# WILDLAND FIRE IN COLORADO

## ANNUAL SUMMARY REPORT for Calendar Year 2007



Colorado Department of Public Health and Environment



Bent's Old Fort, November 2006

Prepared by the: Air Pollution Control Division Technical Services Program APCD-TSP-B1 4300 Cherry Creek Drive South Denver, CO 80222-1530 (303) 692-3224 June 16, 2008

# I. INTRODUCTION

Colorado's wildland fire smoke management program is implemented under the requirements of Colorado Air Quality Commission Regulation 9, <u>Open Burning</u>, <u>Prescribed Fire</u>, and <u>Permitting</u>. Requirements for significant users of prescribed fire permitting, reporting of activity, and collection of fees to cover the cost of the smoke management program are included in the regulation. This report contains activity concerning wildland fire (prescribed fire) activities of a number of agencies and several private landowners. The governmental agencies are:

- Colorado State Forest Service (CSFS)
- U.S. Forest Service (USFS)
- National Park Service (NPS)
- U.S. Bureau of Land Management (BLM)
- U.S. Fish and Wildlife Service (USF&WS)
- Colorado Division of Wildlife (CDOW)
- US Air Force Academy (USAFA)
- US Army Fort Carson (USAFC)
- Cherryvale Fire Protection District (CFPD) now Rocky Mountain Fire

- City of Boulder Wildland Fire Program (BWFP)
- Larimer County Open Space Program (LCOS)
- Jefferson County Open Space (JCOS)
- Boulder County Open Space (BCOS)
- City of Fort Collins Wildland Fire Program (FCWFP)
- West Metro Fire Department (WMFD)
- Colorado State Parks (CSP)

This report contains emissions inventory information for the projects proposed and completed by all permittees. Since 1990 the land management agencies have annually reported all planned ignition projects and wildland fire use fires to the Division. Since January of 2002 landowners and managers of public lands using fire to manage grasslands or wildlands are legally subject to the reporting requirements of Regulation 9.

This annual report summarizes the proposed and actual fire activity reported by land managers in 2007. The Division updates the emission inventory and this report annually. For additional information concerning the prescribed burning emission inventory, contact Coleen Campbell at (303) 692-3224. For information regarding Colorado's prescribed fire program, visit our <u>website</u>.

## **II. PRESCRIBED FIRE ACTIVITY**

A permit application is submitted to the Division for all proposed wildland fire projects. Daily and annual activity reports are also submitted for all wildland fire projects. This report summarizes only annual activity; contact the Division for daily information about a specific date or project.

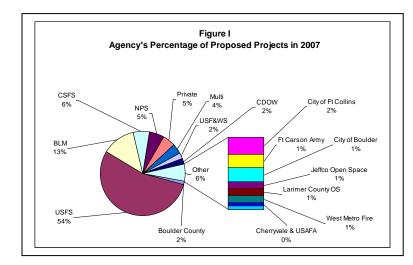
Land managers are required to obtain a permit from the Division prior to ignition. The permit application includes the proposed dates of the burn, the burn purpose(s), smoke sensitive areas that have the potential to be impacted by the burn, and the proposed size of the burn. **Table I** is a summary of the proposed planned ignition burns and wildland fire use areas by permittee. **Figure I** indicates the percentage of the total projects proposed by each of the entities in 2007.

Unplanned ignition prescribed fire, also known as wildland fire use, is the management of naturally ignited fires to achieve resource benefits where fire is a major component of the ecosystem. Allowing fire to play its natural role, when protection of private property and social values is possible, can enhance many natural resource values. Most of the federal land management units have completed or are working on fire management plans that include wildland fire use as one of the tools available to meet resource objectives on the lands they manage. More information about wildland fire use is available at:

http://www.fs.fed.us/fire/fireuse/wildland\_fire\_use/use\_index.html

Activity information concerning individual prescribed fire projects is listed in **Appendix A**. The appendix provides information on the total number of acres or piles burned during 2007on individual projects. The appendix also lists those projects for which no activity occurred. To obtain air pollutant emissions information on a specific project, contact the Division.

TABLE I PROPOSED PRESCRIBED BURNING ACTIVITY BY PERMITTEE 2007							
AGENCY	# OF BROADCAST BURNS PROPOSED	PROPOSED TOTAL ACRES (Broadcast)	# OF PILE BURNS PROPOSED	PROPOSED TOTAL VOLUME OF FUEL IN FT <sup>3</sup> (Piles)	# OF WILDLAND FIRE USE AREAS PROPOSED	PERMITTEE'S PERCENTAGE OF ALL PROPOSED BURNS	
BLM	26	19,050	15	5,496,684	1	12.77%	
BCOS	2	102	3	128,370	0	1.52%	
BWFP	4	141	0	0	0	1.22%	
CDOW	5	227	2	28,000	0	2.13%	
CFPD	0	0	1	100,000	0	0.30%	
CSFS	8	1,552	13	495,024	0	638%	
FCWFP	4	141	0	0	0	1.52%	
JCOS	0	0	2	51,920	0	0.61%	
LCOS	1	75	1	31,500	0	0.61%	
MULTI	6	5,735	1	89,250	5	3.65%	
NPS	6	725	10	2,936,561	2	5.47%	
Private	6	4,780	11	3,530,925	0	5.17%	
USAFA	0	0	1	12,190	0	0.30%	
USAFC	4	71,000	0	0	0	1.22%	
USFS	86	109,493	92	15,104,891	1	54.10%	
USF&WS	7	3,511	1	117,200	0	2.43%	
WMFD	2	335	0	0	0	0.61%	
All Permittees	167	216,988	154	28,133,927	8	100%	



BLM= Bureau of Land Management BCOS= Boulder County Open Space BWFP= City of Boulder Wildland Fire Program CDOW= Colorado Division of Wildlife CFPD=Cherryvale Fire Protection District CSFS= Colorado State Forest Service FCWFP=City of Fort Collins Wildland Fire Program JCOS= Jefferson County Open Space LCOS= Larimer County Open Space Multi= Multiple Agencies NPS= National Park Service USAFA= US Air Force Academy USAFC= US Army Fort Carson USFS= US Forest Service USF&WS= US Fish & Wildlife Service WMFD= West Metro Fire Department

#### III. EMISSIONS INVENTORY

The Division's permit application and reporting forms provide the information necessary to generate an emissions inventory for prescribed burning in the State. Smoke from prescribed fire contains a complex mixture of carbon, tars, liquids, various gases and particles. The fuel loading, fuel consumption, fuel moisture, burning method, and fuel type influence the air pollutant emissions.

This emissions inventory is only an estimate of the emissions from prescribed fires in Colorado during 2007. To allow for an emissions inventory of wildland prescribed fire to be developed, the land managers reported the most accurate burn specific information that was available. For most of the burns this included an expert estimate of fuel loading and consumption.

The inventory developed consists of the emissions in Colorado from wildland prescribed burning completed only by the entities listed on page 1. The Division does not receive any emissions information from open burning performed by other parties, such as ski areas and the agricultural industry. This inventory does not include the emissions from wildfires. Wildfire emissions vary greatly from year to year but typically are greater than the emissions from prescribed fires.

The magnitude of prescribed burning in states in the northwest and southwest regions of the U.S. far exceeds that of Colorado. Much of the research on emissions from prescribed fire and the impacts of various parameters on the emissions is performed in these areas. The accuracy of applying these factors to develop emissions for Colorado's inventory has not been determined, but they should be adequate to develop an emissions inventory with a moderate level of confidence.

The permittees report the acreage burned, fuel loading, fuel type and fuel type composite for this emissions inventory. If it is necessary to estimate fuel loading for a burn, loadings are estimated by averaging the reported fuel loading of other burns with the same fuel type. For information concerning a specific burn, contact the Division. **Table II** is a summary of typical fuel loadings for various fuels.

TABLE II AVERAGE FUEL LOADING FOR SELECTED FUEL TYPES FOR COLORADO						
FUEL TYPE	TOTAL FUEL LOADING (tons/acre )	REFERENCES				
Grass	2	Prescribed Fire Smoke Management Guide Aids to Determining Fuel Models for Estimating Fire Behavior (Range of 0.74 to 4.0 T/A is indicated in reference- 2 T/A is the most common loading for Colorado projects)				
Sagebrush	5	Average of reported loading from other burns				
Oakbrush	4	Average of reported loading from other burns				
Pine / Conifer	30	AP-42, Wildfires and Prescribed Burning, Rocky Mtn Avg <sup>*</sup>				
FUEL TYPE	FUEL LOADING (lbs/ft <sup>3</sup> )	REFERENCE				
Piled Douglas-fir	38	Estimating the Volume of Wood in Large Piles of Logging Residue				

\* AP-42 value = fuel loading x fuel consumption during wildfire. A value for the fuel loading separately is not given. If less than 100% consumption was used in calculating this value, the fuel loading would be less.

#### **EMISSION FACTORS**

The major pollutants from prescribed burning are particulate matter, carbon monoxide, and volatile organic compounds. For the purpose of this report, an inventory of particulate matter, volatile organic compounds (methane and non-methane hydrocarbons) and oxides of nitrogen was developed. Emission factors that experts have indicated should be accurate for Colorado are available for these pollutants for most of the reported fuel types. The emission factors are reported as pounds of the specific pollutant produced for each ton of fuel that is consumed. The majority of the emission factors are calculated from measurements taken during prescribed fires in the Northwest. **Table III** is a summary of the emission factors used to develop the emissions inventory.

				EM	ISSION F	TABLE ACTORS	III FOR COL	ORADO
FUEL TYPE			E	MISSIO	N FACTO			REFERENCES
	Par	ticulate	es *	СО	Volatile	Organics	NO <sub>x</sub> **	
	PM <sub>2.5</sub>	PM <sub>10</sub>	Total PM		Methane	Non Methane		
Grass	18 <b>†</b>	20	20	150	0	0	2.5	AP-42- Rocky Mtn Grasslands & Chaparral Grassland
Sagebrush	27	30	45	206	12.4	13.8	2.5	USDA Forest Service, Fire and Air Research Station & AP-42, Sagebrush Range Fire
Oakbrush	16	18	30	124	9	25	2.5	AP-42- Pacific SW Chaparral & Chaparral Shrub
Aspen	16	18	30	124	9	25	2.5	AP-42- Pacific SW Chaparral & Chaparral Shrub
Pine/Conifer	60*	60	70	326	11.2	7	2.5	AP-42- Rocky Mtn Underburning Pine & Short- Needle Conifer
Piled Slash	8*	8	12	74	3.6	0	2.5	AP-42- Rocky Mtn Logging Slash & Logging Slash Debris
Pinon / Juniper	9	24	27	167	12	10.4	2.5	AP-42- Pacific SW Pinon/Juniper & Juniper Range Fire
Other	23▼	26	34	350	9.4	9.2	2.5	AP-42, Rocky Mtn Region Avg

\* Each particulate size category includes all particulates in the smaller size classes

\*\* AP-42, Average of Emission Factor Range for All Fuel Types (NO<sub>x</sub>)

 $\uparrow$  Calculated using the average ratio of PM<sub>10</sub> emissions to PM<sub>2.5</sub> emissions from the sagebrush, oakbrush, aspen and pine/conifer emission factors

\* AP-42, Pacific NW Underburning Pine (PM<sub>2.5</sub> only)

\* AP-42, Pacific NW Piled Logging Slash (PM<sub>2.5</sub> only)

▼ AP-42, Pacific NW Region Avg (PM<sub>2.5</sub> only)

#### **EMISSIONS**

The estimate of the emissions from prescribed fire performed by land managers for 2007 is summarized in **Table IV**. The summary includes the  $PM_{10}$ , VOC, NO<sub>x</sub> and non-methane hydrocarbon (NMHC) emissions from pile and broadcast burns and wildland fire use fires by permittee. For information regarding other pollutants, contact the Division. Most of the permittees completed at least some of their proposed prescribed burns during 2007. The size of a broadcast burn is reported as acres burned and percent of fuel consumed. The **Total Acres** column in **Table IV** reflects the acres burned. The size of a pile burn is reported as the volume (in cubic feet) of slash ignited and the percentage of slash consumed. The amount of fuel consumed during pile burning is summarized in the **Volume Consumed** column.

			Т	TABLE IV					1
	SUMMARY OF AIR POLLUTANT EMISSIONS BY PERMITTEE FOR 2007								
for Reported Projects with Burning Activity									
AGENCY	NUMBER OF	-		VOLUME	TOTAL	-			AGENCY'S
		ACRES	OF PILE	CONSUMED	PM10	VOC	NOX	NMHC	% OF
	BURNS		BURNS	( <b>ft</b> <sup>3</sup> )	(tons)	(tons)	(tons)	(tons)	TOTAL PM10
BLM	13	2,153	12	1,713,649	203	67	30	83	10.2%
Boulder County OS	2	88	2	104,398	9	3	0	5	0.4%
CDOW	3	42	1	5,220	2	1	0	0	0.1%
Cherryvale Fire	0		1	2,850	0	0	0	0	0.0%
City of Boulder	1	3	0		0	0	0	0	0.0%
City of Fort Co	2	23	1	3,012	0	0	0	0	0.0%
CSFS	5	414	9	242,624	26	10	1	12	1.3%
Fort Carson Army	4	16,687	0		261	256	4	6	13.2%
Jeffco OS	1	12	2	22,090	2	0	0	1	0.1%
Larimer County	1	74	1	7,607	1	0	0	0	0.1%
MULTI	5	4,890	1	102,717	139	52	161	8	7.0%
NPS	1	335	10	924,584	86	33	0	44	5.9%
PRIVATE	2	317	9	1,096,797	111	33	10	53	2.9%
USFS	40	22,787	67	5,079,240	1,157	496	214	256	58.2%
USFWS	5	1,082	1	10,488	14	13	0	1	0.7%
West Metro Fire	2	265	0		5	5	0	0	0.3%
Prescribed Fire									
Subtotal	86	49,010	111	9,077,172	1,987	952	423	458	100.00%
BLM Fire Use	1	1			0	0	0	0	
MULTI Fire Use	3	161			9	4	3	0	
NPS Fire Use	0								
USFS Fire Use	0								
Wildland Fire Use									
Subtotal	4	162			9	4	3	0	
All Permittees	90	49,172	111	9,077,172	1,996	956	426	458	

PM10= Particulate Matter under 10 microns

NOX= Nitrogen Oxide(s)

VOC= Volatile Organic Compounds

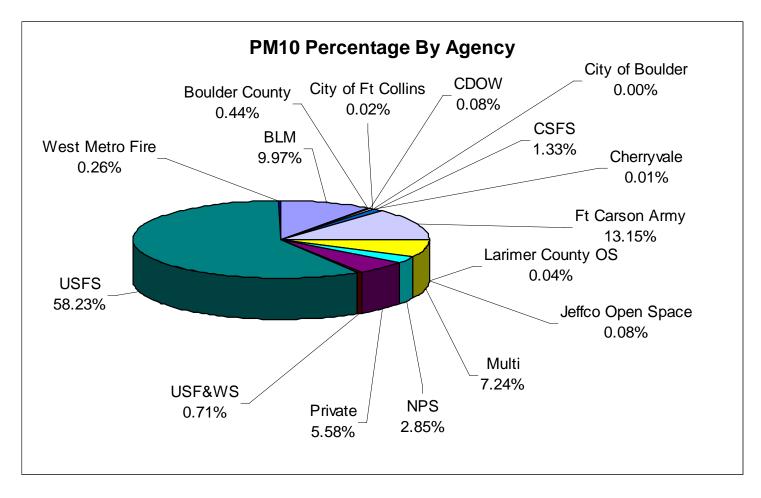
NMHC= Non Methane Hydrocarbons

During 2007 the air pollutants emitted during wildland fire use fires was insignificant. The number of wildland fire use ignitions within a planning area varies substantially year-to-year and the acres burned vary much more. Wildland fire ignitions follow a similar seasonal pattern similar to wildfires, although managers are more circumspect about managing a new fire as a wildland fire use fire during peak burning season than during the wetter months in spring and fall. Wildland fire season in Colorado typically runs from late spring through early fall. During 2007, there were 12 wildland fire use fires ignited and about 160 acres burned. The Lujan Ridge fire on the Montrose Interagency Management Unit's (MIMU) land reached 52 acres. Approximately 40 acres burned on the MIMU are with the Hauser fire north of Nucla. On the San Juan Public Lands, the Dead Horse wildland fire use fire burned 55 acres during a week's time before a significant rain event put it out on July 7, 2007. The Lost Canyon wildland fire use burned 10 acres on San Juan Public Lands. All of the other wildland fire use fires were less than one acre. Small fires (less than 1 acre each) occurred on the Royal Gorge Field Office lands and Northwest Colorado Fire Management Unit's lands.

Land managers and owners that use wildland prescribed fire to manage wildland areas are charged fees to cover the cost of the Division's wildland fire program. These fees are based in part on the amount of PM10 emitted by an agency's completed projects during the year. **Figure II** provides each entity's percentage of the total PM10 emissions during 2007 for prescribed fire projects. Wildland fire use areas are charged a flat fee each year. They may or may not have any emissions from wildland fire use in a given year. Contact the Division for more information about the fee program and how data from the emission inventory is used to determine fees.

**Figure III** is a comparison of the particulate matter emissions from prescribed fire to other types of emission sources. Although a project may cause significant, short-term impacts to an area, the total emissions from prescribed fire are orders of magnitude less than emissions from stationary and mobile sources. Prior to 2002, only a couple of areas had wildland fire use plans in place and most years the emissions from the burns were negligible. **Table V** provides the values used to create **Figure III**.

Figure II PM<sub>10</sub> Emissions from Permitted Wildland Fire Projects with Activity during 2007 Excludes Wildland Fire Use Emissions

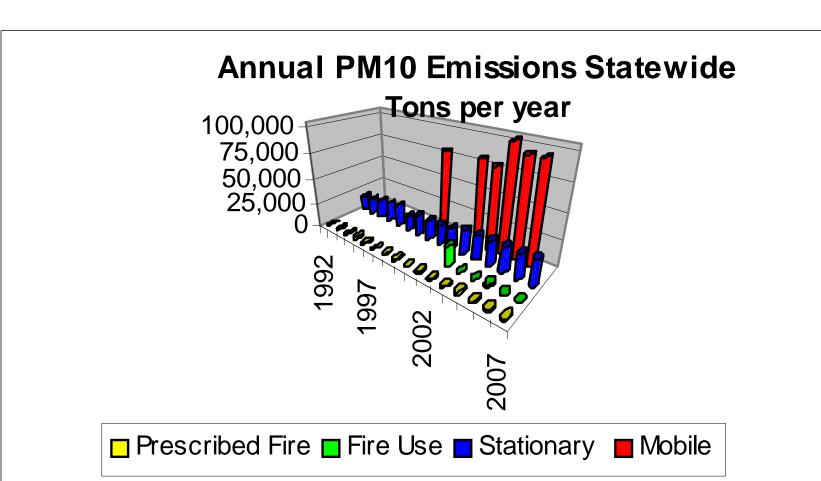


Multi category includes burns with more than one agency participating.

	TABLE V   Annual PM <sub>10</sub> Emission Inventory   for Various Colorado Sources from 1992 to 2003   (Tons per Year)						
Year	Prescribed Fire	Wildland Fire Use*	Stationary Sources (includes portable and fugitive dust)	Mobile-Statewide (includes tailpipe and road dust emissions)**			
1992	627		15,364	unknown			
1993	1,646		16,452	unknown			
1994	895		18,185	unknown			
1995	2,267		19,783	unknown			
1996	1,298		21,215	unknown			
1997	709		13,897	unknown			
1998	1,684		20,376	unknown			
1999	1,633		19,376	80,229			
2000	390		19,362	unknown			
2001	1,747		21,004	unknown			
2002	666	19,723	24,518	82,376			
2003	910	782	24,413	78,671			
2004	3,093	247	24,736	98,600			
2005	1,726	2,458	24,745	94,565			
2006	1,447	1	24,646	95,173			
2007	1,988	9	25,097	not available			

\* Before 2002 only a couple of areas had wildland fire use plans in place and most years the emissions from the burns were negligible.

\*\* Prior to 2002 mobile emission inventories are available only from special studies and were not calculated for each year. Currently there is an 18-month delay to estimate the mobile source emission inventory.





Appendix A List of 2007 Projects A notation of 'No Activity' in the last column means the project was not burned in 2007.

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
	Unknown				
CRD-07-141	MIDDLE MT. SLASH PILE	BLM		10,800	
CRD-07-142	STAGECOACH SLASH PILES	BLM		16,875	
CRD-07-162	NINE MILE	BLM	10		
CRD-07-163	MAGGIE	BLM	20		
CRD-07-164	MIDDLE MOUNTAIN	BLM	22		
CRD-07-181	PANHANDLE	BLM	0		No Activity
CRD-07-208	CURTIS DIVIDE	BLM	150		,
CRD-07-268	MARSHALL DRAW RX	BLM	300		
CRD-07-269	RAT HOLE	BLM	0		No Activity
GJD-07-250	DEER PEN	BLM	28		· · · ·
KRD-07-035	PUMPHOUSE PILES	BLM		67,510	
KRD-07-087	OURAY PILES	BLM		800	
KRD-07-090	TEN MILE	BLM			No Activity
KRD-07-267	GORE LAKES FUEL REDUCTION PROJECT	BLM		20,995	
MRD-07-119	LONGHILL ROLLERCHOP	BLM	100		
MRD-07-120	ROUBIDEAU	BLM	0		No Activity
MRD-07-121	PAXTON	BLM	325		-
MRD-07-200	POWDERHORN	BLM	0		No Activity
MRD-07-201	GOOSE CREEK	BLM	190		•
MRD-07-202	STEERS GULCH	BLM	0		No Activity
MRD-07-203	WEST ANTELOPE STATE LANDS	BLM	0		No Activity
MRD-07-219	LONG GULCH	BLM	98		
MRD-07-319	GOLD BASIN PILES	BLM		234,944	
PSF-07-127	RICE GULCH	BLM	60		
PSF-07-175	LAKEMORE WEST	BLM	0		No Activity
RGD-07-031	POVERTY MOUNTAIN PILES	BLM		894,375	
RGD-07-032	SULLIVAN CREEK PILES	BLM		44,800	
RGD-07-033	LAKEMOOR WEST PILES	BLM		76,500	
RGD-07-074	TURKEY GULCH PILES	BLM		292,512	
RGD-07-084	SPRUCE BASIN PILES	BLM			No Activity
RGD-07-150	ROYAL GORGE FIELD OFFICE WFU	BLM	1		
RGD-07-182	ARKANSAS MOUNTAIN BROADCAST	BLM	0		No Activity
SJD-07-086	EDGEMONT	BLM		55,100	Use daily to estimate
SJD-07-156	DOLORES RIM	BLM	0		No Activity
SJD-07-228	VIGIL/ABEYTA MESA	BLM	150		_
WRD-07-153	OAK RIDGE	BLM	0		No Activity
WRD-07-154	BOIES	BLM	700		
WRD-07-207	CARL'S HOLE UNIT 1	BLM	0		No Activity
WRD-07-266	WOLF CREEK RX	BLM	0		No Activity
WRD-07-272	WASSON DRAW	BLM	0		No Activity
WRD-07-294	TRI-STATE PILES	BLM		1,813	
BOX-07-112	WALKER SLASH	Boulder County			Estimate

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
BOX-07-206	BETASSO PRESERVE	Boulder	44		
		County			
BOX-07-279	HEIL	Boulder	44		
		County			
BOX-07-312	REYNOLDS RANCH 1A	Boulder			Assumed no act
		County			
BOX-07-313	REYNOLDS RANCH 2 A	Boulder		104,118	Proposed Assumed
		County			
DEW-07-189	TARRYALL SWA	CDOW	7		
DEW-07-190	WOODHOUSE SWA	CDOW	0		No Activity
LAW-07-322	TERN ISLAND	CDOW			No Activity
MOW-07-114	HAMILTON TAMARISK PILES	CDOW		5,220	
MOW-07-115	LOWER ROUBIDEAU TAMARISK PILES	CDOW			No Activity
MOW-07-126	ESCALANTE FOOD PLOTS, FIELD BURN	CDOW	15		
SSS-07-224	SAND CREEK	CDOW	20		
CVX-07-040	FLAGSTAFF	Cherryvale		2,850	
BCX-07-184	S-3	City of Boulder	3		
BCX-07-185	FELL SLOUGH	City of Boulder	0		No Activity
BCX-07-187	WATERTANK	City of Boulder	0		No Activity
BCX-07-188	MCINTOSH	City of Boulder	0		No Activity
FCX-07-081	BOBCAT RIDGE PILES	City of Ft Collin		3,012	
FCX-07-263	COYOTE RIDGE NATURAL AREA	City of Ft Collin	0		No Activity
FCX-07-264	BUTTERFLY WOODS	City of Ft Collin	11		
FCX-07-265	ARAPAHOE BEND NATURAL AREA	City of Ft Collin	12		
FCX-07-307	BOBCAT RIDGE NATURAL AREA	City of Ft Collin	0		No Activity
ALS-07-067	LAJARA FIREWOOD AREA	CSFS		1,520	
ALS-07-068	FORBES PILES	CSFS		25,840	
ALS-07-270	WAGON CREEK PILES	CSFS		3,979	
BOS-07-072	BUNCE SCHOOL ROAD	CSFS			No Activity
BOS-07-149	CRESCENT MEADOW	CSFS	50		<b>y</b>
BOS-07-314	GROSS RESERVOIR BOS	CSFS			No Activity
BRS-07-037	NIGHTHAWK PILES	CSFS		35,088	J
BRS-07-052	HORSE CREEK PILES	CSFS		82,585	
BRS-07-073	GOOSE CREEK PILES	CSFS		02,000	No Activity
FCS-07-110	MANHATTAN SL	CSFS		7,524	
FCS-07-138	TORRES PILES	CSFS		4,375	
FMS-07-028	GREAT PLAINS WILDFIRE COLLEGE 2007	CSFS	0		No Activity
GOS-07-178	STAUNTON STATE PARK	CSFS	245		
GOS-07-237	WINDY PEAK OELS BROADCAST	CSFS	0		No Activity
GOS-07-246	GGCSP NOTT CREEK BROADCAST	CSFS	63		
GOS-07-277	MT. FALCON BROADCAST	CSFS	38		
GOS-07-278	WHITE RANCH BROADCAST #2	CSFS	18		

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
SAS-07-034	DRY CREEK STATE LAND and MAHER	CSFS		57,713	
SSS-07-230	DELANEY BUTTES	CSFS	0		No Activity
SSS-07-304	CS FOREST PILES	CSFS			No Activity
WPS-07-271	SALT CREEK PILES	CSFS		24,000	
FCQ-07-173	FORT CARSON - MIDDLE AREA	Ft Carson Army	2,535		
FCQ-07-174	FORT CARSON - NORTH AREA	Ft Carson Army	1,326		
FCQ-07-191	FORT CARSON - PCMS	Ft Carson Army	12,083		
FCQ-07-192	FORT CARSON - SOUTH AREA	Ft Carson Army	743		
JEX-07-047	WHITE RANCH SLASH PILE	Jeffco Open Space		14,549	
JEX-07-050	ELK MEADOW SLASH PILE	Jeffco Open Space		7,540	
LRX-07-003	HORSETOOTH	Larimer County OS		7,607	
LRX-07-082	INDIAN CREEK LARIMER	Larimer County OS	74		
MUL-07-022	3-4 ELK #2	Multi		102,717	
MUL-07-036	SAN JUAN PUBLIC LANDS WFU	Multi	65		
MUL-07-096	SLAUGH WALL	Multi	345		
MUL-07-145	ROARING FORK	Multi	1,273		
MUL-07-152	UPPER COLORADO RIVER INTERAGENCY FMU WFU	Multi			
MUL-07-179	DEER HAVEN	Multi	0		No Activity
MUL-07-227	BATTLEMENTS	Multi	3,150		
MUL-07-245	WHITE RANCH BROADCAST	Multi	17		
MUL-07-251	MONTROSE INTERAGENCY MANAGEMENT UNIT FIRE USE	Multi	93		
MUL-07-254	NW COLORADO FMU	Multi	3		
MUL-07-258	SAN LUIS VALLEY PUBLIC LANDS WFU	Multi			No Activity
PSF-07-176	BOX CREEK	Multi	105		
BCP-07-134	BCP MAINTENANCE BRUSH PILE	NPS			No Activity
CCP-07-133	CCP MAINTENANCE BRUSH PILE	NPS			No Activity
CNP-07-261	UTE MESA	NPS	0		No Activity
FFP-07-013	FLORISSANT PILES	NPS			No Activity
FFP-07-286	NORTH & EAST INTERFACE RX BURN	NPS	0		No Activity
GSP-07-253	GREAT SAND DUNES NP & PRESERVE WFU	NPS	0		No Activity
MVP-07-108	HOGAN PILE Rx	NPS		16,660	
MVP-07-229	FARVIEW RX	NPS	0		No Activity
MVP-07-323	MOREFIELD RX	NPS	0		No Activity
RMP-07-012	EMERALD PILES	NPS			No Activity
RMP-07-014	GRAND LAKE BOUNDARY PILES	NPS		47,773	
RMP-07-015	DEER MOUNTAIN PILES	NPS		620,350	

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
RMP-07-016	MORAINE PARK TEMPORARY STORAGE	NPS			No Activity
RMP-07-017	PONTIAC PIT	NPS		1,698	
RMP-07-018	GLACIER BASIN TEMP STORAGE	NPS			No Activity
RMP-07-019	ROCKY MOUNTAIN NAT'L PARK FIRE USE ZONE	NPS	0		No Activity
RMP-07-029	MORAINE PARK 2F	NPS	0		No Activity
RMP-07-273	HORSETOOTH BEND	NPS	185		
PVT-07-020	CRYSTAL LAKES	Private		9,499	
PVT-07-043	BANDED PEAK RANCH PILES	Private		51,053	
PVT-07-044	BANDED PEAK RANCH BROADCAST	Private	292	,	
PVT-07-083	GLMRD	Private		418,950	
PVT-07-093	YMCA EMERALD MTN PROJECT	Private		4,983	
PVT-07-102	GINN SLASH PILES	Private		183,566	
PVT-07-158	BUCK MOUNTAIN	Private	0		No Activity
PVT-07-160	WILKENS	Private	25		
PVT-07-169	PEARL CREEK PILES	Private		23,513	
PVT-07-209	WWV	Private	0	,	No Activity
PVT-07-233	COAL CREEK #1 KENNEDY	Private	0		No Activity
PVT-07-234	BAR NI UNIT 2	Private	0		No Activity
PVT-07-252	VAIL MT. CHAIR 10 & 14	Private		40,470	
PVT-07-308	F/T COMPARTMENT #1	Private			No Activity
PVT-07-309	F/T COMPARTMENT #2	Private			No Activity
PVT-07-310	FRISCO PENINSULA	Private		97,920	
PVT-07-324	BVR 2007	Private		266,844	
AFQ-07-186	FARISH PILES	USAFA			No Activity
ALR-07-135	C2	USF&WS	1		
ALR-07-137	D, ALR	USF&WS	0		No Activity
ALR-07-151	UNIT-P	USF&WS	0		No Activity
ARR-07-139	HAMPTON	USF&WS	140		
BPR-07-103	BEAVER CREEK	USF&WS	20		
BPR-07-128	HOY GRASSLAND	USF&WS	233		
RMR-07-089	ARSENAL BROADCAST BURNS 07	USF&WS	688		
RMR-07-091	ARSENAL PILES 2007	USF&WS		10,488	
ARF-07-038	SHEEP CREEK 2 PILES	USFS		16,425	
ARF-07-039	SEVEN MILE PILES	USFS		129,144	
ARF-07-041	SHEEP CREEK 2 (2007)	USFS	0		No Activity
ARF-07-045	SHEEP CREEK 1 (2007)	USFS	77		
ARF-07-051	CRYSTAL LAKES PILES	USFS		1,520,863	
ARF-07-053	SUGARLOAF 168/F2.1	USFS			No Activity
ARF-07-054	SUGARLOAF 54 W & NW	USFS		2,122	
ARF-07-055	SUGARLOAF 110 SOUTH	USFS		16,160	
ARF-07-056	SUGARLOAF F6 & 7S	USFS		38,448	
ARF-07-057	SUGARLOAF 82	USFS		1,739	
ARF-07-058	SUGARLOAF 102	USFS		8,073	
ARF-07-059	SUGARLOAF 91 SE	USFS		5,670	
ARF-07-060	SUGARLOAF 110N	USFS		6,310	
ARF-07-061	SUGARLOAF 90	USFS			No Activity
ARF-07-062	SUGARLOAF 54 ROCK	USFS		398	

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
ARF-07-063	SUGARLOAF 156 SOUTH	USFS			No Activity
ARF-07-064	SUGARLOAF 9N and 7W	USFS		1,123	-
ARF-07-066	LAKESHORE GOOD NEIGHBOR	USFS			No Activity
ARF-07-088	DOWDY 2007	USFS	440		
ARF-07-092	WINIGER STEWARDSHIP 4	USFS			No Activity
ARF-07-170	PAWNEE 2007 - WEST	USFS	2,579		
ARF-07-171	PAWNEE 2007 - EAST	USFS	2,010		
ARF-07-289	A-BAY TEMP STORAGE	USFS		2,160	
ARF-07-290	CRIMSON	USFS			No Activity
ARF-07-291	KAWANEECHE	USFS			No Activity
ARF-07-292	RANGER GULCH	USFS			No Activity
ARF-07-293	SIMPSON	USFS			No Activity
ARF-07-296	TABLE MOUNTAIN	USFS		12,382	
ARF-07-297	WILLOW CREEK PILES	USFS		24,700	
ARF-07-305	WILLOW CREEK TEMP STORAGE	USFS		1,045	
ARF-07-306	PANORAMIC	USFS		6,210	
ARF-07-327	RED TOP	USFS		1,440	
GMF-07-097	HUBBARD PILES	USFS			No Consumption
GMF-07-098	DIVIDE CAMPGROUND PILES	USFS		15,300	•
GMF-07-117	DAVEWOOD	USFS	0		No Activity
GMF-07-118	ESCALANTE	USFS	0		No Activity
GMF-07-136	ONE MILE	USFS	0		No Activity
GMF-07-148	ТОМІСНІ	USFS	326		
GMF-07-161	WEST ELK	USFS	180		Estimated from Daily
GMF-07-165	FLAT TOP	USFS	1,256		
GMF-07-166	MYERS	USFS	12		
GMF-07-167	LOS PINOS	USFS	0		No Activity
GMF-07-168	ALPINE	USFS	0		No Activity
GMF-07-193	OHIO CITY-PITKIN	USFS	0		No Activity
GMF-07-213	SAND MOUNTAIN	USFS		17,005	
GMF-07-220	HORSE PASTURE PIT	USFS		2,178	
GMF-07-221	ILLIUM VALLEY PILES	USFS		4,750	
GMF-07-222	OURAY SPRINGS	USFS		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	No Activity
GMF-07-232	DOMINGUEZ/BRUSHY RIDGE	USFS	0		No Activity
GMF-07-243	HANKS VALLEY	USFS	126		
GMF-07-244	COAL CANYON ROLLERCHOP	USFS	198		
GMF-07-247	CLAY CREEK ROLLERCHOP	USFS	1		
GMF-07-248	COLUMBINE WILDLIFE OAK BURN	USFS	0		No Activity
GMF-07-249	BASIN TIMBER SALE	USFS	0		No Activity
GMF-07-245	WARD LAKE PILE	USFS	0	3,420	
GMF-07-288	MESA LAKES	USFS		17,028	
GMF-07-295	RIDGESTOCK T.S.	USFS		83,600	
GMF-07-315	TIN CUP	USFS		27,144	
GMF-07-317	WHITEPINE HAND PILES	USFS		9,900	
GMF-07-318	TOMICHI MACHINE PILES	USFS		118,800	
GMF-07-329	HIGH TOWER PILES	USFS		110,000	No Activity
MRD-07-223	MAILBOX	USFS	1,794		
PSF-06-085	INDIAN CREEK HUERFANO	USFS	1,794		No Activity
	1		0	00 440	NO ACTIVITY
PSF-07-002	VOC PILES	USFS	000	22,446	
PSF-07-004	PRAIRIE STAR	USFS	929		

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
PSF-07-005	BROWN RESERVOIR	USFS	0		No Activity
PSF-07-006	SUNFLOWER	USFS	393		
PSF-07-007	LONESTAR	USFS	0		No Activity
PSF-07-008	LYONS CAMP	USFS	0		No Activity
PSF-07-009	PINTATA	USFS	802		•
PSF-07-010	KIRKWELL SOUTH	USFS	604		
PSF-07-011	BUZZARDS ROOST/SHOOTING RANGE	USFS	1,140		
PSF-07-021	ADVENTURE UNLIMITED	USFS			No Activity
PSF-07-023	RANCH OF THE ROCKIES	USFS		99,479	
PSF-07-024	PAN ARK	USFS		91,248	
PSF-07-025	LEADVILLE NATIONAL FISH HATCHERY	USFS		559	
PSF-07-026	RED DEER PILES	USFS		90,450	
PSF-07-027	BROWNS CREEK	USFS		22,974	
PSF-07-042	TROUT CREEK PILES	USFS		34,960	
PSF-07-046	RIDGEWOOD PILES	USFS		50,035	
PSF-07-048	LONG JOHN WEST	USFS		44,010	
PSF-07-049	LONG JOHN EAST	USFS		46,086	
PSF-07-069	SLEDGEHAMMER 3B - ALL	USFS		9,800	
PSF-07-070	SLEDGEHAMMER 3A - ALL	USFS		64,173	
PSF-07-071	WOODLAND PARK PILES	USFS			No Activity
PSF-07-079	BENNETT MOUNTAIN PILES	USFS		812,205	
PSF-07-080	FDR SHADED FUEL BREAK	USFS		95,998	
	(550,543,560 Roads)			00,000	
PSF-07-099	FISH CREEK	USFS	255		
PSF-07-100	SLEDGEHAMMER EAST	USFS	998		
PSF-07-101	ROAD GULCH	USFS	0000		No Activity
PSF-07-104	TROUT WEST	USFS	250		
PSF-07-105	BUFFALO CREEK	USFS	0		No Activity
PSF-07-106	TRUMBULL PILES	USFS		14,070	
PSF-07-109	VILLEGREEN	USFS	0	14,070	No Activity
PSF-07-113	MONUMENT PILES	USFS	0		NO ACTIVITY
PSF-07-116	MOUNT CARMEL	USFS	317		
PSF-07-122	BUFFALO WALLOW	USFS	321		
PSF-07-122		USFS	0		No Activity
	WINDMILL		-		No Activity
PSF-07-124		USFS	348		
PSF-07-125		USFS	640		
PSF-07-132	550 ROAD UNDERBURN	USFS	10		
PSF-07-177	BLACK MOUNTAIN BROADCAST	USFS	1,208	404.050	
PSF-07-180	BLACK MOUNTAIN PILES	USFS		101,250	1
PSF-07-198		USFS	0		No Activity
PSF-07-199	NODDLES	USFS	0		No Activity
PSF-07-204	KELSEY	USFS	0		No Activity
PSF-07-205	TRUMBULL BROADCAST	USFS	9		
PSF-07-214	RED DEER	USFS	0		No Activity
PSF-07-215	THREEMILE CREEK	USFS	696		
PSF-07-216	BASSAM RIDGE BROADCAST	USFS	0		No Activity
PSF-07-255	ROCKY GULCH PILES	USFS			No Activity
PSF-07-256	WAGON TONGUE SOUTH PILES	USFS			No Activity
PSF-07-257	SLEDGEHAMMER 2 PILES	USFS		251,460	

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
PSF-07-274	MILLER GULCH	USFS	7		
PSF-07-275	FAIRPLAY BONEYARD PILE	USFS			No Activity
PSF-07-320	DECKERS PILES	USFS			No Activity
PSF-07-321	PLATTE RIVER PILES	USFS			No Activity
PSF-07-325	Arkansas Mountain Fuelbreak Piles	USFS		26,265	•
PSF-07-326	TWIN LAKES RX BURN	USFS	58		
PSF-07-330	LODGEPOLE FLATS	USFS			No Activity
RGF-07-030	LITTLE KERBER WEST PILES	USFS		270,000	· · · · · ·
RGF-07-143	HOUSELOG	USFS	1,150	,	
RGF-07-210	CONEJOS CANYON WUI PILES	USFS	,	22,425	
RGF-07-211	RITO HONDO BROADCAST RX	USFS	1,050		
RGF-07-212	NOVEMBER BROADCAST RX	USFS	0		No Activity
RGF-07-238	ALDER UNIT 1	USFS	0		No Activity
RGF-07-239	ALDER UNIT 2	USFS	0		No Activity
RGF-07-240	LIME CREEK WILLOWS	USFS	12		
RGF-07-241	POWDER HOUSE UNIT 1	USFS	0		No Activity
RGF-07-242	POWDER HOUSE UNIT 2	USFS	0		No Activity
RGF-07-260	BUFFALO PASS/NORTH PARK PILES	USFS	0	129,200	No Adivity
RGF-07-262	MILL CREEK UNIT 6	USFS	120		
RTF-07-065	DOUBLE DECKER	USFS	120	52,000	
RTF-07-107	GORE PASS ADMIN SITE	USFS		4,199	
RTF-07-183	CAMP CREEK BROADCAST	USFS	325		
RTF-07-194	BIG CREEK RIDGE	USFS	0		No Activity
RTF-07-195	BIG TWISTY	USFS	0		No Activity
RTF-07-196	DUNCKLEY	USFS	0		No Activity
RTF-07-217	BEAR RIVER	USFS	0		No Activity
RTF-07-225	ELK MOUNTAIN	USFS	0	44,000	
RTF-07-281	GOULD	USFS		44,000	No Activity
RTF-07-281	WHISKEY	USFS		90,000	NO ACTIVITY
		USFS			
RTF-07-283 RTF-07-284	BIG CREEK UNIT #2 PILE BURN			108,000	
	GORE LAKES PILE BURN	USFS		5,225	
RTF-07-285	SEEDHOUSE PILE BURN	USFS			No Activity
RTF-07-311		USFS			No Activity
SJF-07-075	CHIMNEY ROCK #1	USFS		2,182	
SJF-07-076	EIGHTMILE #1	USFS			No Activity
SJF-07-077	TURKEY SPRINGS	USFS		1,824	
SJF-07-078	UTE CG #4	USFS		19,125	
SJF-07-094	LITTLE BEAR	USFS	180		use daily
SJF-07-095	SHAMROCK	USFS	80		use daily
SJF-07-111	SOUTH CARVER PILES	USFS			No Activity
SJF-07-129	FIRST NOTCH	USFS			No Activity-use daily
SJF-07-130	MITCHELL LAKES	USFS			No Activity-use daily
SJF-07-131	HERMOSA	USFS			No Activity-use daily
SJF-07-140	SAWMILL CANYON PRESCRIBED BURN	USFS			No Activity-use daily
SJF-07-155	TRIMBLE POINT	USFS	1,300		
SJF-07-157	BOGGY COMPLEX	USFS	0		No Activity
SJF-07-159	TRAIL CANYON BROADCAST	USFS	0		No Activity
SJF-07-197	TRAIL CANYON PILES	USFS		37,194	
SJF-07-218	UPPER LOST	USFS		2,090	

FullPermitNumbe r	BurnName	AgencyGroup	ActAcres	Volume Consumed	Completed
SJF-07-226	BURNS CANYON	USFS	421		
SJF-07-231	DOE CANYON COMPLEX	USFS	0		No Activity
SJF-07-235	DEVIL CREEK	USFS	0		No Activity
SJF-07-236	LOWER MIDDLE MOUNTAIN	USFS	285		
SJF-07-259	SOUTH CARVER BROADCAST	USFS	0		No Activity
SJF-07-276	NORTH JACKSON	USFS		1,401	-
SJF-07-328	GUARD STATION	USFS			No Activity
WRF-07-144	COULTER MESA BURN BLOCK	USFS	0		No Activity
WRF-07-146	NORTHWEST BURN BLOCK	USFS	60		
WRF-07-172	DERBY MESA	USFS	0		No Activity
WRF-07-298	SWISS VILLAGE	USFS		21,560	-
WRF-07-299	MAHAN PILES	USFS		39,375	
WRF-07-300	LANGLAS DRAW	USFS		164,657	
WRF-07-301	FRISCO WUI	USFS	0		No Activity
WRF-07-302	WEST VAIL/DONOVAN BENCH	USFS		81,000	
WRF-07-303	BLANCO SUMMER HOMES	USFS		12,780	
WEX-07-280	FOOTHILLS PARK & REC	West Metro Fire	90		
WEX-07-316	GREENMOUNTAIN UNITS 1-5	West Metro Fire	175		Proposed Assumed