
- C. State agencies supporting ESF 4a are responsible for providing financial support for their operations. Each agency and department is responsible for maintaining appropriate documentation to support requests for reimbursement, and for submitting bills in a timely fashion, and for closing out mission assignments.
- D. Each state agency is responsible for establishing effective administrative controls to guide the expenditure of funds during the emergency. Accurate activity and expenditure logs, invoices, and other financial transaction records are required for Federal reimbursement requests. Record keeping is also necessary to facilitate closeouts and to support post-emergency audits.
- E. Governor's Executives Orders for Wildfire Incidents are coordinated between the Office of the Governor, the Office of State Planning and Budget, the Division of Emergency Management, CSFS, and Colorado State University. All appropriate business and finance rules apply.

XI. List of Documents

- County/State Agreement for Cooperative Fire Protection
- State/Federal Agreement for Cooperative Fire Protection
- State/FEMA Agreement for Fire Management Assistance
- Annual Operating Plans
- Colorado Mobilization Plan
- Cooperative Resource Rate Forms

Brief Overview of Wildfire Suppression in Colorado

Sheriff Responsibilities: Colorado law identifies the sheriff as the fire warden for the county and the individual ultimately responsible for controlling and extinguishing prairie and forest fires on private & state lands within that county. **(CRS 30-10-513)** The state forestry role is to aid and assist the sheriff and county fire departments with this responsibility. The Colorado State Forest Service (CSFS) fulfills this role by providing training, equipment, technical assistance, and funding; and facilitating interagency mutual aid agreements and annual operating plans.

County fire planning - CSFS may assist County Commissioners and the County Sheriff in their role to prepare, adopt, and implement a county fire management plan **(CRS 30-11-124)** that details individual county policies on fire management for prescribed burns, fuels management, or natural ignition burns on lands owned by the state or county.

Mutual Aid Agreements & Annual Operating Plans - Each year, federal land fire agencies, state forestry, and counties meet to reach agreement on the sharing of firefighters and equipment if wildfires exceed a particular jurisdiction's resources. The intent of mutual aid is for all fire suppression agencies to work as a team, avoid duplication, and suppress wildfires efficiently. The Annual Operating Plan defines the limits of interagency cooperation, and contains a mobilization plan that identifies the location and availability of firefighters and equipment.

Emergency Fire Fund (EFF) - This fund was established in 1967 by Counties that recognized that some wildfires may exceed the counties resources and ability to manage. - Participation in the EFF is voluntary. A 10 person committee comprised of county commissioners, sheriffs, fire chiefs, and the state forester oversees the administration of the fund. 43 Colorado counties and the Denver Water Board contribute to EFF. A county's annual assessment for EFF is calculated using a formula based on the acreage of private watershed and the annual property tax valuation. Counties with large amounts of private watershed land and a high assessed valuation pay more into the fund than rural counties with large acreage of federal lands and low assessed valuation. Emergency funding requests must originate from the county sheriff and State Forester approval is required. Once accepted, an EFF fire is managed under the direction of CSFS.

Federal Emergency Management Agency (FEMA).

CSFS is authorized by the Governor as the primary point of contact with FEMA when wildfires pose an imminent threat to life and property. CSFS requests and, if awarded, administers FEMA Fire Management Assistance Grants (FMAG). FMAGs provide for up to 75% of eligible costs in the suppression of catastrophic wildfires.

Wildfire Emergency Response Fund (WERF) CRS 23-30-310 This State of Colorado fund was first designated and funded by the state legislature in 2002 reimburses a fire department or county for the first retardant load on state & private land initial attack fires at the request of the County Sheriff, Municipal Fire Chief, or Fire Protection District. In 2006 the legislature expanded authorities in the WERF to include reimbursement of 2 days of handcrew use with preference to state inmate crews. The goal is reduced suppression cost by attacking fires quickly to keep them small.

Interagency Incident Management Teams - Once a wildland fire burns beyond the initial and extended attack capabilities of local forces, the local responsible agency often requests management assistance in the form of a local Incident Management Group or a Type II or Type I Incident Management Team. These teams are available across the nation; the Rocky Mountain

Area currently has one Type I team, three Type II teams, and one Fire Use team. Rocky Mountain area teams are interagency, consisting of individuals from the private sector, local fire departments, counties, state and federal agencies.

Cooperative Agreements – CSFS establishes and maintains cooperative agreements with both federal agencies and counties in Colorado. These agreements provide the framework and basis for the various levels of government to cooperate in wildfire prevention, preparedness, mitigation, response, and administration.

The two primary agreements are:

- 1) **The Cooperative Fire Management Agreement** between the Colorado State Forest Service; the USDA Forest Service; the DOI agencies that include the Bureau of Land Management, the National Park Service, the Fish and Wildlife Service, the Bureau of Indian Affairs, and the Bureau of Reclamation.
- 2) **The Cooperative Fire (Watershed) Protection Agreement** between the Colorado State Forest Service and each of the individual counties.

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