Fire Resource Briefing Packet
2016

Arapaho and Roosevelt National Forests &
Pawnee National Grassland

Rocky Mountain National Park

May 2016

General Information

Overview: The Arapaho and Roosevelt National Forests and Pawnee National Grassland (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 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 expectation

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 2016 Fire Management Resources (ARF Standard Identifiers):

	Arapaho and Roosevelt NFs & PNG		
Chief 1	Forest FMO	Bryan Karchut	Fort Collins
Chief 2	Forest AFMO	*- vacant -*	Fort Collins
Division 1	South Zone FMO- Acting	Tim Haas	Boulder
Division 5	North Zone FMO	Dave Hamrick	Fort Collins
Battalion 1	South Zone AFMO	Dave Buchanan	Boulder
Battalion 5-1	North Zone AFMO	Chet Dieringer	Fort Collins
Battalion 5-2	North Zone Fuels AFMO	James White	Fort Collins
Captain 612	E-612 Supervisor	Ed LeBlanc	Nederland
Captain 651	E-651 Supervisor	Scott Nilson	Redfeather
Captain 653	E-653 Supervisor	Linda Austin	Fort Collins
Captain 654	E-654 Supervisor	Nate Hallam	Fort Collins
Captain 681	E-681 Supervisor	Todd Like	Granby
Captain 1	South Zone IA Squad Supervisor	Nick Fetsch	Idaho Springs
Captain 1-2	South Zone IA Squad Supervisor	Chad Buser	Boulder
Captain 5-5	North Zone IA Squad Supervisor	Matt Champa (detailed)	Fort Collins
Captain 5-6	North Zone Fuels Squad Supervisor	Matt Champa	Fort Collins
Squad 1	South Zone IA Squad	Nick Fetsch	Idaho Springs
Squad 1-2	South Zone IA Squad	Chad Buser	Boulder
Squad 5-5	North Zone IA Squad	Matt Champa (detailed)	Fort Collins
Squad 5-6	North Zone Fuels Squad	Matt Champa	Fort Collins
Patrol 8-1	South Zone Patrol Unit (with water)	*unstaffed*	Granby
Patrol 1	South Zone Prevention Unit (no water)	*- vacant -*	Boulder
Prevention 5-1	North Zone Prevention Unit (no water)	*- vacant -*	Fort Collins
Prevention 5-2	North Zone Prevention Unit (w/water)	Jane Gordon	Fort Collins
Northern CO Helitack	Helitack Superintendent- 210	Matt Lingenfelter	Broomfield
	Helitack Captain-210	Scott Nutt	Broomfield
	Helitack Squad Leader- 210 Alpha	Joe Rinaldi	Broomfield
Roosevelt Hotshots	Roosevelt IHC Superintendent	Larry Money	Fort Collins
Roosevelt 1	IHC Assistant Superintendent	Tim Griffin	Fort Collins
Roosevelt A	Squad Leader	Andy Epp	Fort Collins
Roosevelt B	Squad Leader	Joe Murray	Fort Collins
Roosevelt C	Squad Leader	Sterling Jones	Fort Collins

2016 Rocky Mountain National Park Fire Management Resources (Unit Identifiers)

	Position	Current Employee	Phone
Chief 3-0	FMO	Mike Lewelling	970-586-1287 (w) 970-232-5326 (c) 970-586-3655 (h)
Battalion 3-1	Fire Operations	Charlie Reynar	970-586-1436 (w) 970-227-0397 (c) 970-480-1292 (h)
Battalion 3-2	Fuels Specialist	Doug Watry	970-586-1211 (w) 970-227-4632 (c)
Fire 308	Fire Business Manager	Rhonda Foley	970-586-1237 (w) 970-372-7670 (c)
Fire 309	Fire Program Clerk	VACANT	970-586-1299 (w)
Fire 380	Fire Ecologist	Nate Williamson	970-586-1434 (w) 970-227-7708 (c)
Fire 381	Fire Effects Monitor	Chris Kopek	970-586-1435 (w) 417-251-1579 (c)
Fire 382	Fire Effects Monitor	Andy Forget	970-586-1435 (w) 303-987-6954 (c)
	ROMO DISPATCH		970-586-1204
	ROMO FIRE FAX		970-586-1318
Rocky Mountain Module			
Captain 3-2	Module Supervisor	Jeff Singer	970-586-1495 (w) 970-692-1578 (c) 303-823-5444 (h)
Rocky Mountain Alpha	Module Lead/Engine 632 Lead	Brian Faith	970-586-1259 (w) 970-646-1522 (c)
Rocky Mountain Charlie	Squad Leader	Mark Troxel	541-490-6146 (c)
Rocky Mountain Holslag	Module Crewmember	Aaron Holslag	970-213-7233 (c)
Rocky Mountain Holman	Module Crewmember	Casey Holman	970-270-2867 (c)
Rocky Mountain Schaefer	Module Crewmember	Jackie Schaefer	619-694-9271 (c)
Rpcky Mountain Henning	Module Crewmember	Paul Henning	956-369-0110 (c)
Rocky Mountain Polasek	Module Crewmember	Dustin Polasek	970-313-8012 (c)
Rocky Mountain Carranza Fabian	Module Crewmember	Linda Carranza Fabian	626-759-1276 (c)
Rocky Mountain Gones	Module Crewmember	David Gones	314-809-3980 (c)
ALPINE HOTSHOTS – Interagency Hot Shot Crew			
Alpine	Alpine Hotshot Superintendent	Paul Cerda	970-586-1335 (w) 970-215-9465 (c)
Alpine Alpha	Alpine IHC Captain	James Champ	970-586-1432 (w) 970-227-6154 (c)
Alpine Bravo	Alpine IHC Captain	Shawn Phillips	970-586-1457 (w) 970-215-1116 (c)
SQUAD 33 – Hazard Tree Crew			
370	Forestry Crew Supervisor	Brian Verhulst	970-586-1444 (w)
371	Forestry Crew	Dale Loper	970-586-1348(w)
373	Forestry Crew	Dave Frey	970-586-1433(w)

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 7,500 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 9,500 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 > 65 (avg. 90th % measured at Sugarloaf (71), Pickle Gulch (62), Corral Creek (61) RAWS.
RH < 20%,
Temperature > 75°F
20 ft. Winds >12 mph
1000 hr FM < 11%

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, Idaho Springs Work Center adjacent to I-70, Rocky Mountain Metro Airport (BJC) or the Boulder District Office on Yarmouth Ave in Boulder. 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. Most of the volunteer firefighters have limited availability during extended response. 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.

South Zone (Sulphur R.D.)

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 abutt 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 > 49 (90th percentile measured at Harbison RAWS).
RH < 20%,
Temperature > 75°F
20 ft. Winds >12 mph
1000 hr FM <14%

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 may provide IA suppression response, when requested 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 Ault.

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 the area, 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 -12,000 ft) 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 (65), Estes Park (64) RAWS).
RH < 20%
Temperature > 75°F
20 ft. Winds > 12 mph
1000 hr FM < 10%

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. The 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 8,500 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 > **64** (90th percentile measured at Estes Park RAWS)
RH < 20%
Temperature > 75ºF
20 ft. Winds > 12 mph
1000 hr FM < 11%

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 ≤ 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

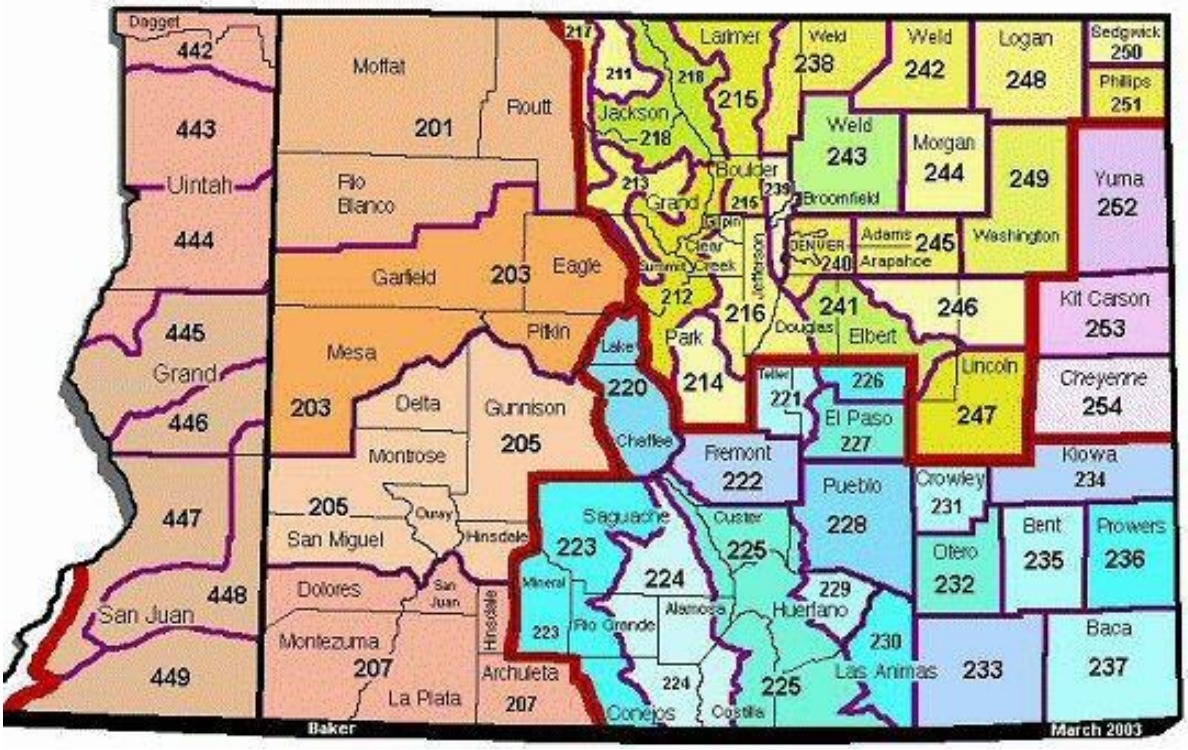
Withdrawal and/or reassessment should be considered if any of the following are present:
Thunderstorms in the immediate vicinity.
Wind speeds are strong enough that canopy movement is observed[1] (Consider that wind speeds at eye level in sheltered areas may not indicate the much greater winds aloft)
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

Fire Weather Zones for Colorado and Eastern Utah



UNIT: **FORT COLLINS INTERAGENCY DISPATCH CENTER**	FIRE TELEPHONE NUMBERS Commercial: **FTC- 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 ask to speak to the on-call dispatcher.** **Use Numbers Listed Below If No Response**
OFFICE NUMBER: **970-295-6800** 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	E-MAIL	CELL
Center Manager Tracey Kern	970-295-6800	traceyrkern@fs.fed.us	970-219-9490
Assistant Center Manager Scott Molinari	970-295-6831	smolinari@fs.fed.us	970-217-1281
Aircraft Dispatcher John Stevi	970-295-6800	jstevi@fs.fed.us	970-217-5444
I.A. Dispatcher Kristen Fischer	970-295-6800		
I.A. Dispatcher Ally Yeager	970-295-6800		
Floor Operations	970-295-6834		

CO-ARF-FTC
Revised: 2016

UNIT: **BOULDER RANGER DISTRICT**	FIRE TELEPHONE NUMBERS Commercial: **FTC- 970-295-6800**
ADDRESS: **2140 Yarmouth Avenue** **Boulder, CO 80301-1614**	NIGHT OR 24 HOUR TELEPHONE NUMBERS: Commercial: **970-295-6800 After Hours ask to speak to the on-call dispatcher.** **Use Numbers Listed Below If No Response**
OFFICE NUMBER: **303-541-2515** FACSIMILE NUMBER: Type: **Automatic** Commercial: **303-541-2515**	ELECTRONIC ADDRESSES: **E-Mail: Web: firstinitiallastname@fs.fed.us**

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

NAME/TITLE	OFFICE	E-MAIL	CELL
District Ranger Sylvia Clark	303-541-2505	**sgclark@fs.fed.us**	303-304-0948
Zone FMO Tim Haas – DIV 1 BRD/CCRD	303-541-2520	**thass@fs.fed.us**	307-272-2965
Zone AFMO Dave Buchanan – BAT 1 BRD/CCRD	303-541-2514	**dbuchanan@fs.fed.us**	303-506-7659
LEO Boulder RD Paul Krisanits- FS 1379	303-541-2513	**pkrisanits@fs.fed.us**	303-349-8220
Patrol 1 Chad Buser –Captain 1-2	303-541-2518	**cebuser@fs.fed.us**	303-956-3623
Northern Colorado Helitack Matt Lingenfelter – Sup 210 Helitack Supervisor	303-541-2544 303-439-0332	**mlingenfelter@fs.fed.us**	805-705-8621
Northern Colorado Helitack Scott Nutt - Captain 210 Assistant Helitack Supervisor	303-439-0332	**sdnutt@fs.fed.us**	970-420-2599
Northern Colorado Helitack Joe Rinaldi - 210 Alpha Squad Leader	303-439-0332	**jcrinaldi@fs.fed.us**	208-401-8618
Engine 612 Ed LeBlanc – Captain 612	303-258-9193	**efleblanc@fs.fed.us**	720-272-2078
Engine 612 Tim Egan - ENOP	303-258-9193	**tjegan@fs.fed.us**	303-828-7651
Nederland Work Center 534 Ridge Rd. Nederland, CO 80466 Fire Cache	303-258-0234 303-258-9193		FAX 303-258-0362

UNIT: **CANYON LAKES RANGER DISTRICT**	FIRE TELEPHONE NUMBERS: Commercial: **FTC- 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 ask to speak to the on-call dispatcher.** **Use Numbers Listed Below If No Response**
OFFICE NUMBER: **970-295-6600** FACSIMILE NUMBER Type: **Automatic** Commercial: **970-295-6795**	ELECTRONIC ADDRESSES: **E-Mail: firstinitiallastname@fs.fed.us**

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

NAME/TITLE	OFFICE	E-MAIL	CELL
District Ranger Katie Donahue	970-295-6711	**kdonahue@fs.fed.us**	970-556-3849
Zone FMO Dave Hamrick – DIV 5 CLRD/PNG	970-295-6780	**gdhamrick@fs.fed.us**	970-420-2726
Zone AFMO, Suppression Chet Dieringer – BAT 5-1 CLRD/PNG		**cdieringer@fs.fed.us**	970-712-8503
Zone AFMO, Fuels James White – BAT 5-2 CLRD/PNG	970-295-6783	**jawhite@fs.fed.us**	970-219-3610
LEO Canyon Lakes Nicole Edison	970-295-6719	**aedison@fs.fed.us**	720-324-9905
Prevention Jane Gordon - PREV-5	970-295-6782	**jhgordon@fs.fed.us**	
Engine 653 Linda Austin – Captain 653	970-419-4424	**lmaustin@fs.fed.us**	970-420-2602
Engine 653 Assistant Captain 653 Vacant			
Engine 654 Nate Hallam – Captain 654	970-419-4425	**nhallam@fs.fed.us**	970-631-2420
Engine 654 Assistant Captain 654 Vacant			
Squad 5-5 Matt Champa – Detailed Captain 5-5	970-295-6766	**mchampa@fs.fed.us**	970-631-4515

UNIT: **CANYON LAKES RANGER DISTRICT (continued)**		FIRE TELEPHONE NUMBERS Commercial: FTC- **970-295-6800**	
NAME/TITLE	**OFFICE**	**E-MAIL**	**CELL**
Squad 5-5 Reid Marquart--Detailed Assistant Captain 5-5	970-419-4422		970-420-2597
CLRD "Ad Site" Hemlock Work Center 300 Hemlock Street Fort Collins, CO 80524			FAX 970-419-4439
Roosevelt IHC Larry Money Roosevelt IHC Superintendent	970-419-4433	**llmoney@fs.fed.us**	970-420-2609
Roosevelt IHC Tim Griffin Roosevelt IHC Asst. Supt.	970-419-4432	**tegriffin@fs.fed.us**	970-420-2607
Engine 651 Scott Nilson – Captain 651	970-881-2347	**sanilson@fs.fed.us**	970-420-2615
Engine 651 Vacant - Assistant Captain 651			
Redfeather Work Center **274 Dowdy Drive** **Redfeather Lakes, CO 80545**	970-881-2347		FAX 970-881-2346

UNIT: **CLEAR CREEK RANGER DISTRICT**	FIRE TELEPHONE NUMBERS: Commercial: **FTC- 970-295-6800**
ADDRESS: **101 Chicago Creek** **Idaho Springs, Co 80452**	NIGHT OR 24 HOUR TELEPHONE NUMBERS: Commercial: **970-295-6800 After Hours ask to speak to the on-call dispatcher.** **Use Numbers Listed Below If No Response**
OFFICE NUMBER: **303-567-3000** FACSIMILE NUMBER Type: **Automatic** Commercial: **303-567-3021**	ELECTRONIC ADDRESSES: **E-Mail: firstinitiallastname@fs.fed.us**

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

NAME/TITLE	OFFICE	E-MAIL	CELL
District Ranger Penny Wu	303-567-3001	**pwu@fs.fed.us**	970-799-7759
Zone FMO Tim Haas(Acting) – DIV 1 BRD/CCRD	303-541-2520	**thaas@fs.fed.us**	307-272-2965
Zone AFMO Dave Buchanan – BAT 1 BRD/CCRD	303-541-2514	**dbuchanan@ fs.fed.us**	303-506-7659
Law Enforcement Brian Fields	303-567-3031	**bfields@fs.fed.us**	970-531-2913
Visitors Center	303-567-3000		
Squad 1 Nick Fetsch – Captain 1(Acting)	303-258-9193	**nbfetsch@fs.fed.us**	303-374-4612
Clear Creek Work Center #4 County Rd 314, Idaho Springs, CO 80452 Fire Cache	303-567-3035		

CO-ARF-CCRD
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UNIT **PAWNEE NATIONAL GRASSLAND**	FIRE TELEPHONE NUMBERS: Commercial: **FTC- 970-295-6800**
ADDRESS: **660 "O" Street** **Greeley, CO 80631-9104**	NIGHT OR 24 HOUR TELEPHONE NUMBERS Commercial: **970-295-6800 After Hours ask to speak to the on-call dispatcher.** **Use Numbers Listed Below If No Response**
OFFICE NUMBER: **970-346-5000** FACSIMILE NUMBER Type: **Automatic** Commercial: **970-346-5014**	ELECTRONIC ADDRESSES **E-Mail: firstinitiallastname@fs.fed.us**

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

NAME/TITLE	OFFICE	E-MAIL	CELL
District Ranger Curtis Youngman	970-346-5003	**cyoungman@ fs.fed.us**	970-301-0157
Zone FMO Dave Hamrick – DIV 5 CLRD/PNG	970-295-6780	**gdhamrick@fs.fed.us**	970-420-2726
Zone AFMO, Suppression Chet Dieringer – BAT 5-1 CLRD/PNG		**cdieringer@ fs.fed.us**	970-712-8503

CO-ARF-PNG
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UNIT: **SULPHUR RANGER DISTRICT**	FIRE TELEPHONE NUMBERS Commercial: FTC- **970-295-6800**
ADDRESS: **9 Ten Mile Drive, P.O. Box 10** **Granby, Co 80446-0010**	NIGHT OR 24 HOUR TELEPHONE NUMBERS**:** **Commercial: 970-295-6800 After Hours ask to speak to the on-call dispatcher.** **Use Numbers Listed Below If No Response**
OFFICE NUMBER: **(VIS) 970-887-4100** FACSIMILE NUMBER: **970-887-4102** **970-627-3866 (Grand Lake)**	ELECTRONIC ADDRESSES **E-Mail: firstinitiallastname@fs.fed.us**

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

NAME/TITLE	OFFICE	E-MAIL	CELL
District Ranger Jonny Fryar	970-887-4124	**jsfryar@fs.fed.us**	337 208 6851
Zone FMO Tim Haas(Acting) – DIV 1 BRD/CCRD	303-541-2520	**thaas@fs.fed.us**	307-272-2965
Law Enforcement Lauren Pirchner	970-887-4116	**lcpirchner@fs.fed.us**	970-286-1561
Engine - 681 Todd Like	970-627-5022	**tlike@fs.fed.us**	970-531-3303

CO-ARF-SRD
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UNIT: **USFS – ARAPAHO-ROOSEVELT NATIONAL FOREST/PAWNEE NATIONAL GRASSLANDS**	FIRE TELEPHONE NUMBERS: Commercial: **FTC- 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 ask to speak to the on-call dispatcher.** **Use Numbers Listed Below If No Response**
OFFICE NUMBER: **970-295-6604** FACSIMILE NUMBER Commercial: **970-295-6696**	ELECTRONIC ADDRESSES **E-Mail: firstinitiallastname@fs.fed.us** **Web: www.fs.usda.gov/arp**

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

NAME TITLE	OFFICE PHONE EXT.	E-MAIL	CELL
ARP Fire Mgmt. Officer Bryan Karchut	970-295-6631	**bkarchut@fs.fed.us**	970-821-5434
ARP Assist. Fire Mgmt. Officer Vacant			
Fort Collins Interagency Dispatch Center Manager Tracey Kern	970-295-6800	**traceyrkern@fs.fed.us**	970-219-9490
FOREST SUPERVISOR Monte Williams	970-295-6601	**mlwilliams01@fs.fed.us**	423-584-2378
DEPUTY FOREST SUPERVISOR Ron Archuleta	970-295-6602	**rachuleta@fs.fed.us**	406-223-0799

CO-ARF-SO
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Arapaho and Roosevelt NFs and Pawnee National Grassland Radio Frequencies						
GROUP 1 – Boulder						
CH	**Description**	**Display**	**RX**	**Tone**	**TX**	**Tone**
1	North Direct (Roosevelt)	N DIRECT	169.9750		169.9750	0
2	Point-to-Point Work Channel	ARP WORK	168.7250		168.7250	0
3	Point-to-Point Work Channel	WORK 1	163.7125		163.71250	0
4	Twin Sisters Repeater	TWIN SIS	169.9750		164.1000	131.8
5	Thorodin Mountain	THORODIN	169.9750		164.1000	136.5
6	GunBarrel Repeater	GUNBARRL	169.9750		164.1000	103.5
7	Air-to-Ground 9 (Aviation)	A/G 9	166.9125		166.91250	0
8	Multi-Agency Fire Attack	VFIRE21	154.2800		154.2800	156.7
9	Air-to-Ground 58 - aviation	A/G 58	169.0875		169.08750	0
10	Gilpin County	GILPIN	153.8450		156.01500	127.3
11	Boulder Co. Red 1 North	BCFD N	155.5350		154.32500	179.9
12	Boulder Co. Red 2 South	BCFD S	151.3550		154.32500	179.9
13	Boulder Co. Red 3	BC FTAC3	154.4150		154.41500	179.9
14	Boulder Co. Red 5	BC FTAC5	153.9500		153.9500	167.9
15	Boulder Co. Old-Red 6 Rpt	BCFD CMD	154.3700		153.7700	131.8
16	Starr Peak Repeater	STARR PK	170.47500		164.1375	146.2
GROUP 2 – Canyon Lake						
CH	**Description**	**Display**	**RX**	**Tone**	**TX**	**Tone**
1	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	0
2	Deadman Repeater	DEADMAN	169.97500		164.10000	110.9
3	Buckhorn Mtn Repeater	BUCKHORN	169.97500		164.10000	123.0
4	Twin Sisters Repeater	TWIN SIS	169.97500		164.10000	131.8
5	Thorodin Mtn Repeater	THORODIN	169.97500		164.10000	136.5
6	Reno Hill Repeater	RENO HILL	169.97500		164.10000	167.9
7	Jelm Mtn Repeater	ARP JELM	169.97500		164.10000	146.2
8	Point-to-Point Work Channel	ARP WORK	168.72500		168.72500	0
9	Larimer Co. Fire	LARCFIRE	154.38500		154.38500	156.7
10	Rocky Mtn. National Park	RMNP TWN	171.75000		166.35000	110.9
11	Multi-Agency Fire Attack	VFIRE21	154.28000		154.28000	156.7
12	Point-to-Point Work Channel	WORK 1	163.71250		163.71250	156.7
13	Medicine Bow Direct	MBOW DIR	171.50000		171.50000	110.9
14	CO Parks and Wildlife	CPW	151.40000		151.40000	156.7
15	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	0
16	Local NOAA weather	WEATHR5	162.45000		000.00000	0

GROUP 3 – PAWNEE						
CH	Description	Display	RX	Tone	TX	Tone
1	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	0
2	Deadman Repeater	DEADMAN	169.97500		164.10000	110.9
3	Buckhorn Mtn Repeater	BUCKHORN	169.97500		164.10000	123.0
4	Twin Sisters Repeater	TWIN SIS	169.97500		164.10000	131.8
5	Thorodin Mtn Repeater	THORODIN	169.97500		164.10000	136.5
6	Reno Hill Repeater	RENO HIL	169.97500		164.10000	167.9
7	Point-to-Point Work Channel	ARP WORK	168.72500		168.72500	0
8	Squaw Mtn. Repeater	SQUAW	170.47500		164.13750	110.9
9	CO Parks and Wildlife	CPW RPT	151.19000		159.28500	141.3
10	CO Parks and Wildlife	CPW	151.40000		151.40000	156.7
11	Multi-Agency Fire Attack	VFIRE21	154.28000		154.28000	156.7
12	Local NOAA Weather	WEATHR2	162.40000		000.00000	0
13	Larimer CO. Fire	LARCFIRE	154.38500		154.38500	156.7
14	CO Parks and Wildlife	CPW ST	151.14500		159.28500	146.2
15	Point-to-Point Work Channel	WORK 1	163.71250		163.71250	0
16	Mesa Hill Repeater	MESA	169.97500		164.10000	151.4

GROUP 4 – CLEAR CREEK RANGER DISTRICT						
CH	Description	Display	RX	Tone	TX	Tone
1	South Direct	S DIRECT	170.47500		170.47500	0
2	Squaw Mtn. Repeater	SQUAW	170.47500		164.13750	110.9
3	Mines Peak Repeater	MINES PK	170.47500		164.13750	123.0
4	Griffith Mtn. Repeater	GRIFFITH	170.47500		164.13750	114.8
5	Starr Peak Repeater	STARR PK	170.47500		164.13750	146.2
6	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	0
7	Point-to-Point Work Channel	WORK 1	163.71250		163.71250	0
8	Thorodin Mtn Repeater	THORODIN	169.97500		164.10000	136.5
9	Local NOAA Weather	WEATHR1	162.55000		000.00000	0
10	CO Parks and Wildlife	CPW	151.40000		151.40000	156.7
11	Multi-Agency Fire Attack	VFIRE21	154.28000		154.28000	156.7
12	Clear Creek Co. Fire/LE	CC CNTY	155.02500		159.06000	100.0
13	Gilpin Co. Fire/LE	GILPIN	153.84500		156.01500	127.3
14	Pike San IS. Devils Head	PSI DEVL	168.72500		168.12500	156.7
15	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	0
16	Point-to-Point Work Channel	ARP WORK	168.72500		168.72500	0

GROUP 5 – SULPHUR RANGER DISTRICT						
CH	**Description**	**Display**	**RX**	**Tone**	**TX**	**Tone**
1	West Direct	W DIRECT	170.55000		170.55000	0
2	Squaw Mtn. Repeater	SQUAW	170.47500		164.13750	110.9
3	Berthoud Pass Repeater	BERTHOUD	170.55000		165.08750	123.0
4	S Cottonwood Repeater	COTTON	170.55000		165.08750	131.8
5	USFS Blue Ridge Rpt	FS BLUE	170.55000		165.08750	136.5
6	Little Gravel Mountain Rpt	LTGRAVEL	170.55000		165.08750	151.4
7	Point-to-Point Work Channel	ARP WORK	168.72500		168.72500	0
8	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	0
9	Owl Mountain	OWL MTN	172.37500		164.87500	146.2
10	Rocky Mtn. Shadow Mtn.	RMNP SHD	169.78750		166.08750	123.0
11	CO Parks and Wildlife	CPW	151.40000		151.30000	156.7
12	Grand Co. LE (SO White)	GRNDSHRF	155.94000		153.92000	156.7
13	Grand County Public Safety	GRND PS	155.68500		158.82000	156.7
14	Grand Co. Table Mtn Pg	GRNDPAGE	155.11500		153.99500	167.9
15	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	0
16	Grand Lake	MARINE16	156.80000		156.80000	0

GROUP 6 – CANYON LAKE FIRE (User Code Guard Enabled)						
CH	**Description**	**Display**	**RX**	**Tone**	**TX**	**Tone**
1	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	110.9
2	North Repeat	N REPEAT	169.97500		164.10000	123.0
3	South Direct (Arapaho)	S DIRECT	170.47500		170.47500	131.8
4	South Repeat (Arapaho)	S REPEAT	170.47500		164.13750	136.5
5	Point-to-Point Work Channel	ARP WORK	168.72500		168.72500	167.9
6	USFS / ARP Fire Attack	FIRETAC	166.56250		166.56250	100.0
7	Point-to-Point Work Channel	WORK 1	163.71250		163.71250	151.4
8	Point-to-Point Work Channel	WORK 2	168.61250		168.61250	179.9
9	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	146.2
10	Multi-Agency Fire Attack	VFIRE21	154.28000		154.28000	156.7
11	Multi-Agency Fire Attack	VFIRE22	154.26500		154.26500	156.7
12	Multi-Agency Fire Attack	VFIRE23	154.29500		154.29500	156.7
13	Boulder CO. Old – Red 3	BC FTAC3	154.41500		154.41500	179.9
14	Rocky Mtn Fire Repeater	RMNP FIR	169.67500		164.42500	103.5
15	Air-to-Ground 58 (Aviation)	A/G 58	169.08750		169.08750	000.0
16	Larimer CO. Fire	LARCFIRE	154.38500		154.38500	156.7

GROUP 7 – CLEAR CREEK FIRE (User Code Guard Disabled)						
CH	Description	Display	RX	Tone	TX	Tone
1	South Direct (Arapaho)	S DIRECT	170.47500		170.47500	000.0
2	Squaw Mtn. Repeater	SQUAW	170.47500		164.13750	110.9
3	Mines Peak Repeater	MINES PK	170.47500		164.13750	123.0
4	Griffith Mtn. Repeater	GRIFFITH	170.47500		164.13750	114.8
5	Air-to-Ground 58 (Aviation)	A/G 58	169.08750		169.08750	000.0
6	USFS / ARP Fire Attack	FIRETAC	166.56250		166.56250	000.0
7	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	000.0
8	Starr Peak Repeater	STARR PK	170.47500		164.13750	146.2
9	Clear Creek Co. Fire 1	CCTAC 1	154.35500		154.35500	100.0
10	Clear Creek Co. Fire 2	CCTAC 2	155.10000		155.10000	100.0
11	Clear Creek Co. Dispatch	CCFD 1	155.02500		159.06000	100.0
12	Multi-Agency Fire Attack	VFIRE 21	154.28000		154.28000	156.7
13	Gilpin Co. Fire/LE	GILPIN	153.84500		156.01500	127.3
14	Multi-Agency Fire Attack	VFIRE22	154.26500		154.26500	156.7
15	Multi-Agency Fire Attack	VFIRE23	154.29500		154.29500	156.7
16	Point-to-Point Work Channel	WORK 1	163.71250		163.71250	000.0

GROUP 8 – FIRE NORTH (User Code Guard Enabled)						
CH	Description	Display	RX	Tone	TX	Tone
1	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	110.9
2	North Repeat (Roosevelt)	N REPEAT	169.97500		164.10000	123.0
3	South Direct (Arapaho)	S DIRECT	170.47500		170.47500	131.8
4	South Repeat (Arapaho)	S REPEAT	170.47500		164.13750	136.5
5	Point-to-Point Work Channel	ARP WORK	168.72500		168.72500	167.9
6	Point-to-Point Work Channel	WORK 1	163.71250		163.71250	100.0
7	USFS / ARP Fire Attack	FIRETAC	166.56250		166.56250	179.9
8	Larimer CO. Fire	LARCFIRE	154.38500		154.38500	156.7
9	Boulder Co. Old-Red 1 No	BCFD N	155.53500		154.32500	179.9
10	Boulder Co. Old – Red 5	BC FTAC5	153.95000		153.95000	167.9
11	Rocky Mtn. Fire Dispatch	RMNPFIRE	169.67500		164.42500	103.5
12	CO State Forest Servic	CSFS	151.34000		151.34000	146.2
13	Multi-Agency Fire Attack	VFIRE21	154.28000		154.28000	156.7
14	Multi-Agency Fire Attack	VFIRE22	154.26500		154.26500	156.7
15	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	000.0
16	Point-to-Point Work Channel	WORK 2	168.61250		168.61250	151.4

GROUP 9 – BOULDER FIRE (User Code Guard Disabled)						
CH	Description	Display	RX	Tone	TX	Tone
1	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	110.9
2	Point-to-Point Work Channel	WORK 1	163.71250		163.71250	000.0
3	Twin Sisters Repeater	TWIN SIS	169.97500		164.10000	131.8
4	Thorodin Mtn Repeater	THORODIN	169.97500		164.10000	136.5
5	GunBarrel Repeater	GUN BARR	169.97500		164.10000	103.5
6	Multi-Agency Fire Attack	VFIRE21	154.28000		154.28000	156.7
7	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	000.0
8	USFS / ARP Fire Attack	FIRE TAC	166.56250		166.56250	156.7
9	Air-to-Ground 58 (Aviation)	A/G 58	169.08750		169.08750	000.0
10	Gilpin Co. Fire/LE	GILPIN	153.84500		156.01500	127.3
11	Boulder Co. Old-Red 1 No	BCFD N	155.53500		154.32500	179.9
12	Boulder Co. Old-Red 1 So	BCFD S	151.35500		154.32500	179.9
13	Boulder Co. Old-Red 3	BC FTAC3	154.41500		154.41500	179.9
14	Boulder Co. Old-Red 4	BC FTAC4	153.83000		153.83000	179.9
15	Boulder Co. Old-Red 5	BC FTAC5	153.95000		153.95000	167.9
16	Boulder Co. Old-Red 6 Rpt	BCFD CMD	154.37000		153.77000	131.8

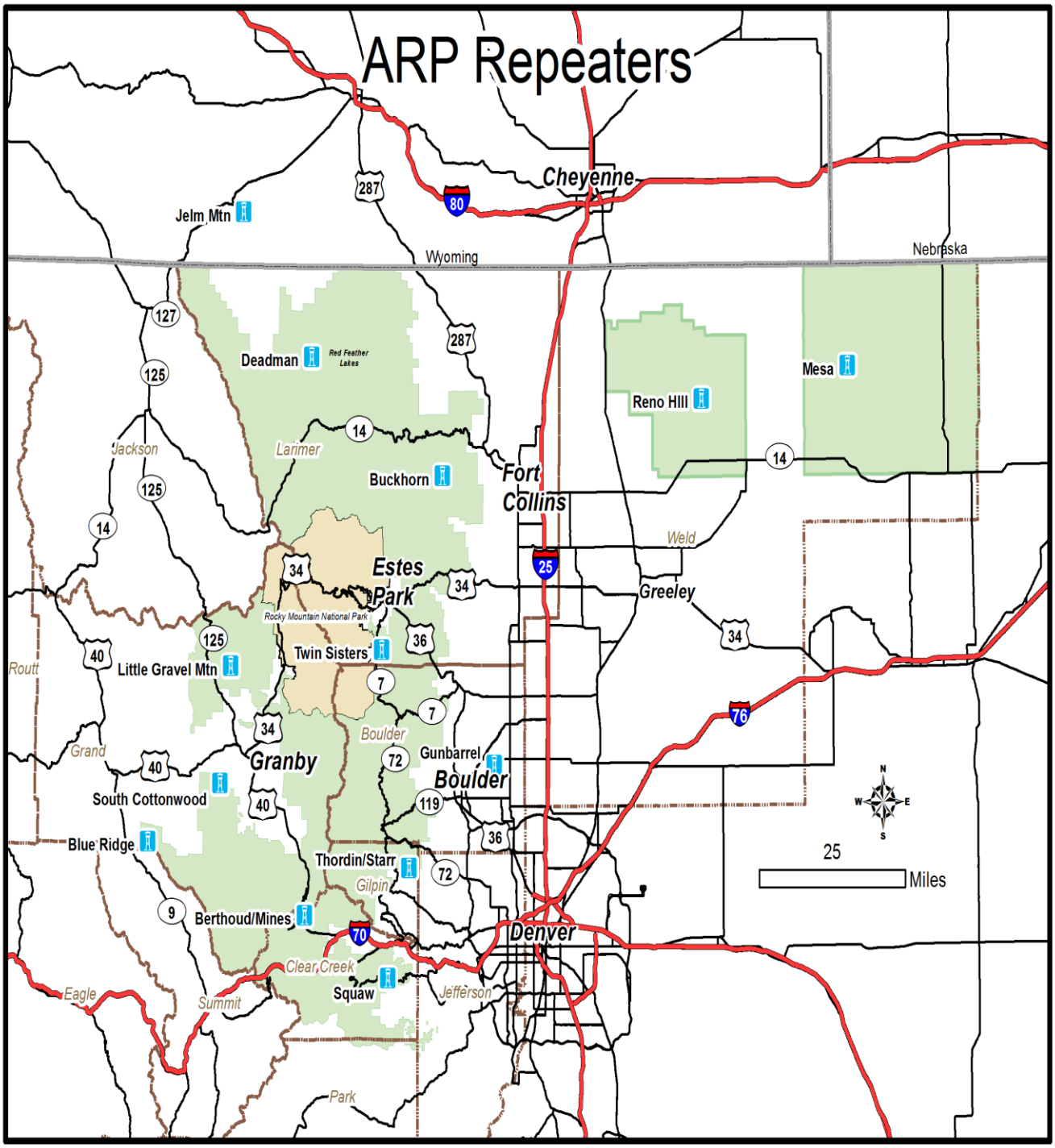
GROUP 10 – WEST FIRE (User Code Guard Enabled)						
CH	Description	Display	RX	Tone	TX	Tone
1	West Direct	W DIRECT	170.55000		170.55000	123.0
2	West Repeat	W REPEAT	170.55000		165.08750	131.8
3	Point-to-Point Work Channel	ARP WORK	168.72500		168.72500	136.5
4	USFS / ARP Fire Attack	FIRE TAC	166.56250		166.56250	146.2
5	Air-to-Ground 58 (Aviation)	A/G 58	169.08750		169.08750	151.4
6	Air-to-Ground 9 (Aviation)	A/G 9	166.91250		166.91250	156.7
7	Air-to-Ground 56 (Aviation)	A/G 56	168.66250		168.66250	167.9
8	Owl Mountain Repeater	OWL MTN	172.37500		164.87500	173.8
9	BLM Grouse	BLM GROU	169.62500		169.62500	186.2
10	BLM Blue Ridge Rptr	BLM BLUE	169.62500		163.57500	000.0
11	Grand County Public Service	GRND PS	155.68500		158.82000	000.0
12	Grand County Dispatch Page	GRNDPAGE	155.11500		153.99500	000.0
13	East Grand Fire Dept.	E GRAND	154.16000		154.16000	000.0
14	Grand Fire Protection Dis	GRANBY	154.44500		154.44500	000.0
15	Grand Lake Fire	GL FIRE	154.34000		154.34000	000.0
16	Kremmling Fire Dept.	KREM FD	150.77500		150.77500	000.0

GROUP 11 – Blank						
CH	Description	Display	RX	Tone	TX	Tone
1						

GROUP 12 – Blank						
CH	Description	Display	RX	Tone	TX	Tone
1						

GROUP 13 – TYPE 3 PLAN (User Code Guard Enabled)						
CH	**Description**	**Display**	**RX**	**Tone**	**TX**	**Tone**
1	Line of Sight Work Channel	TAC 1	166.56250		166.56250	162.2
2	Line of Sight Work Channel	TAC 2	168.77500		168.77500	123.0
3	Line of Sight Work Channel	TAC 3	168.61250		168.61250	131.8
4	Fort Collins Scene Action	FTC SOA	169.95000		165.22500	107.2
5	Air-to-Ground 58 (Aviation)	A/G 58	169.08750		169.08750	136.5
6	North Direct (Roosevelt)	N DIRECT	169.97500		169.97500	146.2
7	North Repeat (Roosevelt)	N REPEAT	169.97500		164.10000	167.9
8	South Direct (Arapaho)	S DIRECT	170.47500		170.47500	100.0
9	South Repeat (Arapaho)	S REPEAT	170.47500		164.13750	107.2
10	Sulpher Rptr	W REPEAT	170.55000		165.08750	114.8
11	Rocky Mtn Fire Repeater	RMNP FIR	169.67500		164.42500	103.5
12	Multi-Agency Fire Attack	VFIRE21	154.28000		154.28000	127.3
13	Multi-Agency Fire Attack	VFIRE22	154.26500		154.26500	156.7
14	Logistic Support	LOGISTIC	168.72500		168.72500	141.3
15	Input local 911 Freq	CNTY 911	000.00000		000.00000	151.4
16	Emergency Aircraft	AIRGUARD	168.62500		168.62500	110.9

GROUP 14 – Blank						
CH	**Description**	**Display**	**RX**	**Tone**	**TX**	**Tone**
1						


ARP Repeaters
Cheyenne
Jelm Mtn
Wyoming
Nebraska
Deadman
Red Feather Lakes
Mesa
Reno Hill
Larimer
Buckhorn
Fort Collins
Weld
Estes Park
Rocky Mountain National Park
Greeley
Twin Sisters
Little Gravel Mtn
Routt
Boulder
Gunbarrel
Grand
Granby
Boulder
South Cottonwood
Blue Ridge
Thordin/Starr
Gilpin
Berthoud/Mines
Denver
Clear Creek
Squaw
Jefferson
Eagle
Summit
Park
25
Miles

May 2016

ROCKY MOUNTAIN NATIONAL PARK RADIO GROUPS

Group 1 - RMNP East Side Fire Group - TONE SELECTABLE

Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	FIRE RPT	169.6750	A	110.9	164.4250	A	*110.9	N	Primary Fire Channel in Park - East Side TONE 8
2	TWIN RMP	171.7500	A	110.9	166.3500	A	*123.0	N	ROMO Dispatch. TONE 2
3	HAGUES RPT	172.4000	A	127.3	166.0875	A	*131.8	N	Links west and east side of park to common channel -T3
4	RED/SHAD	172.7500	A	127.3	166.0875	A	*136.5	N	Prim. Fire Channel - West Side SEE TONE CHEATSHEET
5	FIRE TAC 1	166.6375	A	0.0	166.6375	A	*146.2	N	Tactical use at Rocky +30 miles
6	FIRE TAC 2	170.5125	A	0.0	170.5125	A	*156.7	N	Incident Use Only. TONE 1
7	FS N. RPT	169.9750	A	0.0	164.1000	A	*167.9	N	Prim USFS Fire Channel - East Side SEE TONE CHEATSHEET
8	FS N. DIR	169.9750	A	0.0	169.9750	A	*103.5	N	Simplex to FTC Dispatch
9	FS S. RPT	170.4750	A	0.0	164.1375	A	*100.0	N	Prim USFS Fire Channel - South Side SEE TONE CHEATSHEET
10	ROMO A/G	166.7500	A	110.9	166.7500	A	*107.2	N	Park's primary A/G for Medicals/SAR/Projects. TONE 1
11	EPVFD	159.4050	A	127.3	159.4050	A	*114.8	W	TX Tone 127.3 TONE 12
12	LAR	154.3850	A	156.7	154.3850	A	*127.3	N	"LC FIRE" TX Tone 156.7 TONE 6
13	BLDR RED 1	155.5350	A	141.3	154.3250	A	*141.3	N	Boulder Cnty Dispatch TX Tone 179.9 (non-standard) USE TONE 15
14	NIFC A/G 9	166.9125	A	0.0	166.9125	A	*151.4	N	Zone primary A/G for IA
15	TAC 16	166.2375	A	110.9	166.2375	A	*162.2	N	ROMO TAC Channel (ROMO LE if Necessary) TONE 1
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

* These are STANDARD tones, not tones associated with the Freqs in your radio.

Group 2 - RMNP West Side Fire Group - TONE SELECTABLE

Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	FIRE RPT	169.6750	A	110.9	164.4250	A	*110.9	N	Primary Fire Channel in Park - East Side TONE 8
2	TWIN RMP	171.7500	A	110.9	166.3500	A	*123.0	N	ROMO Dispatch. TONE 2
3	HAGUES RPT	172.4000	A	127.3	166.0875	A	*131.8	N	Links west and east side of park to common channel -T3
4	RED/SHAD	172.7500	A	127.3	166.0875	A	*136.5	N	Prim. Fire Channel - West Side SEE TONE CHEATSHEET
5	RM FIRE	166.6375	A	0.0	166.6375	A	*146.2	N	Tactical use at Rocky +30 miles
6	RM FIRE	170.5125	A	0.0	170.5125	A	*156.7	N	Incident Use Only. TONE 1
7	FS N. RPT	169.9750	A	0.0	164.1000	A	*167.9	N	Prim USFS Fire Channel - East Side SEE TONE CHEATSHEET
8	FS N. DIR	169.9750	A	0.0	169.9750	A	*103.5	N	Simplex to FTC Dispatch
9	FS S. RPT	170.4750	A	0.0	164.1375	A	*100.0	N	Prim USFS Fire Channel - West Side SEE TONE CHEATSHEET
10	ROMO A/G	166.7500	A	110.9	166.7500	A	*107.2	N	Park's primary A/G for Medicals/SAR/Projects. TONE 1
11	FS W RPT	170.5500	A	127.3	165.0875	A	*114.8	N	Prim USFS Fire Channel - West Side SEE TONE CHEATSHEET
12	GLVFD TAC	154.3400	A	167.9	154.3400	A	*127.3	N	Grand Lake Volunteer TAC 1 Channel
13	VFIRE21	154.2800	A	0.0	154.2800	A	*141.3	N	Select Tone 6
14	NIFC A/G 9	166.9125	A	0.0	166.9125	A	*151.4	N	Zone primary A/G for IA
15	TAC 16	166.2375	A	110.9	166.2375	A	*162.2	N	ROMO TAC Channel (ROMO LE if Necessary) TONE 1
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

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Group 3- ROMO STANDARD - CHANNEL SELECT									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	E1 PROSP	169.8000	A	110.9	166.3500	A	103.5	N	
2	E2 TWIN	171.7500	A	110.9	166.3500	A	123.0	N	
3	E3 ALPINE	171.6250	A	110.9	166.3500	A	131.8	N	
4	W4 MEADOW	170.3875	A	110.9	166.3500	A	136.5	N	
5	W5 RED	172.7500	A	127.3	166.0875	A	103.5	N	
6	W6 SHADW	169.7875	A	127.3	166.0875	A	123.0	N	
7	W7 HAGUE	172.4000	A	127.3	166.0875	A	131.8	N	
8	M8 DIRECT	172.5000	A	110.9	172.5000	A	110.9	N	
9	M9 MTWIN	172.5000	A	110.9	165.6000	A	103.5	N	
10	R10 FDIRCT	169.6750	A	110.9	169.6750	A	110.9	N	
11	R11 FRPT	169.6750	A	110.9	164.4250	A	103.5	N	
12	NOAA	162.4000	A	0.0	162.4000	A	0.0	N	Place Holder For LE Freq.
13	V13 Work	168.3500	A	110.9	168.3500	A	110.9	N	National All Call
14	MRA	155.1600	A	0.0	155.1600	A	0.0	N	
15	ROMO A/G	166.7500	A	110.9	166.7500	A	110.9	N	ROMO Specific Air To Ground
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

Group 4 - FTC IMG3 - TONE SELECTABLE									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	TAC 1	163.7125	A	0.0	163.7125	A	*110.9	N	Tac 1
2	TAC 2	168.6125	A	0.0	168.6125	A	*123.0	N	Tac 2
3	TAC 3	166.5625	A	0.0	166.5625	A	*131.8	N	National Common Use
4	FTC CMD RPT	169.9500	A	0.0	165.2250	A	*136.5	N	)
5	NIFC A/G 58	169.0875	A	0.0	169.0875	A	*146.2	N	NIICD Assigned Interagency Zone A/G 58 (FTC zone secondary A/G)
6	FS NORTH DIR	169.9750	A	0.0	169.9750	A	*156.7	N	NORTH Direct
7	FS NORTH RPTR	169.9750	A	0.0	164.1000	A	*167.9	N	Utilize Tones to Access
8	FS SOUTH DIR	170.4750	A	0.0	170.4750	A	*103.5	N	SOUTH Direct
9	FS SOUTH RPTR	170.4750	A	0.0	164.1375	A	*100.0	N	Utilize Tones to Access
10	RMNP FIRE RPT	169.6750	A	110.9	164.4250	A	*107.2	N	RMNP Fire RPT on Twin Sisters (100 Watt)
11	VFIRE21	154.2800	A		154.2800	A	*114.8	N	Back-up use only Tone 6 156.7 Medical Evacs
12	VFIRE22	154.2650	A		154.2650	A	*127.3	N	Back-up use only Tone 6 156.7 Interagency Commo
13	LOGS	168.7250	A	0.0	168.7250	A	*141.3	N	Roosevelt work net
14	AIRGUARD	168.6250	A	0.0	168.6250	A	*151.4	W	AIRGUARD Utilize Tone 110.9 (Tone 1)
15	CNTY 911	0.0000	A	0.0	0.0000	A	*162.2	W	TBD MUST BE INPUT (See Attached List)
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

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Group 5 - Boulder County I.A. - CHANNEL SELECT									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	RED 1	154.3250	A	179.9	154.3250	A	179.9	N	Dispatch/Emergency
2	RED 2	154.2050	A	179.9	154.2050	A	179.9	N	
3	RED 3	154.4150	A	179.9	154.4150	A	179.9	N	
4	RED 4	153.8300	A	179.9	153.8300	A	179.9	N	
5	RED 5	153.9500	A	167.9	153.9500	A	167.9	N	
6	RED 6	154.3700	A	131.8	153.7700	A	131.8	N	COMMAND CHANNEL NO TACTICAL
7	RED 7	155.8500	A	203.5	155.8500	A	203.5	N	DIV C
8	VFIRE21	154.2800	A		154.2800	A	156.7	N	Medical Emergency
9	VFIRE22	154.2650	A		154.2650	A	156.7	N	
10	VFIRE23	154.2950	A		154.2950	A	156.7	N	
11	NIFC A/G 9	166.9125	A	0.0	166.9125	A	0.0	N	Air to Ground Channel 9
12	RED NW	155.2500	A	110.9	155.2500	A	110.9	N	Interop to DTRS, cross band connected to State DTRS
13	FS GNBRL RPT	169.9750	A	0.0	164.1000	A	103.5	N	
14	RNF Work	166.5625	A	0.0	166.5625	A	0.0	N	
15	VLAW31	155.4750	A	0.0	155.4750	A	156.7	N	Law Tac
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

Group 6 - Boulder County Extended Attack - CHANNEL SELECTABLE									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	RED 1	154.3250	A	179.9	154.3250	A	179.9	N	
2	RED 6	154.3700	A	131.8	153.7700	A	131.8	N	County Wide RPTR. Do Not Use For Tactical
3	VTAC17RPT	161.8500	A	156.7	157.2500	A	156.7	N	BCSO Portable Repeater
4	A VTAC11	151.1375	A	0.0	151.1375	A	156.7	N	DIV A
5	Z VTAC12	154.4525	A	0.0	154.4525	A	156.7	N	DIV Z
6	B VTAC13	158.7375	A	0.0	158.7375	A	156.7	N	DIV B
7	Y VTAC14	159.4725	A	0.0	159.4725	A	156.7	N	DIV Y
8	C VFIRE24	154.2725	A	0.0	154.2725	A	156.7	N	DIV C
9	X VFIRE26	154.3025	A	0.0	154.3025	A	156.7	N	DIV X
10	SG1 VFIRE23	154.2950	A	0.0	154.2950	A	156.7	N	Structure Group 1
11	SG2 VFIRE22	154.2650	A	0.0	154.2650	A	156.7	N	Structure Group 2
12	VFIRE21	154.2800	A	0.0	154.2800	A	156.7	N	AIR MEDICAL Emergency
13	NIFC A/G 58	169.0875	A	0.0	169.0875	A	0.0	N	Air to Ground, FTC Zone Secondary
14	RNF GUNB	169.9750	A	0.0	164.1000	A	103.5	N	Gunbarrel RPTR.
15	RED NW	155.2500	A	110.9	155.2500	A	110.9	N	Interop to DTRS
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling
17	YELLOW 2	155.9250	A	123.0	154.3100	A	123.0	N	Removed, need to hand program

Group 7- FLFO/Pike San Isabel - TONE SELECTABLE									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	PIKE DIR	168.7250	A		168.7250	A	103.5	N	
2	PIKE RPTR	168.7250	A		168.1250	A	110.9	N	Tone Selectable See Attached Table
3	SNIS DIR	169.9000	A		169.9000	A	123.0	N	
4	SNIS RPTR	169.9000	A		169.1250	A	131.8	N	Tone Selectable See Attached Table
5	FLO VFD	154.1900	A		154.1900	A	136.5	N	
6	TELL FIRE	154.4000	A		154.4000	A	146.2	N	
7	BLM RPTR	173.6750	A		164.6250	A	156.7	N	Tone Selectable See Attached Table
8	GOV WORK	168.6125	A		168.6125	A	167.9	N	
9	FLFO WORK	163.7125	A		163.7125	A	192.8	N	
10	N TAC 1	168.0500	A		168.0500	A	0.0	N	NIFC TAC 1
11	N TAC 2	168.2000	A		168.2000	A	0.0	N	NIFC TAC 2
12	FLFO PR	167.0750	A		167.0750	A	0.0	N	
13	A/G 35	167.2250	A		167.2250	A	0.0	N	
14	A/G 28	170.0000	A		170.0000	A	0.0	N	
15	VFIRE21	154.2800	A		154.2800	A	0.0	N	
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

Group 8- GRSA/USFS Rio Grande - TONE SELECTABLE									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	RGF DIRECT	164.1500	A		164.1500	A	*110.9	N	Tone 2
2	RGF RPTR	164.1500	A		164.9125	A	*123.0	N	Tone Selectable See Attached Table
3	RGF WORK 1	163.7125	A		163.7125	A	*131.8	N	NO TONE
4	RGF WORK 2	168.6125	A		168.6125	A	*136.5	N	NO TONE
5	RGF TACTICAL	166.9875	A		166.9875	A	*146.2	N	Tone 2
6	A/G 35	167.2250	A		167.2250	A	*141.3	N	NO TONE
14	A/G 28	170.0000	A		170.0000	A	*151.4	N	NO TONE
8	A/G 15	167.5250	A		167.5250	A	*103.5	N	NO TONE
9	A/G 7	166.8500	A		166.8500	A	*100.0	N	NO TONE
10	A/G 13	167.4250	A		167.4250	A	*107.2	N	NO TONE
11									
12									
13									
14									
15									
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

Group 9 - RMNP East INCIDENT - Widland Fire (All-Risk) - CHANNEL SELECT									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	USFS TWIN	169.9750	A	0.0	164.1000	A	131.8	N	FTC Dispatch - East Side
2	USFS DEADMN	169.9750	A	0.0	164.1000	A	110.9	N	FTC Dispatch - North Side
3	USFS GUNB	169.9750	A	0.0	164.1000	A	103.5	N	Gunbarrel RPTR.
4	RM FIRE RPT	169.6750	A	110.9	164.4250	A	103.5	N	COMMAND - East Side
5	RM TWIN RPT	171.7500	A	110.9	166.3500	A	123.0	N	
6	RM MEAD RPT	170.3875	A	110.9	166.3500	A	136.5	N	
7	ROMO A/G	166.7500	A	110.9	166.7500	A	110.9	N	ROMO Specific Air to Ground
8	LAR FIRENET	154.3850	A	156.7	154.3850	A	156.7	N	Larimer County Dispatch
9	EPVFD	159.4050	A	127.3	159.4050	A	127.3	W	
10	BLDR RED 1 N	155.5300	A	179.9	154.3250	A	179.9	N	Boulder County Dispatch and Emergency
11	VFIRE21	154.2800	A		154.2800	A	156.7	N	
12	FIRE TAC 1	166.6375	A	0.0	166.6375	A	0.0	N	Tactical Use at Rocky +30 miles
13	FIRE TAC 2	170.5125	A	0.0	170.5125	A	0.0	N	Incident Use Only. (Temporary Rpt Freqs. Used as simplex)
14	G16 TAC	166.2375	A	110.9	166.2375	A	110.9	N	ROMO Park Simplex Channel
15	NIFC A/G 9	166.9125	A	0.0	166.9125	A	0.0	N	Zone primary IA Air to Ground
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

Group 10 - RMNP West INCIDENT - Widland Fire (All-Risk) - CHANNEL SELECT									
Channel	Label	Rx Freq	Mode	Rx CG	Tx Freq	Mode	Tx CG	BW	Comments
1	USFS CTNWD	170.5500	A	0.0	165.0875	A	131.8	N	FTC Dispatch - West Side
2	USFS DEADMN	169.9750	A	0.0	164.1000	A	110.9	N	FTC Dispatch - North Side
3	USFS MINES	170.4750	A	0.0	164.1375	A	123.0	N	FTC Dispatch - North Side
4	USFS LTL GRAV	170.5500	A	0.0	165.0875	A	151.4	N	FTC Dispatch- West Side
5	RM HAG RPT	172.4000	A	127.3	166.0875	A	131.8	N	
6	RM RED RPT	172.7500	A	127.3	166.0875	A	103.5	N	
7	RM SHAD RPT	169.7875	A	127.3	166.0875	A	123.0	N	COMMAND - West Side
8	ROMO A/G	166.7500	A	110.9	166.7500	A	110.9	N	ROMO Specific Air to Ground
9	GLVFD TAC 1	154.3400	A	167.9	154.3400	A	167.9	W	Grand Lake Volunteer TAC 1 Channel
10	ARAP WORK	164.1000	A	0.0	164.1000	A	0.0	N	Arapaho Work
11	VFIRE21	154.2800	A	0.0	154.2800	A	156.7	N	
12	FIRE TAC 1	166.6375	A	0.0	166.6375	A	0.0	N	Tactical Use at Rocky +30 miles
13	FIRE TAC 2	170.5125	A	0.0	170.5125	A	0.0	N	Incident Use Only. (Temporary Rpt Freqs. Used as simplex)
14	TAC 16	166.2375	A	110.9	166.2375	A	110.9	N	ROMO Park Simplex Channel
15	NIFC A/G 9	166.9125	A	0.0	166.9125	A	0.0	N	Air to Ground
16	All Call	168.3500	A	0.0	168.3500	A		N	Common Use - Not to be used during incident operations. Monitor for incident traffic while Travelling

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

USFS South TONES	
TONE 1	SQUAW
TONE 2	MINES PEAK
TONE 11	GRIFFITH
TONE 5	STARR PEAK

USFS PIKE TONES	
TONE 4	BADGER
TONE 6	DEVILS HEAD
TONE 7	PIKES PEAK
TONE 8	SACRAMENTO

LARIMER CNTY TONES	
TONE 6	LAR FIRENET

BOULDER CNTY TONES	
TONE 15	Boulder Red 1 N

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

USFS Rio Grande	
TONE 1	BOOT MTN
TONE 3	METHODIST
TONE 4	BRISTOL
TONE 5	GRAYBACK
TONE 6	SAN ANTONE
TONE 7	ZAPATA

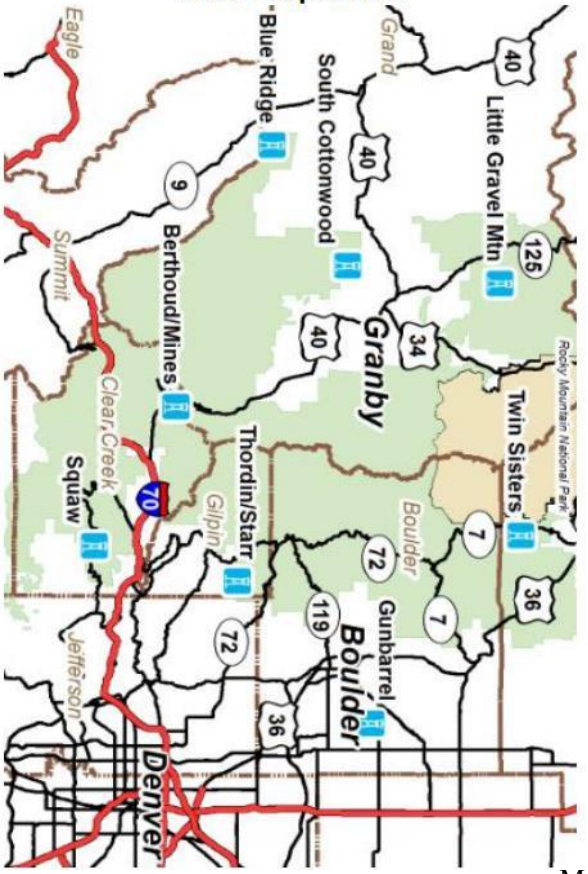
EPVFD TONES	
TONE 12	EPVFD

RMNP TONES	
TONE 3	ALPINE
TONE 3	HAGUES
TONE 4	MEADOW
TONE 8	RED MTN (CRD)
TONE 2	SHADOW MTN (CRD)
TONE 8	FIRE RPT
TONE 2	TWIN SISTERS
TONE 1	TAC 16, ROMO LE TAC

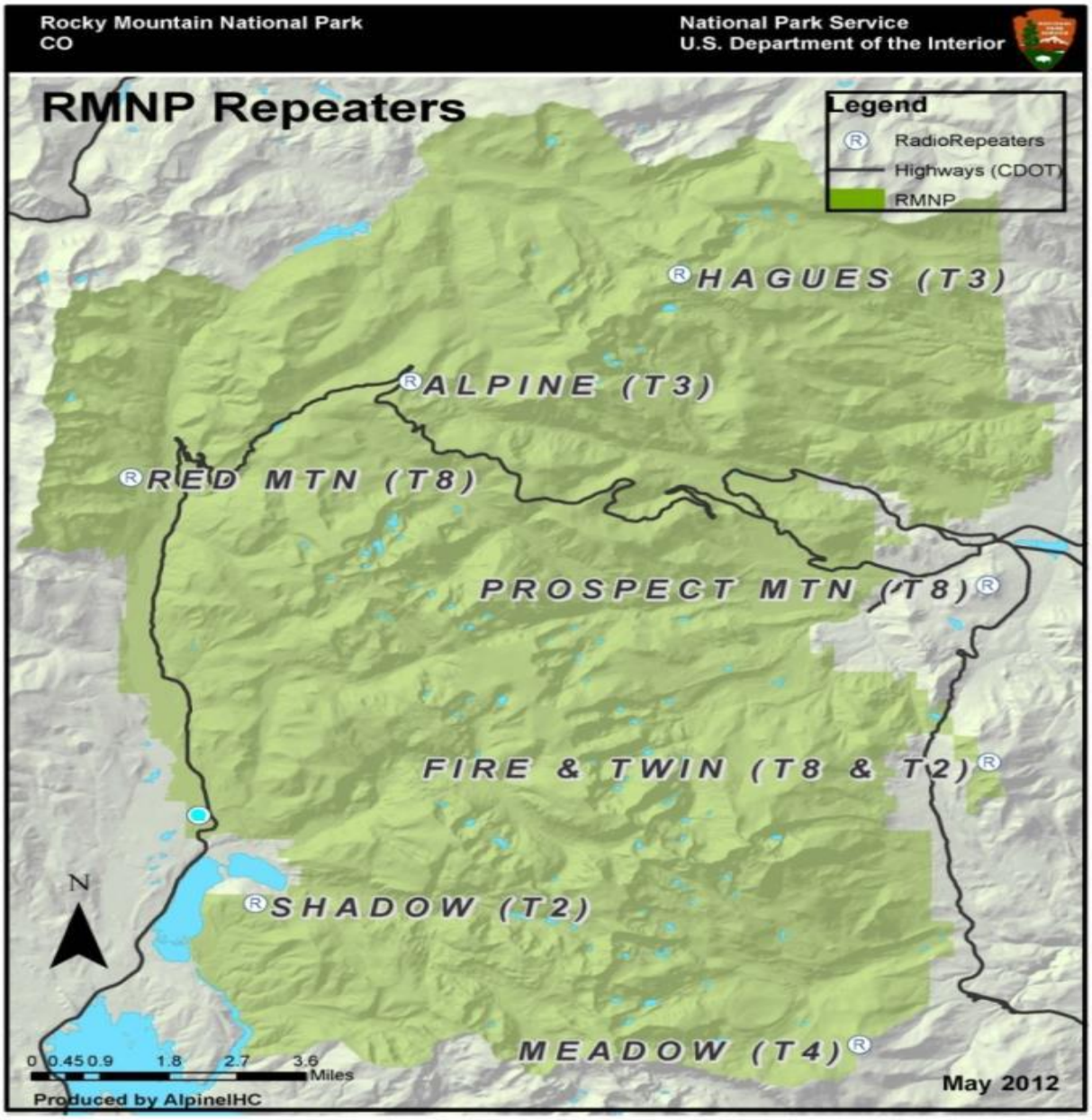
USFS WEST TONES	
TONE 2	BERTHOUD
TONE 14	LITTLE GRAVEL
TONE 3	SOUTH COTTONWOOD
TONE 4	BLUE RIDGE

North Repeaters

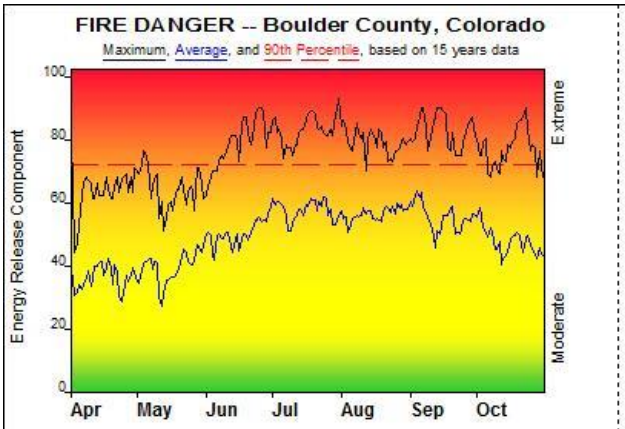
South Repeaters



May 2016

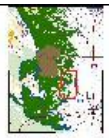

Rocky Mountain National Park
CO
National Park Service
U.S. Department of the Interior
RMNP Repeaters
Legend
RadioRepeaters
Highways (CDOT)
RMNP
HAGUES (T3)
ALPINE (T3)
RED MTN (T8)
PROSPECT MTN (T8)
FIRE & TWIN (T8 & T2)
SHADOW (T2)
MEADOW (T4)
N
0 0.45 0.9 1.8 2.7 3.6
Miles
Produced by AlpinelHC
May 2012

South Zone



Fire Danger Area:

- Boulder RD
- FWZ-215
- 050604-Sugarloaf
  * Meets NWCG Wx Station Standards

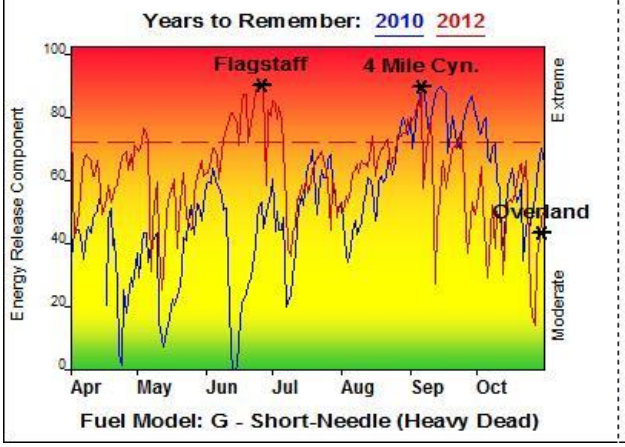


Fire Danger Interpretation:

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

Maximum -- Highest Energy Release Component by day for 2000 - 2014
Average -- shows peak fire season over 15 years (3332 observations)
90th Percentile -- Only 10% of the 3332 days from 2000 - 2014 had an Energy Release Component above 72

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



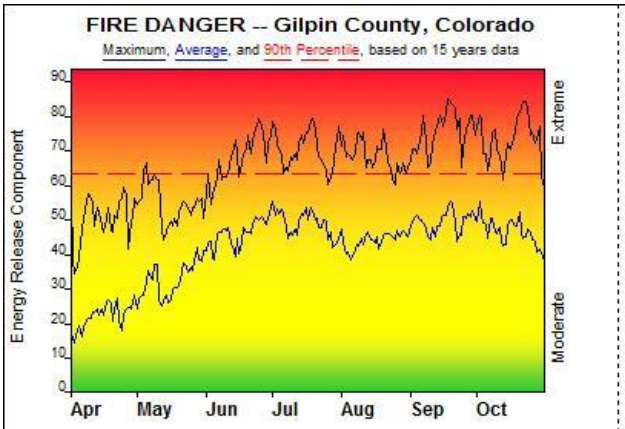
Remember what Fire Danger tells you:

- ✓ 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:

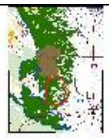
Watch out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
Woody FM below 110% will contribute to EXTREME fire behavior.
Expect Increased fire behavior in Insect Decimated Timber stands.
SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
Use caution when transitioning from Type IV/V incidents to Extended attack.
FLAGSTAFF: 6/26/12--300 ac., 94 F temp., 8% RH, 6 mph.
4 MILE CANYON: 9/6/10--6181 ac., 67 F temp., 5% RH, 9 mph.
OVERLAND: 10/30/03--3869 ac., 75 F temp., 14% RH, 12 mph.

Responsible Agency: USFS
FF+4.1 build 1622 02/02/2015-14:27 (C:\Workspace\FireFamilyPlus\FortCollins)
Design by NWCG Fire Danger Working Team



Fire Danger Area:

- Boulder RD
- FWZ-216
- 051901-Pickle Gulch
  * Meets NWCG Wx Station Standards

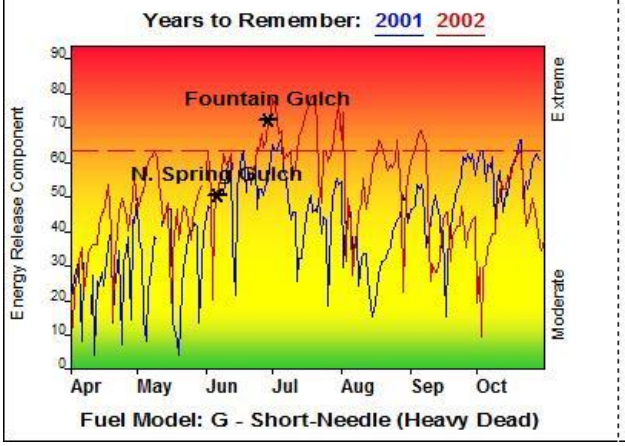


Fire Danger Interpretation:

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

Maximum -- Highest Energy Release Component by day for 2000 - 2014
Average -- shows peak fire season over 15 years (3203 observations)
90th Percentile -- Only 10% of the 3203 days from 2000 - 2014 had an Energy Release Component above 63

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



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.

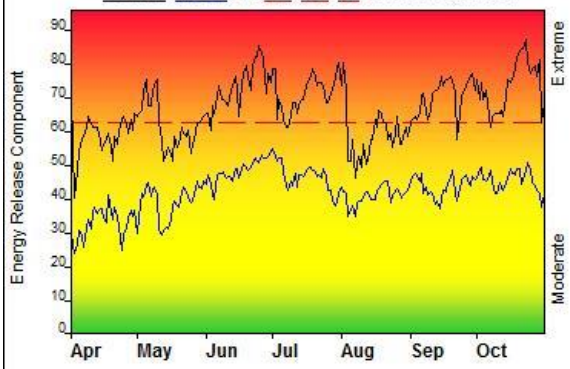
Past Experience:

Watch out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
Woody FM below 110% 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 attack.
FOUNTAIN GULCH: 6/29/02--200 ac., 83 F temp., 10% RH, 5 mph.
NORTH SPRING GULCH: 6/6/02--11 ac., 69 F temp., 20% RH, 8 mph.

Responsible Agency: USFS
FF+4.1 build 1622 02/02/2015-14:42 (C:\Workspace\FireFamilyPlus\FortCollins)
Design by NWCG Fire Danger Working Team

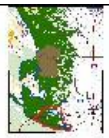
FIRE DANGER -- Clear Creek County, Colorado

Maximum, Average, and 90th Percentile, based on 14 years data



Fire Danger Area:

- Clear Creek RD
- FWZ-216
- 051804-Corral Creek
  * 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 2001 - 2014

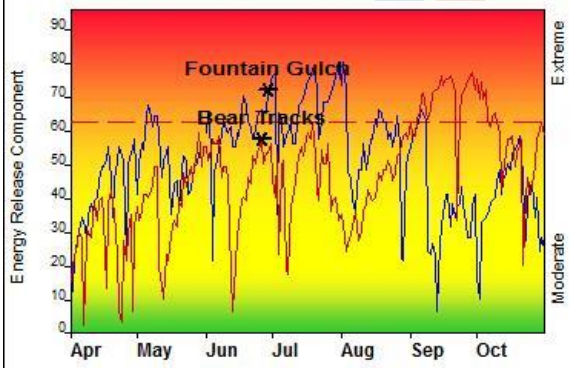
Average -- shows peak fire season over 14 years (2934 observations)

90th Percentile -- Only 10% of the 2934 days from 2001 - 2014 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 10

Years to Remember: 2002 2010



Fuel Model: G - Short-Needle (Heavy Dead)

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:

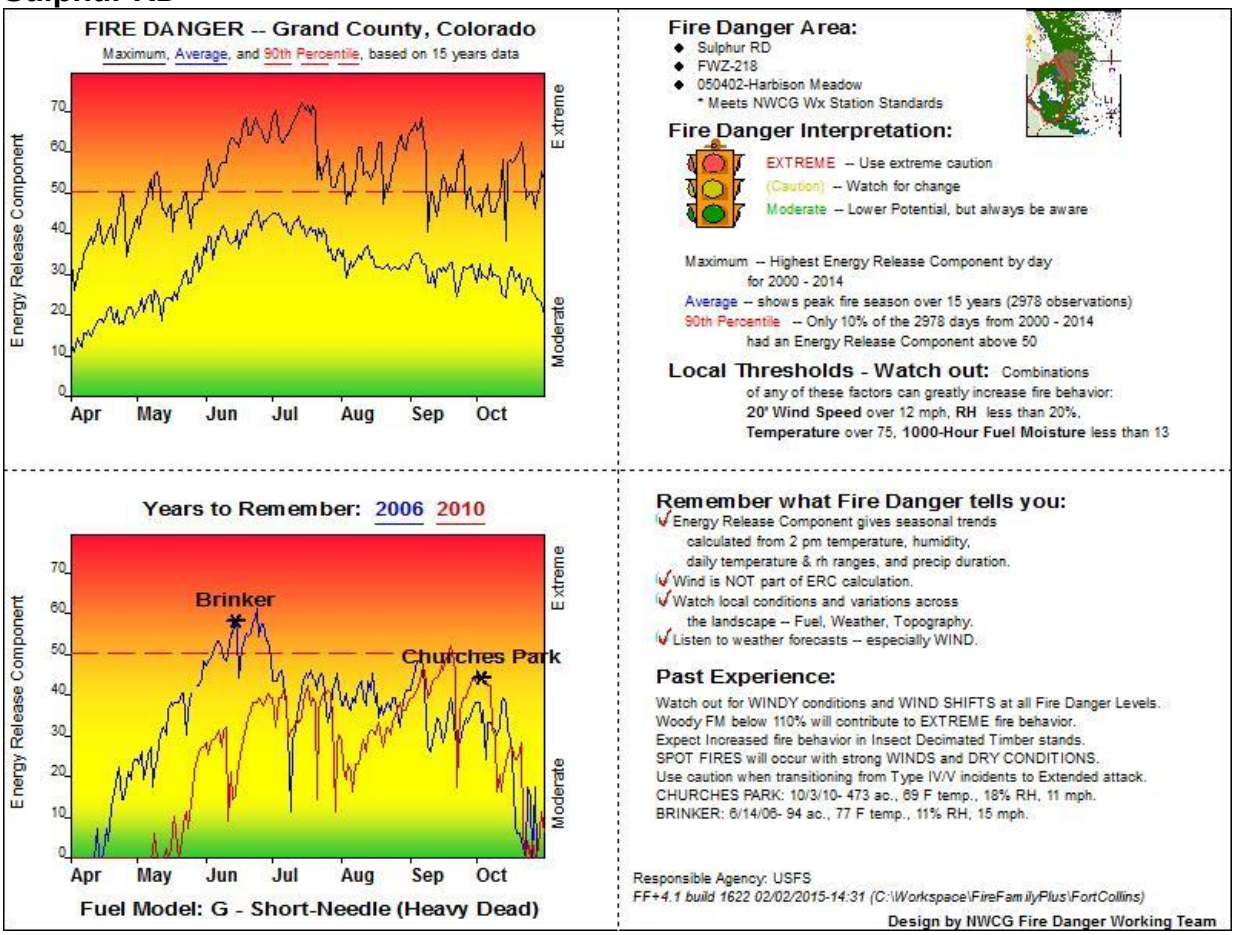
Watch out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
Woody Fuel Moistures below 110% will contribute to EXTREME fire behavior.
Expect Increased fire behavior in Insect Decimated Timber stands.
SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
Use caution when transitioning from Type IV/V incidents to Extended Attack.
FOUNTAIN GULCH: 6/29/02--200 ac., 83 F temp., 10% rh, 5 mph.
BEAR TRACKS:6/27/98--485 ac., 78 F temp., 13% rh, 5 mph.

Responsible Agency: USFS

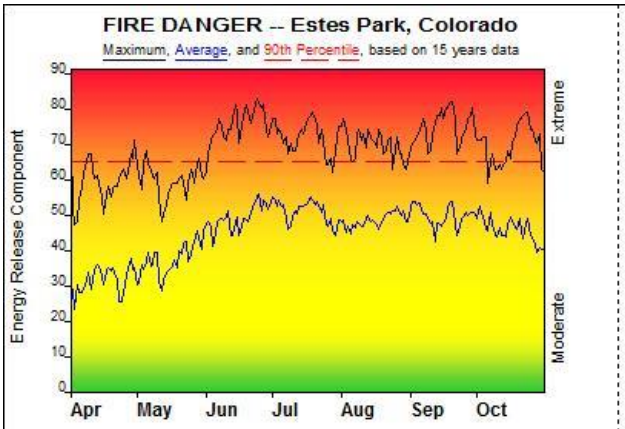
FF+4.1 build 1622 02/10/2015-15:03 (C:\Workspace\FireFamilyPlus\FortCollins)

Design by NWCG Fire Danger Working Team

Sulphur RD

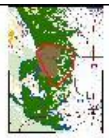

FIRE DANGER -- Grand County, Colorado
Maximum, Average, and 90th Percentile, based on 15 years data
Energy Release Component
Extreme
Moderate
Apr May Jun Jul Aug Sep Oct
Fire Danger Area:
Sulphur RD
FWZ-218
050402-Harbison Meadow
* Meets NWCG Wx Station Standards
Fire Danger Interpretation:
EXTREME -- Use extreme caution
(Caution) -- Watch for change
Moderate -- Lower Potential, but always be aware
Maximum -- Highest Energy Release Component by day for 2000 - 2014
Average -- shows peak fire season over 15 years (2978 observations)
90th Percentile -- Only 10% of the 2978 days from 2000 - 2014 had an Energy Release Component above 50
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 13
Years to Remember: 2006 2010
Brinker
Churches Park
Fuel Model: G - Short-Needle (Heavy Dead)
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 FM below 110% 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 attack.
CHURCHES PARK: 10/3/10- 473 ac., 69 F temp., 18% RH, 11 mph.
BRINKER: 6/14/06- 94 ac., 77 F temp., 11% RH, 15 mph.
Responsible Agency: USFS
FF+4.1 build 1622 02/02/2015-14:31 (C:\Workspace\FireFamilyPlus\FortCollins)
Design by NWCG Fire Danger Working Team

North Zone



Fire Danger Area:

- Canyon Lakes RD
- FWZ 215
- 050507-Estes Park
  * Meets NWCG Wx Station Standards

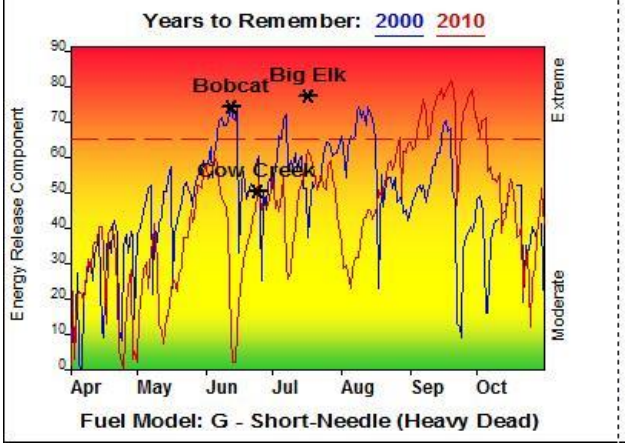


Fire Danger Interpretation:

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

Maximum -- Highest Energy Release Component by day for 2000 - 2014
Average -- shows peak fire season over 15 years (3341 observations)
90th Percentile -- Only 10% of the 3341 days from 2000 - 2014 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



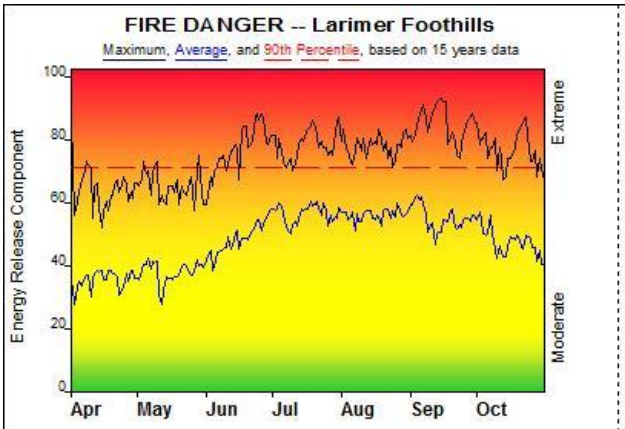
Remember what Fire Danger tells you:

- ✓ 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:

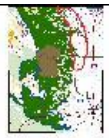
Watch out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
Woody FM below 110% will contribute to EXTREME fire behavior.
Expect Increased fire behavior in Insect Decimated Timber stands.
SPOT FIRES will occur with strong WINDS and DRY CONDITIONS.
Use caution when transitioning from Type IV/V incidents to Extended attack.
COW CREEK: 6/24/10--916 ac., 80 F temp., 12% RH, 6 mph.
BIG ELK: 7/17/02--4,348 ac., 88 F temp., 7% RH, 4 mph.
BOBCAT: 6/12/00--10,599 ac., 78 F temp., 7% RH, 11 mph.

Responsible Agency: USFS
FF+4.1 build 1622 02/02/2015-14:32 (C:\Workspace\FireFamilyPlus\FortCollins)
Design by NWCG Fire Danger Working Team



Fire Danger Area:

- Canyon Lakes RD
- FWZ-215
- 050508-Redstone
  * Meets NWCG Wx Station Standards

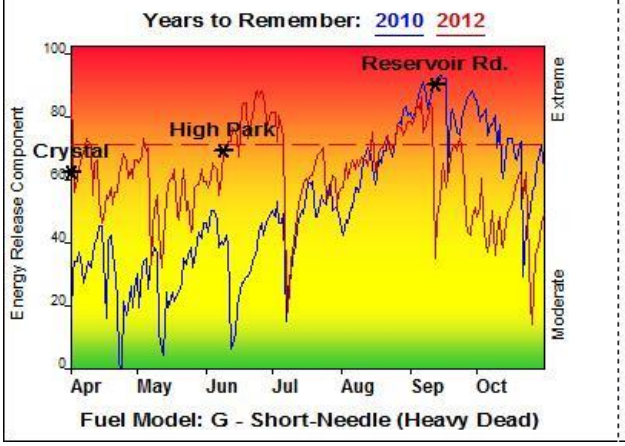


Fire Danger Interpretation:

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

Maximum -- Highest Energy Release Component by day for 2000 - 2014
Average -- shows peak fire season over 15 years (3173 observations)
90th Percentile -- Only 10% of the 3173 days from 2000 - 2014 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.

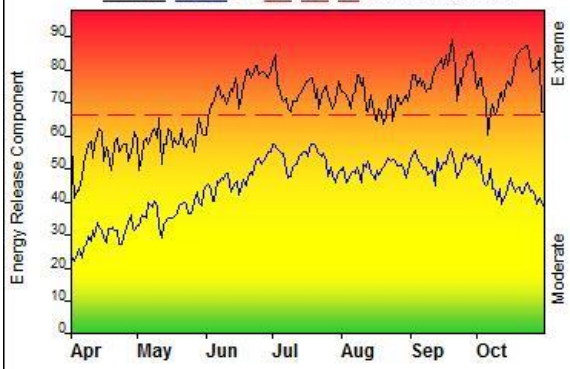
Past Experience:

Watch out for WINDY conditions and WIND SHIFTS at all Fire Danger Levels.
Woody FM below 110% 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 attack.
HIGH PARK: 6/9/12--87,275 ac., 92 F temp., 6% RH, 7 mph.
CRYSTAL:4/1/11-- 2,939 ac., 78 F temp., 6% RH, 9 mph.
RESERVOIR RD:9/12/10-- 710 ac., 77 F temp., 9% RH, 9 mph.

Responsible Agency: USFS
FF+4.1 build 1622 02/02/2015-14:29 (C:\Workspace\FireFamilyPlus\FortCollins)
Design by NWCG Fire Danger Working Team

FIRE DANGER -- Redfeather Lakes, Colorado

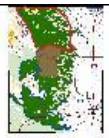
Maximum, Average, and 90th Percentile, based on 15 years data



Fire Danger Area:

- Canyon Lakes RD
- FWZ-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 2000 - 2014

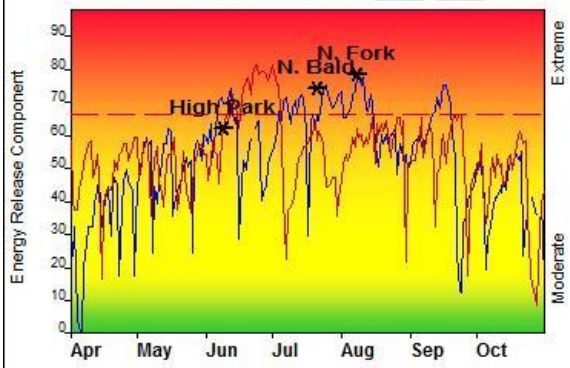
Average -- shows peak fire season over 15 years (3345 observations)

90th Percentile -- Only 10% of the 3345 days from 2000 - 2014 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 2012



Fuel Model: G - Short-Needle (Heavy Dead)

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 FM below 110% 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 attack.
HIGH PARK: 6/9/12--87,275 ac., 92Ftemp., 6% RH, 7 mph.
NORTH BALD: 7/21/05--45 ac., 84 F temp., 8% RH, 11 mph.
NORTH FORK: 8/8/00--180 ac., 91 F temp., 9% RH, 7 mph.

Responsible Agency: USFS

FF+4.1 build 1622 02/02/2015-14:36 (C:\Workspace\FireFamilyPlus\FortCollins)

Design by NWCG Fire Danger Working Team