

Fire Resource Briefing Packet 2012

Arapaho - Roosevelt National Forest &
Pawnee National Grassland



Rocky Mountain National Park



General Information

Overview: The Arapaho-Roosevelt National Forests and Pawnee National Grasslands (ARF) is a heavy use recreation Forest, which encompasses 1.5 million acres and a variety of fuels, topography, and weather. Fire management consists of the North Zone, South Zone and Sulphur Ranger District. The Forest boundary extends from the Wyoming border south to I-70; and from the Front Range west to the Williams Fork Mountains. The ARF Elevations range from 6,000 to 14,000 feet. Fire suppression areas on the Forest are broken into 3 strategies; Direct (Control), Perimeter (containment), and Prescription, which allows for the complete range of fire strategies.

Fire occurrence: Peak fire season is typically June – September; with July having the greatest fire occurrence. Lightning is the primary ignition source during this period; therefore, lightning safety must be addressed. Dry thunderstorms typically develop in June but bring little precipitation. Monsoonal moisture usually moves into the area in late July reducing the potential for lightning caused fire activity. WFDSS will be completed for any fires which exceed Initial Attack.

Weather:

Anticipate changes and utilize spot forecasts. The FTC Zone is covered by 6 Fire Weather Zones, outlined in the detailed unit briefings. RAWs stations in the area will broadcast warnings when fuel temperature, RH, or winds reach critical thresholds. Temperatures in the lower foothills may reach 105 degrees in June, July and August and 15 degrees cooler at the higher elevations. Relative humidity in the single digits and night-time recoveries may be minimal. The Zone experiences a drying trend September through January. Chinook winds (50-100 mph) from the west occur in the fall and winter. Significant snow may fall in the high mountains in September. Snow at lower elevations melts; fuels dry quickly, and in combination with strong winds can create a very active fall and winter fire season. Historically, the largest fires in the Zone occur in the late fall and early spring.

Interagency Environment: Federal and local cooperators, including Volunteer and City fire departments, Colorado State Forest Service, National Park Service and Counties will respond to IA fires on the ARF. County Sheriff departments play a large role in Colorado and Unified Command may occur even on small fires with two or more jurisdictions. Fires may be tactically simple, but complexity is elevated due to heavy resource commitment and media presence. Mutual Aid agreements preclude any exchange of funding for at least 12 hours. USFS resources respond up to 2 miles from the NF boundary in support of mutual aid. The ARF provides suppression response to scattered BLM properties on the Northern Front Range.

Fire Dispatch: Fort Collins Interagency Wildfire Dispatch (FTC) is located at the Forest Supervisor's Office; 2150 Centre Ave. Building E, Fort Collins, CO. 80526. 970-295-6800 or http://gacc.nifc.gov/rmcc/dispatch_centers/r2ftc/ FTC dispatches all IA on the National Forest, Rocky Mountain National Park and BLM lands using the closest forces concept. FTC dispatches all aviation resources in the Zone (regardless of jurisdiction) for local, regional, and national mobilizations. FTC is staffed 7 days a week 0800 – 1800 from mid-May to mid-October. FTC broadcasts general fire weather in the morning and fire weather with local indices in the afternoon over the ARF frequencies. County resources, Fire Departments, and Volunteer Fire Departments are dispatched through County dispatch centers. Other exceptions are outlined in the Sulphur R.D. Overview.

Supporting Information - *Ensure visiting resources receive:*

- ARF Forest Map
- Copy of FTC Zone Incident Organizer
- Daily Fire Weather Forecast for appropriate Zone
- Overview of *current* indices; ERC's, 1000 hr. FM, and Pocket Cards (*attached*)
- Status of local fire activity and daily staffing summary
- Fire Operations Guidance in Bark Beetle Stands
- Clear assignment and expectations

Staffing:

ARF resources normally staff from 0900 – 1730. Briefings (including visiting module supervisors) are at 1020 after PT. Visiting Resources will be identified on the web-based staffing summary on the FTC web page, updated daily by the District Fire Duty Officer. ICs should use the ARF Incident Organizer on each incident to provide size-up and information to FTC Dispatch.

FY 2012 Fire Management Resources (ARF Standard Identifiers):

<i>Arapaho - Roosevelt NF</i>			
Chief 1	Forest FMO	Geoffrey Bell	Fort Collins
Chief 2	Forest AFMO	- vacant -	Fort Collins
Division 1	South Zone FMO	Will Briggs	Boulder
Division 5	North Zone FMO	Dave Hamrick	Fort Collins
Division 8	Sulphur R.D. FMO	- pending -	Granby
Battalion 1	South Zone AFMO	Dave Buchanan	Nederland
Battalion 5-1	North Zone AFMO	John Southern-Weber	Fort Collins
Battalion 5-2	North Zone Fuels AFMO	James White	Fort Collins
Captain 611	E-611 Supervisor	Ed LeBlanc	Nederland
Captain 612	E-612 Supervisor	Chad Buser	Nederland
Captain 651	E-651 Supervisor	Scott Nilson	Redfeather
Captain 652	E-652 Supervisor	<i>unstaffed</i>	Redfeather
Captain 653	E-653 Supervisor	Linda Austin	Fort Collins
Captain 654	E-654 Supervisor	Nate Hallam	Fort Collins
Captain 671	E-671 Supervisor	<i>unstaffed</i>	Idaho Springs
Captain 681	E-681 Supervisor	Deana Harms	Granby
Captain 1-1	South Zone IA Squad Supervisor	Pat Owens	Nederland
Captain 1-2	South Zone Fuels Squad Supervisor	Bill Alakai	Boulder
Captain 5-5	North Zone IA Squad Supervisor	Scott Nutt	Fort Collins
Captain 5-6	North Zone Fuels Squad Supervisor	Matt Champa	Fort Collins
Captain 8-2	Sulphur R.D. Fuels Squad Supervisor	Bill Ross	Granby
Squad 1-1	South Zone IA Squad	Pat Owens	Nederland
Squad 1-2	South Zone Fuels Squad	Bill Alakai	Boulder
Squad 5-5	North Zone IA Squad	Shane Fisk	Fort Collins
Squad 5-6	North Zone Fuels Squad	Joe Parr	Fort Collins
Squad 8-2	Sulphur R.D. Fuels Squad	Bill Ross	Granby
Patrol 6-1	North Zone Patrol Unit (with water)	<i>unstaffed</i>	Greeley
Patrol 8-1	Sulphur R.D. Patrol Unit (with water)	- pending -	Granby
Prevention 1-1	South Zone Prevention Unit (no water)	Julie Stennes	Nederland
Prevention 5-1	North Zone Prevention Unit (no water)	Sonya Whitesell	Fort Collins
Prevention 5-2	North Zone Prevention Unit (no water)	Jane Gordon	Fort Collins
Roosevelt Hotshots	Roosevelt IHC Superintendent	Larry Money	Fort Collins
Roosevelt 1	IHC Assistant Superintendent	Tim Griffin	Fort Collins
Roosevelt A	Squad Leader	Tom Kelsea	Fort Collins
Roosevelt B	Squad Leader	Eric Levy	Fort Collins
Roosevelt C	Squad Leader	Mike Lehman	Fort Collins
	<i>Full identifier begins with "ARF." Example: "ARF Battalion 1-1"</i>		

Rocky Mountain National Park

Call Sign	Position	Current Employee	Phone
Chief 3	FMO	Mike Lewelling	586-1287 (w) 232-5326 (c)
Battalion 3-1	Fire Operations Specialist	Charlie Reynar	586-1436 (w) 227-0397 (c)
Battalion 3-2	Fuels Specialist	Doug Watry	586-1211 (w) 227-4632 (c)
Fire 308	Fire Business Manager	Rhonda Foley	586-1237 (w) 372-7670 (c)
Fire 309	Fire Program Clerk	Melania Stoeber	586-1299 (w)
Fire 380	Fire Ecologist	Nate Williamson	586-1434 (w) 227-7708 (c)
Fire 381	Fire Monitor	Matt Muller	586-1435
Fire 382	Fire Monitor	Kevin Osborne	586-1435
	FIRE CACHE		586-1444
	ROMO DISPATCH		586-1204
	ROMO FIRE FAX		586-1318
MODULE 32 – Fire Module			
Captain 3-2	Module Supervisor	Jeff Singer	586-1495 (w) 692-1578 (c)
32 Alpha	Asst. Module Leader	Todd Pinkowski	586-1259 (w) 692-9837 (c)
32 Bravo	Squad Leader	David Frey	
32 Charlie	Squad Leader	Jeff Noble	
Module 32	Module Crewmember	Laura Norman	
Module 32	Module Crewmember	Clint Gregalla	
Module 32	Module Crewmember	Scott Noble	
Module 32	Module Crewmember	Chris Sommers	
Module 32	Module Crewmember	Andrew Coats	
Module 32	Module Crewmember		
Module 32	Module Crewmember		
Module 32	Module Crewmember		
For the Module it is preferred to simply contact 'Module 32' (includes Type 6 Engine)			
ALPINE HOTSHOTS – Interagency Hot Shot Crew			
Alpine	Alpine Hotshot Superintendent	Paul Cerda	586-1335 (w) 215-9465 (c)
Alpine Alpha	Alpine IHC Captain	James Champ	227-1432 (w) 227-6154 (c)
Alpine Bravo	Alpine IHC Captain	Mark Mendonca	692-1463 (w) 692-1463 (c)
Alpine Charlie	Module Leader	Shawn Phillips	586-1457 (w) 215-1116 (c)
Alpine Delta	Module Leader	Zach Becker	586-1457 (w) 523-2269 (c)
SQUAD 33 – Hazard Tree Crew			
354	Hazard Tree Crew Supervisor	Brian Verhulst	
SQUAD 33	Crew	Aaron Klee	
SQUAD 33	Crew	Jay Schaub	
SQUAD 33	Crew	Mike Donnachie	
SQUAD 33	Crew	VACANT	
SQUAD 33	Crew	Dale Loper	
SQUAD 33	Crew	Mike Cooper	

Miscellaneous Support:

For Incident replacement requisitions, logistical support, lodging, vehicle, and timesheet issues and computer access, see the Zone or District Fire Duty Officer.

South Zone (Boulder & Clear Creek R.D.)

Overview: The South Zone (SZ) encompasses the Colorado Front Range from southern Larimer County to northern Jefferson County (approximately 300,000 acres). The western boundary is the Continental Divide. The eastern boundary is very irregular and runs through the foothills of the Front Range. This heavily urbanized area includes forest adjacent to the I-70 corridor and numerous communities. Three small Wilderness Areas exist on the zone, Mt. Evans, James Peak and Indian Peaks Wilderness. Human caused fires are common in the surrounding National Forest. An extensive road network facilitates fire suppression. Numerous private and other land management agency in-holdings, coupled with extensive WUI complicate suppression action and elevate incident complexity. Approximately 30 Fire Protection Districts exist within SZ, which includes Boulder, Gilpin and Clear Creek Counties. Boulder County is the most urbanized.

Fuels Fire Behavior & Fire Occurrence:

A variety of fuel types are present in the zone and are due to elevation differences. Typically, Ponderosa with grass under story is found at lower elevations. This fuel type exhibits the most aggressive burning, even at night. Most development and WUI exists here. Above 7500 feet, closed canopy mixed conifer stands become more prevalent. Fire occurrence here is lower and fire behavior is reduced. At 8500 feet, Lodgepole pine becomes common. Fire occurrence here is rare and does not usually present control problems unless drought and wind are involved. Elevations above 9500 feet are predominantly short needle conifers or a spruce-fir fuel type. At approximately 11,500 feet is tree line and the tundra begins. Fire occurrence here is very rare. Most fires on the zone are suppressed as class A or B. Larger fires commonly have winds which determine rate and direction of spread.

Some areas of the District have concentrations of mortality due to pests & insects. Heavy mop up, spotting may be encountered due to bug kill and snags. Areas of Douglas fir or Ponderosa pine under story or overstocked dog-hair stands may behave like a brush fuel model.

Local key thresholds:

- **ERC's > 63** (avg. 90th % measured at Sugarloaf(70), Pickle Gulch(58), Corral Creek(61) RAWS).
- **RH < 20%**,
- **Temperature > 75°F**
- **20 ft. Winds >12 mph**
- **1000 hr FM < 12%**

Fire Weather Zones: 239, 215, 216, 212

Topography & Local influences:

Drainages generally run west to east and sometimes inhibit fire spread north or south. Ridge tops can sometimes aid in fire control as many exhibit rocky outcrops that may serve as natural barriers. Steep slopes > 100% are present throughout the Zone. Up valley, up canyon diurnal winds may be relatively strong and persistent at lower elevations. Down valley diurnal winds at night may be anticipated. Some fire spread may be slope driven. Night operations can be particularly hazardous due to the rugged terrain. Many of these canyons have swift moving creeks that may present drowning hazards during high water events. A history of underground mining on the zone has created many hazardous mine openings (mine shafts) that present extreme danger.

Fire Resource locations

Resources are located at Nederland Work Center on the Peak to Peak Highway and the Idaho Springs Work Center adjacent to I-70. District support staff is located at offices in Boulder and Idaho Springs. Crews brief daily at approximately 1000 hrs.

Cooperator Resources:

There are numerous Fire Protection Districts with a variety of capabilities and equipment. Some lack formal Red Card Qualifications. Most of the volunteer firefighters have limited availability during extended

attack. ARF units must coordinate initial attack with County units. The Sheriff departments in Boulder, Clear Creek and Gilpin Counties maintain varying degrees of wildfire response. A deputy or emergency services coordinator may respond for the County. Most County sheriffs are authorized to expend their counties funds to order suppression resources, including aircraft. The mutual aid period in Boulder, Clear Creek and Gilpin Counties is 12 hours or midnight of the first operational period.

Sulphur Ranger District (SRD)

Overview:

The Sulphur Ranger District (SRD), lies entirely within Grand County with approximately 400,000 acres of public lands. The eastern boundary is Rocky Mountain NP, the southeast boundary is the Continental Divide, adjacent to the Clear Creek R.D. (SZ). The north and northwest boundaries of the district abut the Medicine Bow-Routt NF and the southwest border is with the White River NF. The SRD surrounds private lands of the Fraser Valley, which includes the WUI associated with the towns of Winter Park, Fraser, Tabernash, Granby, and Grand Lake. Isolated blocks of BLM land exist throughout the District. Five Wilderness/Protection Areas exist on the district; Vasquez Peak, Byers Peak, Never Summer, James Peak Protection Area and Indian Peaks Wilderness. The surrounding National Forest System Lands receive many visitors however, human caused fires are rare. An extensive road network exists that generally facilitates fire suppression outside the Wilderness Areas.

Fuels Fire Behavior & Fire Occurrence:

Sage and grass are found at lower elevations transitioning to Aspen/Sage and Lodgepole mix. Lodgepole pine is predominating from 8500 to 10000 feet elevation where there is a transition to mixed conifer. Most values at risk such as the urban intermix lie in the lower Lodgepole zone or valley bottoms. The epidemic Mountain Pine Beetle outbreak has caused extensive mortality on 300,000+ acres killing 70 to 80% of all Lodgepole pine trees over 6 inches DBH.

Fire occurrence in all fuel types is low, but the MPB mortality may lead to much larger fires than seen in recent past. Some areas of MPB mortality are in a "red and dead" stage where tree crowns are still intact but may react much like fine dead fuels with the proclivity to initiate a crown fire with moderate surface fire behavior. Some areas have progressed into snag patches. The changing hazardous fuels conditions and snag/tree fall hazards should be thoroughly covered in safety briefings.

Local key thresholds:

- **ERC's > 52** (90th percentile measured at Harbison RAWS).
- **RH < 20%**,
- **Temperature > 75°F**
- **20 ft. Winds >12 mph**
- **1000 hr FM <12%**

Fire Weather Zones: 212, 213, 218

Topography & Local Influences:

National Forest System Lands exist from 8000 feet elevation on the valley bottoms to Pettingell Peak at 13,553 feet on the Continental Divide. Alignment of westerly winds and west facing aspect along the Continental divide can create strong up valley, up canyon winds. Nighttime diurnal winds can be very light with pooling in the high mountain valleys. Several major deep drainages lie perpendicular to westerly winds and create large-scale eddy effects and upslope winds on the lee side. Ridge tops can sometimes aid in fire control as many exhibit rocky outcrops or change to tundra fuel type.

Fire Resources Location:

Fire resources are stationed near Grand Lake at the Shadow Mountain Work Center with District support staff located at the office in Granby. Sulphur has a militia group with up to 15 FFT2's. IA Dispatch is complicated;

- Fort Collins Interagency Dispatch Center (FTC) has responsibility for incidents on ARF and RMNP lands.
- Craig Interagency Dispatch Center (CDC) has responsibility for BLM lands, and resource orders made by the County Sheriff department for private or state lands.

- Grand County 911 Dispatch, (“Hot Sulphur Dispatch”) is the primary source of fire notifications. Confusion can occur on which Federal dispatch center has responsibility. The two Dispatch centers have a working agreement which allows them to transfer responsibility if needed. If location or jurisdiction is unknown on IA, default to FTC and work out the details later.

Cooperator Resources:

Five Fire Protection Districts exist within or adjacent to the District. The mutual aid period in Grand County is 24 hours. The Sulphur District provides IA suppression response to the scattered BLM properties. However, the North West Colorado Fire Management Unit is administratively responsible for all fires on BLM land adjacent to the District, in conjunction with Craig Interagency Dispatch Center (CDC)

NORTH ZONE (Canyon Lakes R.D. and Pawnee N.G.)

Overview:

Canyon Lakes Ranger District covers an area of 841,502 acres and extends from the Wyoming border to the Boulder County line, and west from Highway 287 to Rocky Mountain NP and the Jackson County line. The Northern Front Range area has a large population that lives in the intermix area, and includes numerous Fire Protection Districts and Departments. An extensive road network exists outside the Wilderness Areas that facilitates fire suppression. The District staff office is co-located with the Forest Supervisor’s office in Fort Collins.

The Pawnee National Grassland is short-grass prairie which lies east of I-25 with widely dispersed, large parcels of land under USFS Management. There is a growing increase in the oil and gas industry presence, but most hazards to firefighters are minimal. Most stationary sites are adequately cleared of vegetation considering the fire behavior seen with the fuel type present. Although there have been no reports of sour gas (high H₂S concentrations) incidents, the potential still exists. Be mindful when operating in these areas. Refrain from driving over pipelines. The District staff office is in Greeley.

Fuels Fire Behavior & Fire Occurrence:

Mountain Mahogany can be found in all zones except Spruce Fir zone. With heavy concentrations this brush may resemble a fuel model 4 and have high rates of spread. Re-burn potential must be considered with this brush. Flame lengths of 5-15 feet may be observed.

Grass-Shrub Zone

(5000 ft) Moderate fire occurrence along with the highest density of WUI, and includes a patchwork of ownership and jurisdictions. Fuel Models primarily 1 and 2; grass, Sage, Bitter brush, Mountain mahogany, and Juniper. This zone contains large continuous fuels and rocky slopes. ROS is strongly affected by terrain and wind.

The Pawnee NG has moderate fire occurrence and scattered WUI. Fuel Model 1 (short grass prairie); denser fuel loads may exist in gullies and on adjacent private lands. ROS is wind driven.

Ponderosa Zone

(6,000 – 8,000 ft) highest fire occurrence and moderate WUI. Comprises about half of the Canyon Lakes response area; includes mixed ownership. Fuel Models primarily 2 and 8. Moderate to very steep terrain dominates it, and lower elevations are mainly grass and open Ponderosa while upper elevations tend to be more of a closed canopy stand. Needle and duff layers may be thick under canopy. Lighter densities of trees are intermixed with shrubs and grasses. Most of the fires in this zone are low intensity surface fires. However, wind driven fires do occur.

Lodgepole Pine Zone

(8,000 -12,000ft) low fire occurrence with moderate WUI. The Fuel Models primarily 8 and 10. Moderate terrain with dog hair stands of Lodge pole pine are dominant features of this zone. Insects and disease infestations are very common in this area. Needle and duff layers are relatively light but the dead and down component can be very heavy. ROS are slow to moderate on the surface, however in the presence of 20’ winds of 8 -14 mph., ROS may dramatically increase, with potential to transition into a crown fire.

Spruce-Fir Zone

(9,000-12,000 ft). Low fire occurrence and WUI is rare. Fuel Models primarily 10 and 11. Usually wet with a short fire season. Heavy down and dead throughout the zone are the primary carriers of fire. Deep pockets of duff and sod make up the surface fuels. Creeping ground fire with a slow rate of spread is typical of this zone. However, prolonged drought can reduce fuel moistures and explosive fire behavior could occur.

Local key thresholds:

- **ERC's > 66** (avg. 90th % measured at Redstone(70), Red Feather(67), Estes Park(62) RAWS).
- **RH < 20%**
- **Temperature > 75°F**
- **20 ft. Winds > 12 mph**
- **1000 hr FM < 12%**

Fire Weather Zones: 238, 215, 218

Topography & Local Influences:

Major ridges and drainages are generally East – West, but secondary features are aligned in all directions. The prevailing winds for the CLRD are SW. Formation of lenticular clouds signify high winds aloft that may surface east of the Continental Divide.

The Pawnee National Grassland is generally flat, with prevailing West winds.

Resource Locations:

Resources (including the Roosevelt IHC) are located at the CLRD Admin Site in northern Fort Collins, adjacent to Highway 287, and at Redfeather Lakes Work Center, just east of the Red Feather Lakes Mountain Community, north of Larimer County Road 74E. Morning briefings are at 1015.

Cooperator Resources:

Larimer County (radio call signs 'Ocean') staff Engines and IA Squads. Local VFDs including Crystal Lakes, Red Feather, Glacier View, Rist Canyon, Poudre Canyon, Livermore, Loveland, Big Thompson, Estes Park, Glen Haven, Berthoud, Big Elk Meadows, Lyons, and Pinewood Springs can staff numerous types of engines. Fire response on the Pawnee National Grassland is accomplished through direct protection agreement with cooperator Departments and oversight by NZ resources as needed. The mutual aid period in Larimer County is 12 hours or midnight of the first operational period. There is no mutual aid period in Weld County.

Rocky Mountain National Park

Overview:

The Park embraces 415 square miles of pristine, uninhabited mountains. Trail Ridge Road, the highest paved continuous road in the United States, stays above tree line for 11 miles and reaches 12,183 feet in elevation. Threatened and endangered species such as Greenback Cutthroat Trout and Boreal Toad are found in the Park. Visitation exceeds 3 million visitors annually, which results in significant resource protection and visitor management incidents.

Fuels – Fire Behavior – Fire Occurrence: A variety of fuels are present within RMNP due to elevation differences. Typically, Ponderosa with grass understory is found at lower elevations. This fuel type exhibits the most aggressive burning- even at night. Most development and WUI exists here. Above 7500', closed canopy mixed conifer stands become more prevalent. Fire occurrence here is lower and fire behavior is expected to be less than in the Ponderosa. At 8500 feet, Lodgepole pine becomes common and dominates. Fire occurrence here is limited, unless drought and wind are involved. Elevations above 9500 feet are predominantly short needle conifers or a spruce/fir fuel type. At 11,500 feet, tundra begins. Fire occurrence here is extremely rare and most fires where action is taken do not grow larger than the .10 acre. Large fires in the park can generally be associated with high winds that determine direction and spread. Some areas of the Park have high concentrations of mortality due to pests and insect infestation. Increased fire behavior and long range spotting could be associated with these altered fuel types.

Local key thresholds:

- **ERC's > 62** (90th percentile measured at Estes Park RAWS)
- **RH < 20%**
- **Temperature > 75°F**
- **20 ft. Winds > 12 mph**
- **1000 hr FM < 13%**

Fire Weather Zones: **213** covers the west side of the Park from 6000' to 9000'
218 covers the west side from 9000' to the east side at 9000'
215 covers the east side of the Park from 6000' to 9000'

Cooperator Resources:

Federal and local cooperators, including Volunteer, Municipal, Colorado State Forest Service, US Forest Service, Boulder County, Larimer County, and Grand County may respond to fires in the Park. Fires may be tactically simple, but complexity is elevated due to heavy resource commitment and media presence. Mutual Aid Agreements preclude any exchange of funding for at least 12 hours of initial response.

Topography and Local Influence: Drainages generally run from west to east and can prohibit fire spread north or south. Ridge tops and rocky outcrops may serve as natural fuel barriers. Steep slopes greater than 100% are present throughout the dispatch area. Up valley/canyon/slope diurnal winds may be relatively strong and persistent at lower elevations. Down valley night time winds may be anticipated. Some fire spread may be slope driven. Night operations can be particularly hazardous due to the rugged terrain. Many canyons have swift moving creeks that may present drowning hazards during high water events.

Special Management Considerations:

The policy in Rocky Mountain National Park is to manage all Park land as if it were Wilderness. Legislation within the Wilderness Act of 1964 applies only to specific areas within the park designated Wilderness - however; the Park draws guidance from the Wilderness Act when making decisions involving all lands within its boundaries. These decisions typically involve the Chief of Resource Stewardship, the Backcountry Office, and the Superintendent. In the case of a fire, much of the information would be provided by the Incident Commander, the Fire Management Officer, the Duty Officer, and/or a combination of all entities. The list below is to be utilized as guidance.

Tactical

- ⌘ Chain saws, helicopters, air tankers, or pumps can be used when essential to meet suppression objectives, but with due consideration to impacts on wilderness character and subject to minimum tool determination. Requires Duty Officer Approval.
- ⌘ Helicopters are restricted to natural landing sites when available and will not occur in Research Natural Areas or other sensitive sites identified by the Resource Advisor.
- ⌘ Type 1 helicopters may be required to dip out of separate sites than Type 2 or Type 3.
- ⌘ Motor vehicle and heavy equipment use is limited to existing roads.
- ⌘ Water drops are preferred over fire retardant.
- ⌘ Fireline will be located to take advantage of natural barriers, rock outcroppings, trails, streams, etc.
- ⌘ Firelines will be no wider than necessary to stop the spread of the fire.
- ⌘ Burning snags will be felled only when they are a definite threat to fall across the fire line or to the safety of firefighters. Otherwise, they will be allowed to burn down naturally.
- ⌘ Low stump heights will be used on any trees removed in the suppression effort. Flushed @ or below ground level.
- ⌘ Bucking of windfall in building fire line shall be minimized. Where bucking is done, saw cuts will be aligned away from trails or other travel corridors.
- ⌘ Limbing along the fire line will be done only as necessary for suppression efforts or firefighter safety.
- ⌘ Protection of five-needled pines from crown fires: Where safe and feasible, non-pine ladder trees directly beneath the pine canopy which are less than 100 years (any fir or mountain hemlock \leq 15" dbh) should be felled when torching is expected.

Logistical

- ⌘ Facilities (fire camps and helispots) will be located outside of backcountry whenever possible.
- ⌘ Use of existing campsites is preferred, rather than creating new ones.
- ⌘ Avoid all sensitive areas as identified by the Resource Advisor.
- ⌘ Establish several small camps rather than one large one.
- ⌘ Camps will be a minimum of 200 feet away from water sources.
- ⌘ Toilet facilities, if not managed through portable facilities, will be a minimum of 200 feet away from

water sources.

- ✂ Multiple and varying travel routes will be used to the fire, sources of water, and helispots.
- ✂ Nails will not be used in trees.
- ✂ All garbage will be packed out.

Rehabilitation

- ✂ Control lines will be backfilled and scarified.
- ✂ Water bars will be installed and drain dips constructed to minimize erosion.
- ✂ Stumps will be flush cut and covered with soil, moss, etc.
- ✂ Position felled/bucked material so as to be least noticeable to visitors and camouflage where possible.
- ✂ All flagging, equipment and litter will be removed.
- ✂ Camping areas and helispots will be restored using native materials.

USFS-R2 Fire Operations Guidance in Bark Beetle Stands

Due to altered fuel conditions, personnel operating within the bark beetle environment should be aware of the imminent danger presented by dead and dying trees, falling at an increasing rate across a broad forested landscape.

Purpose and Intent

Fire Operations Guidance is mindful of Foundational Fire Suppression Doctrine in the Forest Service. The first principle is: No resource or facility is worth the loss of human life, however the wildland fire suppression environment is complex and possesses inherent hazards that can---even with reasonable mitigation---result in harm to fire fighters engaged in fire suppression operations. In recognition of this fact, we are committed to the aggressive management of risk.

This guidance provides a collection of potential hazards unique to bark beetle forests, including appropriate practices that have evolved over time within the wildland fire service. It does not provide absolute solutions to the unlimited number of situations that will occur.

This guidance within bark beetle stands was provided with the intention of being used in conjunction with existing fire risk management documents. No further protocols or rules are necessary to make informed risk management decisions for fire operations in bark beetle stands. The following hazard guidance is provided:

Tactical Hazards

- Withdrawal and/or reassessment should be considered if any of the following are present:
 - Thunderstorms in the immediate vicinity.
 - Wind speeds are strong enough that canopy movement is observed¹ (Consider that wind speeds at eye level in sheltered areas may not indicate the much greater winds aloft)
 - Reliable communication cannot be established with the appropriate Dispatch Center and remain in place 24/7 when resources are engaged.
- Due to limited ingress or egress in remote areas or in terrain without vantage points, consider using an aerial platform for risk assessment and size up.

Potential Fire Behavior Hazards

- Due to increased potential of extreme fire behavior, when ERCs approach the 90th percentile, air reconnaissance should be on scene within 1 hour of detection.
- The following situations, though possible on any wildfire, may be accentuated in bark beetle stands:
 - Accelerated transition to crown fire (when needles are present)
 - Increased rate of spread (Surface fire)
 - Resistance to control (Heavy dead and down)
 - Frequent spotting, including long range (>.25 miles)

¹ Beaufort Scale for Estimating 20-FT Wind speed, 2010 IRPG page 77

UNIT Fort Collins Interagency Dispatch Center	FIRE TELEPHONE NUMBERS Commercial: 970-295-6800
ADDRESS 2150 Centre Avenue, Building E Fort Collins, CO 80526-8119	Night or 24 Hour Telephone Numbers Commercial: 970-295-6800 After Hours—Follow Voice Mail directions Use Numbers Listed Below If No Response
FACSIMILE NUMBER Commercial: 970-295-6801	ELECTRONIC ADDRESSES E-Mail: fortcollinsdispatch@yahoo.com Web: gacc.nifc.gov/rmcc/dispatch_centers/r2ftc

-- IF NO ANSWER ON ABOVE FIRE NUMBERS, CALL IN ORDER LISTED BELOW --

NAME/TITLE	OFFICE	HOME	CELL
Allyn Herrington Dispatch Center Mgr.	970-295-6830		970-219-9490 aherrington@fs.fed.us
Scott Molinari Asst Dispatch Center Mgr.	970-295-6831		970-217-1281 smolinari@fs.fed.us
John Stevi Aircraft Dispatcher	970-295-6800		
Anne Baxter IA Dispatcher	970-295-6800		
Vacant Intel. Dispatcher	970-295-6800		
Aircraft Desk	970-295-6832		
IA Desk	970-295-6833		
Floor Ops.	970-295-6834		

UNIT BOULDER RANGER DISTRICT	FIRE TELEPHONE NUMBERS Commercial: 303-541-2500
ADDRESS 2140 Yarmouth Avenue Boulder, CO 80301-1614	NIGHT OR 24 HOUR TELEPHONE NUMBERS Commercial: (FTC) 970 295.6800 ** Use FTC number only if personnel cannot be reached at numbers below **
FACSIMILE NUMBER Type: Automatic Commercial: 303-541-2515	ELECTRONIC ADDRESSES E-Mail: (name)@fs.fed.us

IF NO ANSWER ON ABOVE FIRE NUMBERS, CALL IN ORDER LISTED BELOW

NAME/TITLE	OFFICE	HOME	CELL/MOB/SAT
Will Briggs Zone FMO – DIV 1 BRD/CCRD	303-541-2520		C: 208-851-2945
Dave Buchanan AFMO – BAT 1	303-258-0234		C:720-375-6405
Paul Krisanits Law Enforcement FS 24	303-541-2513		C: 303-349-8220
Trey Schillie Acting District Ranger	303-541-2505		C: 720-256-4732
Nederland W.C. / Fire Cache	303-258-9193 303-258-0234 Fax/303-258-0362		
Pat Owens Captain 1-1	303-258-9193		Squad 1 Cell: 303-956-8049 C 303-870-7807
Ed LeBlanc Captain 611	303-258-9193		C 720-272-2078 Engine Cell: 303-956-2858
Chad Buser Captain 612	303-258-9193		Engine Cell: 303-956-3623 C: 719-330-1133
Julia Stennes Prevention 1	303-258-9193		Prevention Cell: 720-891-6876
Bill Alakai Fuels Captain	303-258-9193		C: 303-717-9789
Fire Bunkhouse 1 (sm.) Fire Bunkhouse 2 (lg.)	(@ Nederland)		Temp Gov Employees #1

UNIT CANYON LAKES RANGER DISTRICT		FIRE TELEPHONE NUMBERS Commercial: 970-295-6600	
ADDRESS 2150 Centre Avenue, Building E Fort Collins, CO 80526-8119		NIGHT or 24 HOUR TELEPHONE NUMBERS Commercial: (FTC) 970 295-6800 * Use FTC number only if personnel cannot be reached at numbers below *	
FACSIMILE NUMBER Type: Automatic Commercial: 970-295-6795		ELECTRONIC ADDRESSES E-Mail: (name)@fs.fed.us	
NAME/TITLE	OFFICE	HOME	CELL/MOB/SAT
Dave Hamrick NZ- FMO / DIVS 5	970-295-6780		C 970-420-2726
John Weber NZ- AFMO / BAT 5-1	970-295-6781		C 970-712-8503
Kevin Atchley District Ranger	970-295-6711		C 970-420-9819
Lenora Arevalos FS 15 (FS1528) LEO Canyon Lakes	970-295-6725		C 970-222-5241 F 970-295-6725
Informational Numbers Redfeather W.C. Office, Bunkhouse New bunkhouse Fire cache FAX 274 Dowdy Lake Road, PO Box 128, Red Feather, CO 80545-0128 Stub Creek W.C. Home Moraine W.C. Arrowhead V.C. Buckhorn W.C. Deadman Lookout	970-881-2937 970-881-2937 970-881-2927 970-881-2347 970-881-2346 970-435-5798 970-881-2401 970-881-2152 Radio Radio		Scotty Nilson, Capt. E651
CLRD Fire Cache Hemlock Work Center 300 Hemlock Street Fort Collins, CO 80524	970-419-4439 (fax) "Ad Site"	Engine Bay 970-419-4420 AFMO x4421	Conf. Room x4423 Scott Nutt, Capt Sqd 55, x4422 Linda Austin, Capt. E653, x4424 Reid Marquart, Capt. E654, x4425 Hotshot Supt. x4433

UNIT CLEAR CREEK RANGER DISTRICT	FIRE TELEPHONE NUMBERS Commercial: 303-567-3000
ADDRESS 101 Chicago Creek Idaho Springs, Co 80452	NIGHT OR 24 HOUR TELEPHONE NUMBERS Commercial: FTC Dispatch 970-295-6800
FACSIMILE NUMBER Type: Automatic Commercial: 303-567-3021	ELECTRONIC ADDRESSES E-Mail: (name)@fs.fed.us

IF NO ANSWER ON ABOVE FIRE NUMBERS, CALL IN ORDER LISTED BELOW

NAME/TITLE	OFFICE	HOME	CELL/MOB/SAT
Will Briggs Zone FMO – DIV 1 BRD/CCRD	303-541-2520		C: 208-851-2945
Dave Buchanan Zone AFMO – BAT 1	303-258-0234		C:720-375-6405
Brian Fields Law Enforcement	303-567-3031		C: 970-531-2913
Daniel Lovato District Ranger	303-567-3001		C 303-204-0356
Visitors Center	303-567-3000		
CCRD Fire Cache	303-567-3035		

UNIT SULPHUR RANGER DISTRICT	FIRE TELEPHONE NUMBERS Commercial: 970-887-4100
ADDRESS 9 Ten Mile Drive, P.O. Box 10 Granby, Co 80446-0010	NIGHT OR 24 HOUR TELEPHONE NUMBERS: Use Cell
Main Office (VIS) 970-887-4100 FAX Number: 970-887-4102	Fort Collins Interagency Dispatch: 970-295-6800 After hours follow voice mail directions.

IF NO ANSWER ON ABOVE FIRE NUMBERS, CALL IN ORDER LISTED BELOW

NAME/TITLE	OFFICE	HOME	CELL
Vacant Fire Mgmt. Officer, DIVS 8	970-887-4128		
Deana Harms Captain Engine - 681	970-627-5022		C: 970-509-9504
Todd Like ENOP Engine - 681	970-627-5022		C: 970-531-3303
Bill Ross Fuels Captain Captain-82	970-627-5022		C: 970-531-2569
Vacant Prevention, Patrol - 81			
Tom Williams Timber	970-887-4132		C 970-531-2564
Craig Magwire District Ranger	970-887-4124		C 970-531-1942
Vacant FS 1728 (LEO)	970-887-4116		

UNIT Arapaho-Roosevelt NF & Pawnee NG	FIRE TELEPHONE NUMBERS Commercial: 970-295-6600
ADDRESS 2150 Centre Ave Building E Fort Collins, CO 80526-8119	NIGHT or 24 HOUR TELEPHONE NUMBERS Commercial: (FTC) 970-295-6800 After Hours: Follow Voice Mail Directions
FACSIMILE NUMBER Type: Automatic Commercial: 970-295-6801	ELECTRONIC ADDRESSES E-Mail: Web:

IF NO ANSWER ON ABOVE FIRE NUMBERS, CALL IN ORDER LISTED BELOW

NAME/TITLE	OFFICE	HOME	CELL
Geoff Bell Forest FMO / Chief 1	970-295-6631		C: 970 217.9814
Vacant Forest AFMO / Chief 2			
Hal Gibbs Forest Fire Staff	970-295-6630		C 970-222-2288
Glenn Cassamassa Forest Supervisor	970-295-6601		C 970-219-3114
Ron Archuleta Deputy Forest Supervisor	970 295.6602		C 406-223-0799

Arapaho – Roosevelt NF Radio Groups
CANYON LAKES RANGER DISTRICT- GROUP 01

CH #	NAME	RX FREQ	RX CG	TX FREQ	TX CG	CHANNEL LABEL
1	ROOSEVELT DIRECT	169.1750		169.1750		ROOS DIR
2	DEADMAN RPT	169.1750		169.9750	110.9	DEADMAN
3	BUCKHORN RPT	169.1750		169.9750	123.0	BUCKHORN
4	TWIN SISTERS RPT	169.1750		169.9750	131.8	TWIN SIS
5	THORODIN RPT	169.1750		169.9750	136.5	THORODIN
6	PAWNEE RPT	169.1750		169.9750	167.9	PAWNEE
7	ROOSEVELT WORK	166.5625		166.5625		ROOSWORK
8	MED BOW DIRECT	164.1500		164.1500	110.9	MBOW DIR
9	RMNP RPT	166.3500	100.0	166.9500	100.0	RMNP RPT
10	CDOW	151.4000	156.7	151.4000	156.7	CDOW
11	VFIRE21	154.2800	156.7	154.2800	156.7	VFIRE21
12	R.T.I.	171.4250		170.5500	156.7	RTI
13	LARIMER FIRE NET	154.3850	156.7	154.3850	156.7	LARCFIRE
14	ROUTT DIRECT	169.6000		169.6000	110.9	ROUT DIR
15	AIR/GROUND 7	166.8500		166.8500	151.4	A/G 7
16	WEATHER FT COLLINS	162.4500				FC WX

SUPERVISOR'S OFFICE- GROUP 02

CH #	NAME	RX FREQ	RX CG	TX FREQ	TX CG	CHANNEL LABEL
1	ROOSEVELT DIRECT	169.1750		169.1750		ROOS DIR
2	DEADMAN RPT	169.1750		169.9750	110.9	DEADMAN
3	BUCKHORN RPT	169.1750		169.9750	123.0	BUCKHORN
4	TWIN SISTERS RPT	169.1750		169.9750	131.8	TWIN SIS
5	THORODIN RPT	169.1750		169.9750	136.5	THORODIN
6	PAWNEE RPT	169.1750		169.9750	167.9	PAWNEE
7	ROOSEVELT WORK	166.5625		166.5625		ROOSWORK
8	ARAPAHO DIRECT	169.8750		169.8750		ARAP DIR
9	SQUAW RPT	169.8750		170.4750	110.9	SQUAW
10	MINES PEAK RPT	169.8750		170.4750	123.0	MINES PK
11	COTTON RPT	169.8750		170.4750	131.8	COTTON
12	BLUERIDGE RPT	169.8750		170.4750	136.5	BLUERIDGE
13	ARAPAHO WORK	164.1000		164.1000		ARAPWORK
14	LARIMER FIRE NET	154.3850		154.3850	156.7	LARCFIRE
15	GRAND SHERIFF	155.9400		153.9200	156.7	GRANDSHRF
16	WEATHER FT COLLINS	162.4500				FC WX

BOULDER RANGER DISTRICT- GROUP 03

CH #	NAME	RX FREQ	RX CG	TX FREQ	TX CG	CHANNEL LABEL
1	ROOSEVELT DIRECT	169.1750		169.1750		ROOS DIR
2	ROOSEVELT WORK	166.5625		166.5625		ROOSWORK
3	ARAPAHO WORK	164.1000		164.1000		ARAPWORK
4	TWIN SISTERS RPT	169.1750		169.9750	131.8	TWIN SIS
5	THORODIN RPT	169.1750		169.9750	136.5	THORODIN
6	BUCKHORN	169.1750		169.9750	123.0	BUCKHORN
7	GUNBARREL	169.1750		169.9750	103.5	GUNBRREL
8	VFIRE21	154.2800	156.7	154.2800	156.7	VFIRE21
9	AIR/GROUND 7	166.8500		166.8500		A/G 7
10	GILPIN COUNTY	153.8450		156.0150	100.0	GILPIN
11	RED1 NO	155.5350		154.3250	179.9	RED1 NO
12	RED1 SO	151.3550		154.3250	179.9	RED1 SO
13	RED3	154.4150		154.4150	179.9	RED3
14	RED5	153.9500		153.9500	167.9	RED5
15	RED6	154.3700		154.3700	131.8	RED6
16	SQUAW RPT	169.8750		170.4750	110.9	SQUAW

CLEAR CREEK RANGER DISTRICT- GROUP 06

CH #	NAME	RX FREQ	RX CG	TX FREQ	TX CG	CHANNEL LABEL
1	ARAPAHO DIRECT	169.8750		169.8750		ARAP DIR
2	SQUAW RPT	169.8750		170.4750	110.9	SQUAW
3	MINES PEAK RPT	169.8750		170.4750	123.0	MINES PK
4	COTTON RPT	169.8750		170.4750	131.8	COTTON
5	BLUERIDGE RPT	169.8750		170.4750	136.5	BLUERDGE
6	ROOSEVELT DIRECT	169.1750		169.1750		ROOS DIR
7	ARAPAHO WORK	164.1000		164.1000		ARAPWORK
8	THORODIN	169.1750		169.9750	136.5	THORODIN
9	WEATHER FT COLLINS	162.5500				WEATHER
10	CDOW	151.4000		151.4000	156.7	CDOW
11	VFIRE21	154.2800	156.7	154.2800	156.7	VFIRE21
12	CC COUNTY	155.0250		155.7450	100.0	CC CNTY
13	GILPIN	153.8450		156.0150	100.0	GILPIN
14	PSI DEVL	168.7250		168.1250	156.7	PSI DEVL
15	AIR/GROUND 7	166.8500		166.8500		A/G 7
16	ROOSEVELT WORK	166.5625		166.5625		ROOSWORK

SULPHUR RANGER DISTRICT- GROUP 07

CH #	NAME	RX FREQ	RX CG	TX FREQ	TX CG	CHANNEL LABEL
1	ARAPAHO DIRECT	169.8750		169.8750		ARAP DIR
2	SQUAW RPT	169.8750		170.4750	110.9	SQUAW
3	MINES PEAK RPT	169.8750		170.4750	123.0	MINES PK
4	COTTON RPT	169.8750		170.4750	131.8	COTTON
5	BLUERIDGE RPT	169.8750		170.4750	136.5	BLUERIDGE
6	ROOSEVELT DIRECT	169.1750		169.1750		ROOS DIR
7	ARAPAHO WORK	164.1000		164.1000		ARAPWORK
8	OWL MOUNTAIN RPT	172.3750		164.8750	146.2	OWL MTN
9	RMNP W RPT	166.3000		166.9000	156.7	RMNPWRPT
10	CDOW	151.4000		151.4000	156.7	CDOW
11	VFIRE21	154.2800	156.7	154.2800	156.7	VFIRE21
12	GRNAD CNT SHERIFF	155.9400		153.9200	156.7	GRANDSHRF
13	GRAND PS	155.6850		158.8200	156.7	GRND PS
14	GRAND PAGE	155.1150		153.9950	167.9	GRNDPAGE
15	AIR/GOUND 7	166.8500		166.8500		A/G 7
16	MARINE16	156.8000		156.8000		MARINE 16

CANYON LAKES FIRE- GROUP 08

CH #	NAME	RX FREQ	RX CG	TX FREQ	TX CG	CHANNEL LABEL
1	ROOSEVELT DIRECT	169.1750		169.1750	110.9	ROOS DIR
2	ROOSEVELT RPT	169.1750		169.9750	123.0	ROOS RPT
3	ARAPAHO DIRECT	169.8750		169.8750	131.8	ARAP DIR
4	ARAPAHO RPT	169.8750		170.4750	136.5	ARAP RPT
5	ROOSEVELT WORK	166.5625		166.5625	167.9	ROOSWORK
6	ARAPAHO WORK	164.1000		164.1000	100.0	ARAPWORK
7	R2 TAC	168.6750		168.6750	156.7	R2 TAC
8	COMMON USE	163.7125		163.7125	179.9	COMM USE
9	AIR/GROUND 7	166.8500		166.8500	151.4	A/G 7
10	VFIRE21	154.2800	156.7	154.2800	156.7	VFIRE21
11	VFIRE23	154.2950	156.7	154.2950	156.7	VFIRE23
12	VFIRE22	154.2650	156.7	154.2650	156.7	VFIRE22
13	BLD RED3	154.4150		154.4150	179.9	BLD RED3
14	RMNP RPT	166.3500		166.9500	100.0	RMNP RPT
15	WEATHER FT. COLLINS	162.4500				FC WX
16	LARAIMER FIRE NET	154.3850		154.3850	156.7	LARCFIRE

INCIDENT RADIO COMMUNICATIONS PLAN		1. Incident Name FTC Area Type III Incident		2. Date/ Time Prepared For Use in 2012		3. Operational Period Date/Time	
4. Basic Radio Channel Utilization Mode: W=Wideband Analog, N=Narrowband Analog, D=Digital, M=Mixed							
Channel	Function	Frequency		Tone	Mode	Assignment	Remarks
1	Tac 1	RX:	166.5625		N	Tac 1	Roosevelt Work Net (Base on Buckhorn Mtn.)
		TX:	166.5625				
2	Tac 2	RX:	168.6750		N	Tac 2	R2 Tactical
		TX:	168.6750				
3	Tac 3	RX:	168.6125		N	Tac 3	National Common Use
		TX:	168.6125				
4	Command Repeater	RX:	169.9500		N	Command Repeater FTC Portable Repeater	R2 ARF Scene of Action (SOA) New for 2012
		TX:	165.2250	107.2			
5	Air-Ground	RX:	166.8500		N	Air-Ground	NIICD Assigned Interagency Zone Air-Ground AG7
		TX:	166.8500				
6	Roosevelt Direct	RX:	169.1750		N	Fort Collins Dispatch	Roosevelt Net
		TX:	169.1750				
7	Roosevelt Repeater(s)	RX:	169.1750		N	Fort Collins Dispatch	TX Tones: Deadman: 110.9, Buckhorn: 123.0, Twin Sisters 131.8, Thorodin 136.5, Pawnee 167.9, Gunbarrel 103.5
		TX:	169.9750	List			
8	Arapaho Direct	RX:	169.8750		N	Fort Collins Dispatch	Arapaho Net
		TX:	169.8750				
9	Arapaho Repeater(s)	RX:	169.8750		N	Fort Collins Dispatch	TX Tones: Squaw: 110.9, Mines: 123.0, S Cottonwood 131.8, Blue Ridge 136.5, Portable 151.4
		TX:	170.4750	List			
10	RMNP Fire Repeater	RX:	169.6750	110.9	N	RMNP Fire Repeater	Twin Sisters-RMP New Freq. in 2012
		TX:	164.4250	103.5			
11	VFIRE21	RX:	154.2800	156.7	N	Interagency Medivac	Back-up Use only Name changed 2012 from Fern 1 to VFIRE21
		TX:	154.2800	156.7			
12	VFIRE22	RX:	154.2650	156.7	N	Interagency Tac	Back-up Use only Name changed 2012 from Fern 3 to VFIRE22
		TX:	154.2650	156.7			
13	VFIRE23	RX:	154.2950	156.7	N	Interagency Tac	Back-up Use only Name changed 2012 from Fern 2 to VFIRE23
		TX:	154.2950	156.7			
14	Logistics	RX:	163.7125		N	ICP Logistics	National Common Use
		TX:	163.7125				
15	Local County 911 Center	RX:	LIST		W	Local 911 Center	Determined by Location of Incident
		TX:	LIST	LIST			
16	Local Law Enforcement	RX:	TBD		W	TBD	Determined by Location of Incident
		TX:	TBD				
5. Prepared by: Scott Molinari Approved by:							
Use Forest Repeaters if FTC and ICP cannot communicate through the FTC Portable Command Repeater.							
FTC T3 IMG Air-Air Frequency: 127.3250. Air Guard-168.6250(110.9) For emergency initial contact only. Request additional A/A & A/G frequencies from FTC if needed.							
TONES: Program Forest Repeater and County 911 Center tones based on location of incident. Tone 1-100.0 2-103.5 3-110.9 4-123.0 5-131.8 6-136.5 7-151.4 8-156.7 9-167.9 10-179.9							
FTC Area County 911 Frequencies (Channel 13): Larimer 154.385 (RX/TX) Tone 156.7 Boulder: 154.3250 (RX/TX) Tone: 179.9 Gilpin: 153.8450 (RX) 156.0150 (TX) Tone: 100.0 Clear Creek: 155.0250 (RX) 155.7450 (TX) Tone: 100.0 Grand: 155.6850(RX) 158.8200 (TX) Tone: 156.7							
TAC Channels: If only one or two TAC channels are needed. Use TAC 2 or 3 first to avoid use of Forest Work Net.							

Rocky Mountain National Park Radio Groups

ZONE 1 - RMNP Primary Fire Group - TONE SELECTABLE

Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	FIRE RPT	164.4250	A	110.9	168.3750	A	110.9	N	Primary Fire Channel in Park - East Side
2	TWIN/TUN RPT	166.3500	A	110.9	166.9500	A	123.0	N	
3	MEAD RPT	170.3875	A	110.9	165.1750	A	131.8	N	
4	HAGUES RPT	172.4000	A	110.9	165.1750	A	136.5	N	Link west and east side of park to common channel
5	RED/SHAD RPT	166.3000	A	127.3	166.9000	A	146.2	N	Primary Fire Channel in Park - West Side
6	FIRE TAC 1	173.8250	A	0.0	173.8250	A	156.7	N	Incident Use Only
7	FIRE TAC 2	163.5750	A	0.0	163.5750	A	167.9	N	Incident Use Only
8	FIRE TAC 3	163.7125	A	0.0	163.7125	A	103.5	N	Incident Use Only
9	FS ROOS RPT	169.1750	A	0.0	169.9750	A	100.0	N	Primary USFS Fire Channel - East Side
10	FS ARAP RPT	169.8750	A	0.0	170.4750	A	107.2	N	Primary USFS Fire Channel - West Side
11	GLVFD	154.3400	A	167.9	151.0700	A	114.8	N	
12	EPVFD	159.4050	A	0.0	159.4050	A	127.3	N	
13	LAR FIRENET	154.3850	A	0.0	154.3850	A	141.3	N	
14	BLDR RED 1	154.3250	A	0.0	154.3250	A	151.4	N	Boulder County Dispatch and Emergency
15	NIFC A/G 1	166.8500	A	0.0	166.8500	A	162.2	N	
16	OPEN	0.0000	A	0.0	0.0000	A	192.8	N	

ZONE 8 - RMNP INCIDENT - Widland Fire (All-Risk) - CHANNEL SELECT

Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	USFS TWIN	169.1750	A	0.0	169.9750	A	131.8	N	FTC Dispatch - East Side
2	USFS CTNWD	169.8750	A	0.0	170.4750	A	131.8	N	FTC Dispatch - West Side
3	USFS DEADMN	169.8750	A	0.0	170.4750	A	110.9	N	FTC Dispatch - North Side
4	RM FIRE RPT	164.4250	A	110.9	168.3750	A	103.5	N	COMMAND - East Side
5	RM TWIN RPT	166.3500	A	110.9	166.9700	A	100.0	N	
6	RM MEAD RPT	170.3875	A	110.9	165.1750	A	131.8	N	
7	RM HAG RPT	172.4000	A	110.9	165.1750	A	123.0	N	
8	RM RED RPT	166.3000	A	127.3	166.9000	A	156.7	N	
9	RM SHAD RPT	166.3000	A	127.3	166.9000	A	103.5	N	COMMAND - West Side
10	RM PRSPCT RPT	164.4750	A	110.9	168.5625	A	103.5	N	Logistics - Authorized Use Only - IC Approval
11	PORTABLE RPT	167.1375	A	0.0	173.6250	A	136.5	N	Place Holder for Portable RPT
12	FIRE TAC 1	173.8250	A	0.0	173.8250	A	0.0	N	Line of Sight - RMNP Fire Tactical
13	FIRE TAC 2	163.5750	A	0.0	163.5750	A	0.0	N	Line of Sight - RMNP Fire Tactical
14	FIRE TAC 3	163.7125	A	0.0	163.7125	A	0.0	N	Line of Sight - RMNP Fire Tactical
15	NIFC A/G 1	166.8500	A	0.0	166.8500	A	0.0	N	Air to Ground
16	OPEN	0.0000	A	0.0	0.0000	A	0.0	N	

RMNP TONES	
TONE 2	TUNDRA
TONE 2	HAGUES
TONE 3	MEADOW
TONE 6	RED MTN (CRD)
TONE 8	SHADOW MTN (CRD)
TONE 8	FIRE
TONE 9	TWIN SISTERS

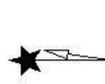
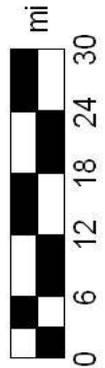
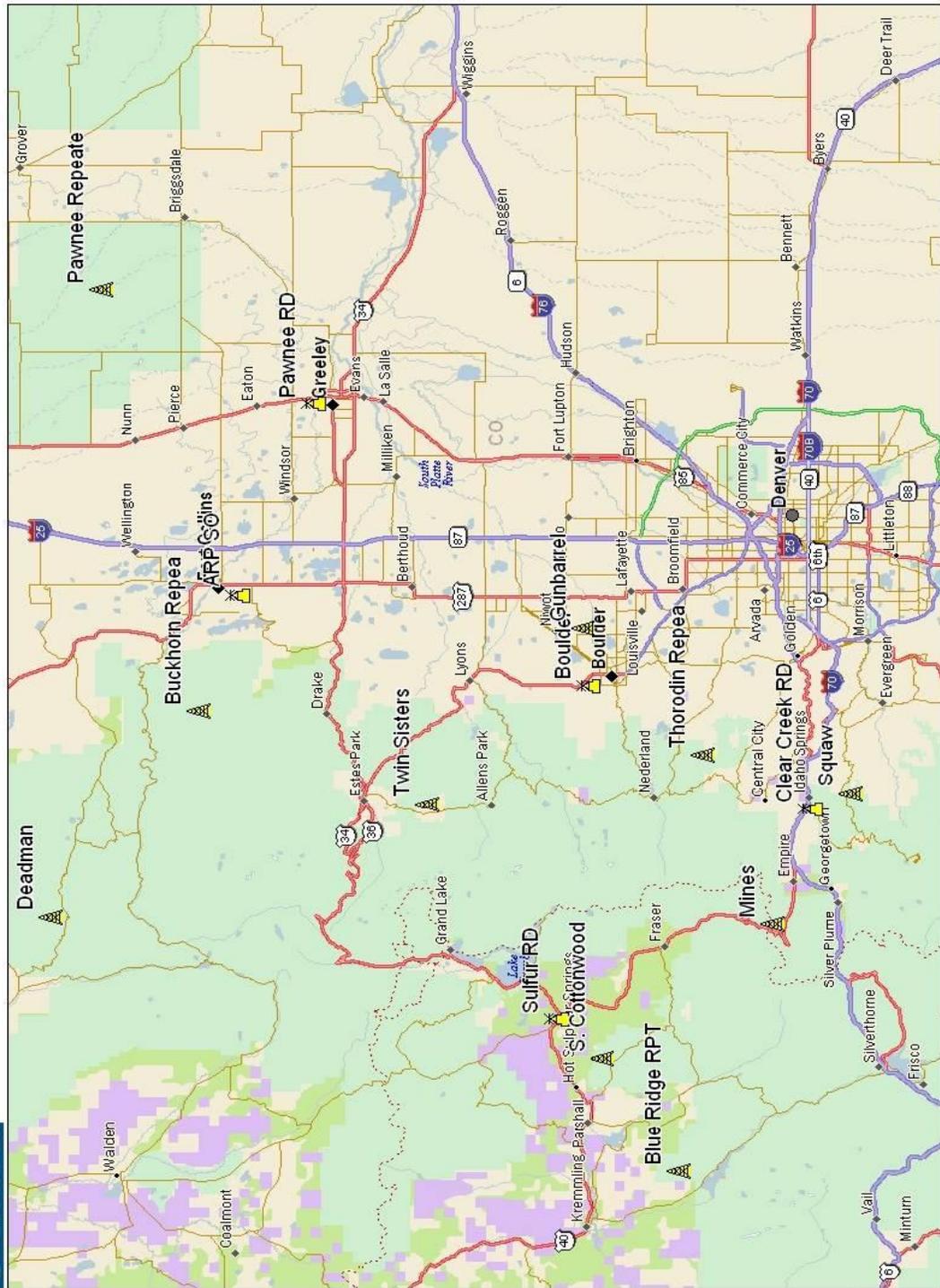
USFS ROOS TONES	
TONE 1	DEADMAN
TONE 2	BUCKHORN
TONE 3	TWIN SISTERS
TONE 4	THORDIN
TONE 7	PAWNEE
TONE 8	GUN BARREL

USFS ARAP TONES	
TONE 1	SQUAW
TONE 2	MINES PEAK
TONE 3	COTTONWOOD
TONE 4	BLUE RIDGE

STANDARD TONES	
TONE 1	110.9
TONE 2	123.0
TONE 3	131.8
TONE 4	136.5
TONE 5	146.2
TONE 6	156.7
TONE 7	167.9
TONE 8	103.5
TONE 9	100.0
TONE 10	107.2
TONE 11	114.8
TONE 12	127.3
TONE 13	141.3
TONE 14	151.4
TONE 15	162.2
TONE 16	192.8



DeLorme Topo USA® 7.0



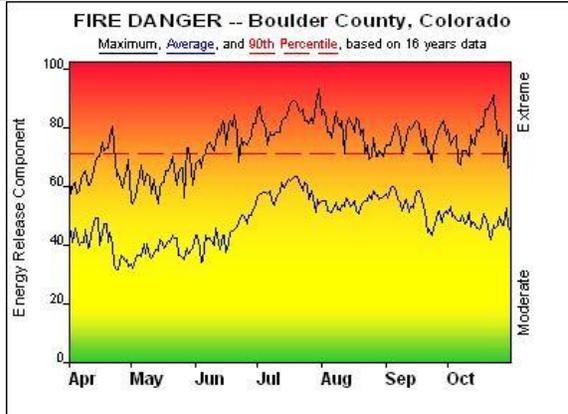
Data Zoom 7-6

Data use subject to license.

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www.delorme.com

South Zone



Fire Danger Area:

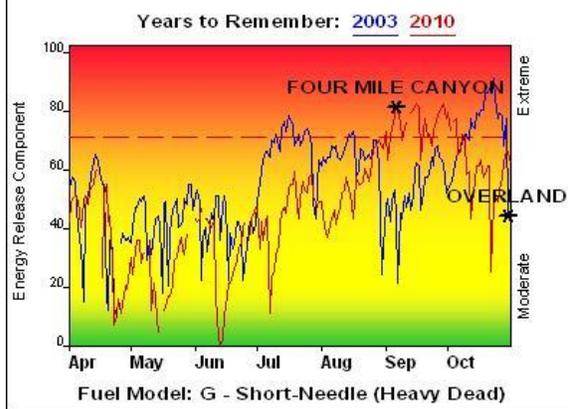
- ◆ Boulder RD
- ◆ Fire Weather Zone 215
- ◆ 050804 - Sugarloaf
- * Meets NWCG Wx Station Standards

Fire Danger Interpretation:

- EXTREME** -- Use extreme caution
- (Caution)** -- Watch for change
- Moderate** -- Lower Potential, but always be aware

Maximum -- Highest Energy Release Component by day for 1995 - 2010
Average -- shows peak fire season over 16 years (3219 observations)
90th Percentile -- Only 10% of the 3219 days from 1995 - 2010 had an Energy Release Component above 71

Local Thresholds - Watch out: Combinations of any of these factors can greatly increase fire behavior:
20' Wind Speed over 12 mph, RH less than 20%,
Temperature over 80, 1000-Hour Fuel Moisture less than 10



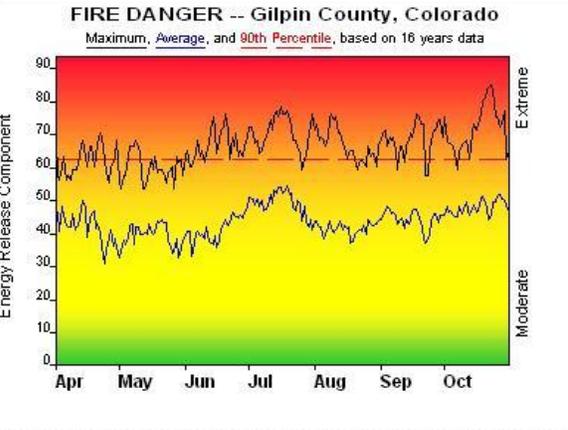
Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

Past Experience:

- Watch-Out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
- Woody Fuel Moistures below 100% (average) will contribute to EXTREME fire behavior.
- Expect Increased Fire Behavior in Insect Decimated Timber Stands.
- SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
- Use caution when transitioning from Type IV/V incidents to Extended or Project level incidents. PROVIDE FOR FIREFIGHTER SAFETY AS #1 PRIORITY!!
- Review 10 Standard Fire Orders and 18 "WATCH-OUT" Situations.
- * Overland Fire: 3869 ac, 75 F temp, 14% RH, 10mph wind
- * Four Mile Canyon Fire: 6181 ac, 87 F temp, 5% RH, 9mph wind

Responsible Agency: Fort Collins Dispatch Center
FF+4.0.2 06/14/2011-16:51 (G:\Fire Family Plus\13 June 2011\Sugarloaf)
Design by NWCG Fire Danger Working Team



Fire Danger Area:

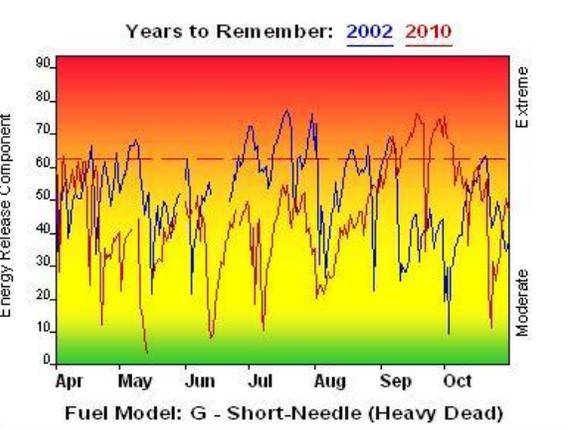
- ◆ Clear Creek RD
- ◆ Fire Weather Zone 212
- ◆ 051901 - Pickle Gulch
- * Meets NWCG Wx Station Standards

Fire Danger Interpretation:

- EXTREME** -- Use extreme caution
- (Caution)** -- Watch for change
- Moderate** -- Lower Potential, but always be aware

Maximum -- Highest Energy Release Component by day for 1995 - 2010
Average -- shows peak fire season over 16 years (3198 observations)
90th Percentile -- Only 10% of the 3198 days from 1995 - 2010 had an Energy Release Component above 62

Local Thresholds - Watch out: Combinations of any of these factors can greatly increase fire behavior:
20' Wind Speed over 12 mph, RH less than 20%,
Temperature over 75, 1000-Hour Fuel Moisture less than 12



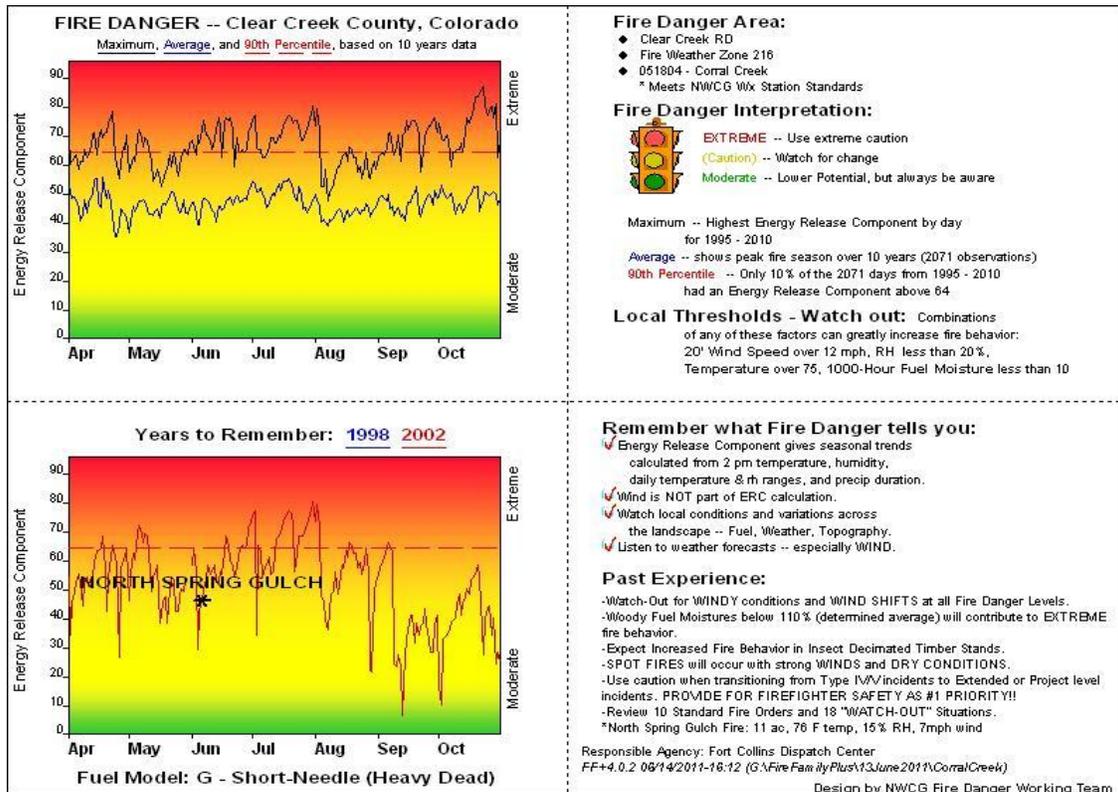
Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

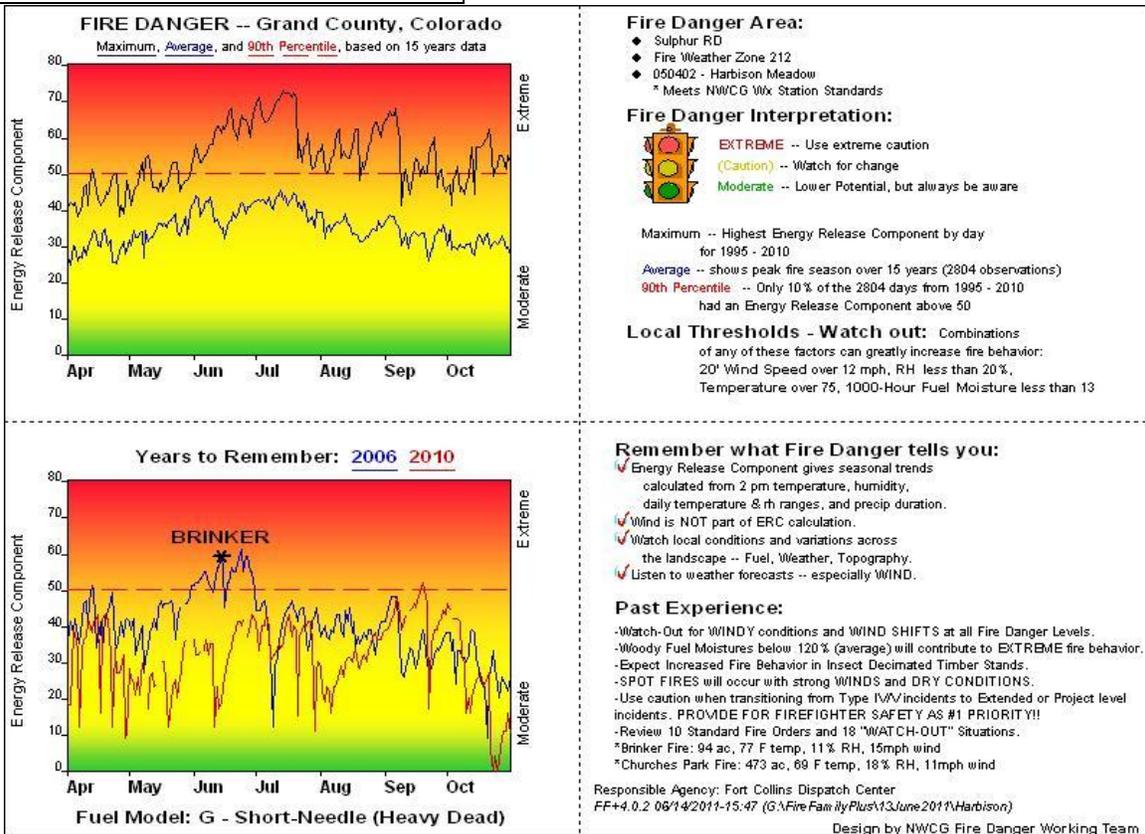
Past Experience:

- Watch-Out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
- Woody Fuel Moistures below 110% (determined average) will contribute to EXTREME fire behavior.
- Expect Increased Fire Behavior in Insect Decimated Timber Stands.
- SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
- Use caution when transitioning from Type IV/V incidents to Extended or Project level incidents. PROVIDE FOR FIREFIGHTER SAFETY AS #1 PRIORITY!!
- Review 10 Standard Fire Orders and 18 "WATCH-OUT" Situations.

Responsible Agency: Fort Collins Dispatch Center
FF+4.0.2 06/14/2011-16:31 (G:\Fire Family Plus\13 June 2011\Pickle Gulch)
Design by NWCG Fire Danger Working Team



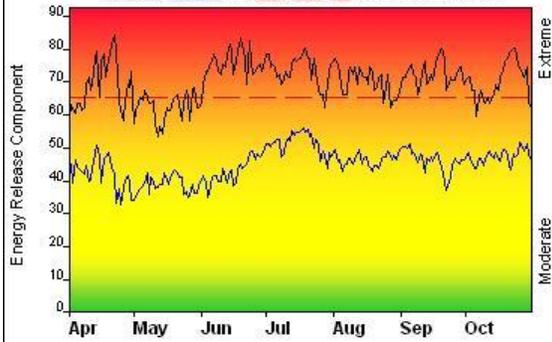
Sulphur RD



North Zone

FIRE DANGER -- Estes Park, Colorado

Maximum, Average, and 90th Percentile, based on 16 years data



Fire Danger Area:

- ◆ Canyon Lakes RD
- ◆ Fire Weather Zone 215
- ◆ 050507 - Estes Park
- * Meets NWCG Wx Station Standards

Fire Danger Interpretation:



- EXTREME** -- Use extreme caution
- (Caution)** -- Watch for change
- Moderate** -- Lower Potential, but always be aware

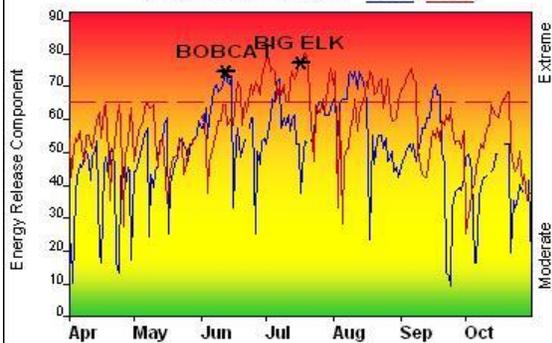
Maximum -- Highest Energy Release Component by day for 1995 - 2010

Average -- shows peak fire season over 16 years (3257 observations)

90th Percentile -- Only 10% of the 3257 days from 1995 - 2010 had an Energy Release Component above 65

Local Thresholds - Watch out: Combinations of any of these factors can greatly increase fire behavior:
 20' Wind Speed over 12 mph, RH less than 20%,
 Temperature over 75, 1000-Hour Fuel Moisture less than 11

Years to Remember: 2000 2002



Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

Past Experience:

- Watch-Out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
- Woody Fuel Moistures below 110% (average) will contribute to EXTREME fire behavior.
- Expect Increased Fire Behavior in Insect Decimated Timber Stands.
- SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
- Use caution when transitioning from Type IV/V incidents to Extended or Project level incidents. PROVIDE FOR FIREFIGHTER SAFETY AS #1 PRIORITY!!
- Review 10 Standard Fire Orders and 18 "WATCH-OUT" Situations.
- * Bobcat Fire: 10599 ac, 78 F temp, 7% RH, 11mph wind
- * Big Elk Fire: 4348 ac, 88 F temp, 7% RH, 4mph wind

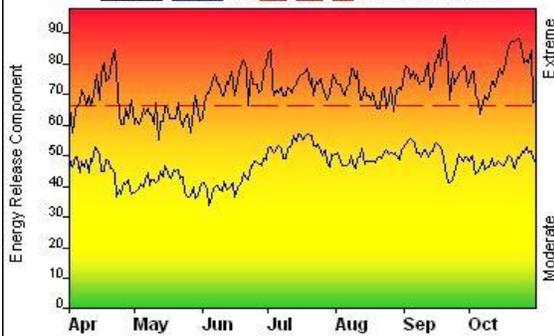
Responsible Agency: Fort Collins Dispatch

FF+4.0.2 06/14/2011-17:24 (G:\Fire Family Plus\13 June 2011\Estes Park)

Design by NWCG Fire Danger Working Team

FIRE DANGER -- Redfeather Lakes, Colorado

Maximum, Average, and 90th Percentile, based on 16 years data



Fire Danger Area:

- ◆ Canyon Lakes RD
- ◆ Fire Weather Zone 215
- ◆ 050505 - Redfeather
- * Meets NWCG Wx Station Standards

Fire Danger Interpretation:



- EXTREME** -- Use extreme caution
- (Caution)** -- Watch for change
- Moderate** -- Lower Potential, but always be aware

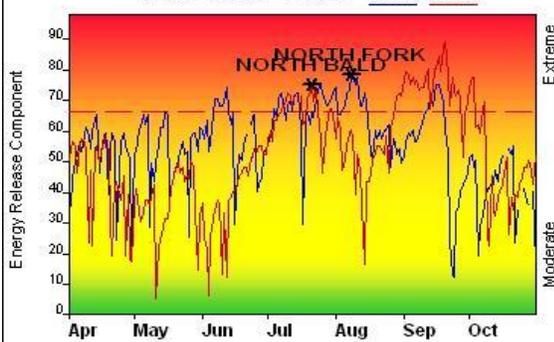
Maximum -- Highest Energy Release Component by day for 1995 - 2010

Average -- shows peak fire season over 16 years (3310 observations)

90th Percentile -- Only 10% of the 3310 days from 1995 - 2010 had an Energy Release Component above 66

Local Thresholds - Watch out: Combinations of any of these factors can greatly increase fire behavior:
 20' Wind Speed over 12 mph, RH less than 20%,
 Temperature over 75, 1000-Hour Fuel Moisture less than 10

Years to Remember: 2000 2005



Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

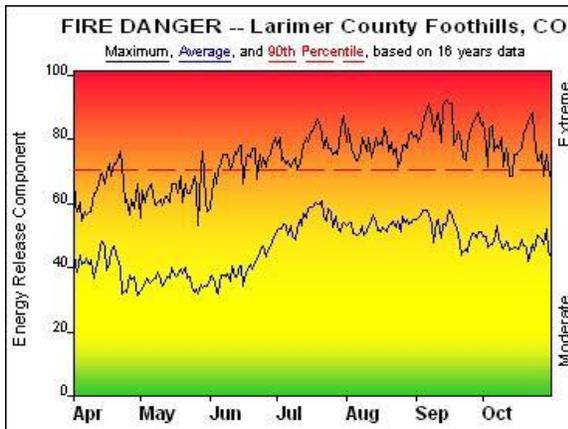
Past Experience:

- Watch-Out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
- Woody Fuel Moistures below 100% (average) will contribute to EXTREME fire behavior.
- Expect Increased Fire Behavior in Insect Decimated Timber Stands.
- SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
- Use caution when transitioning from Type IV/V incidents to Extended or Project level incidents. PROVIDE FOR FIREFIGHTER SAFETY AS #1 PRIORITY!!
- Review 10 Standard Fire Orders and 18 "WATCH-OUT" Situations.
- * North Fork Fire: 180 ac, 91 F temp, 9% RH, 7mph wind
- * North Bald Fire: 45 ac, 84 F temp, 8% RH, 11mph wind

Responsible Agency: Fort Collins Dispatch Center

FF+4.0.2 06/14/2011-18:10 (G:\Fire Family Plus\13 June 2011\Redfeather)

Design by NWCG Fire Danger Working Team



Fire Danger Area:

- ◆ Canyon Lakes RD
- ◆ Fire Weather Zone 215
- ◆ 050508 - Redstone
- * Meets NWCG Wx Station Standards

Fire Danger Interpretation:



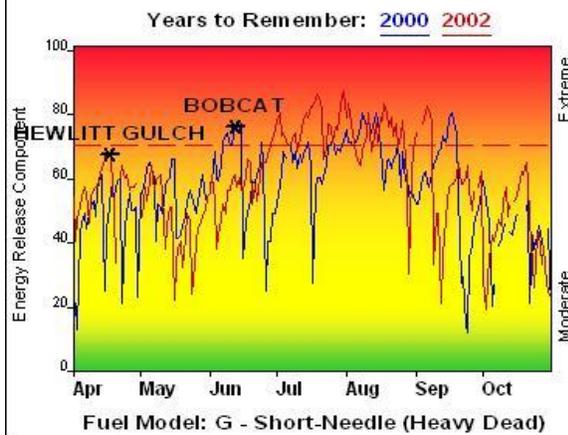
- EXTREME** -- Use extreme caution
- (Caution)** -- Watch for change
- Moderate** -- Lower Potential, but always be aware

Maximum -- Highest Energy Release Component by day for 1995 - 2010

Average -- shows peak fire season over 16 years (3252 observations)

90th Percentile -- Only 10% of the 3252 days from 1995 - 2010 had an Energy Release Component above 70

Local Thresholds - Watch out: Combinations of any of these factors can greatly increase fire behavior:
 20' Wind Speed over 12 mph, RH less than 20%,
 Temperature over 80, 1000-Hour Fuel Moisture less than 10



Remember what Fire Danger tells you:

- ✓ Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ✓ Wind is NOT part of ERC calculation.
- ✓ Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

Past Experience:

- Watch-Out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
- Woody Fuel Moistures below 110% (average) will contribute to EXTREME fire behavior.
- Expect Increased Fire Behavior in Insect Decimated Timber Stands.
- SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
- Use caution when transitioning from Type IV/V incidents to Extended or Project level incidents. PROVIDE FOR FIREFIGHTER SAFETY AS #1 PRIORITY!!
- Review 10 Standard Fire Orders and 18 "WATCH-OUT" Situations.
- * Hewlitt Gulch Fire: 500 ac, 64 F temp, 14% RH, 11mph wind
- * Bobcat Fire: 10599 ac, 78 F temp, 7% RH, 11mph wind

Responsible Agency: Fort Collins Dispatch Center

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Design by NWCG Fire Danger Working Team