



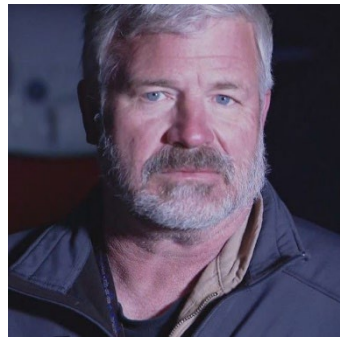
**Fort Collins Interagency Dispatch Center**  
**2021 Annual Report**



## Fort Collins Zone Wildfire Incidents

The 2021 Fort Collins Zone (FTC) fire season was much quieter when compared to the 2020 fire season. As a zone, we responded to 73 wildfires in 2021, whereas in 2020 we responded to 148 wildfires. There were 59 human caused fires (81%) for 12,567.36 acres and 14 lightning caused fires (19%) burning 32.65 acres for a FTC Zone total of 12,600.01 acres burned. The fire season began on January 15, 2021 in the Estes Park area with a human caused wildfire burning 0.2 acres.

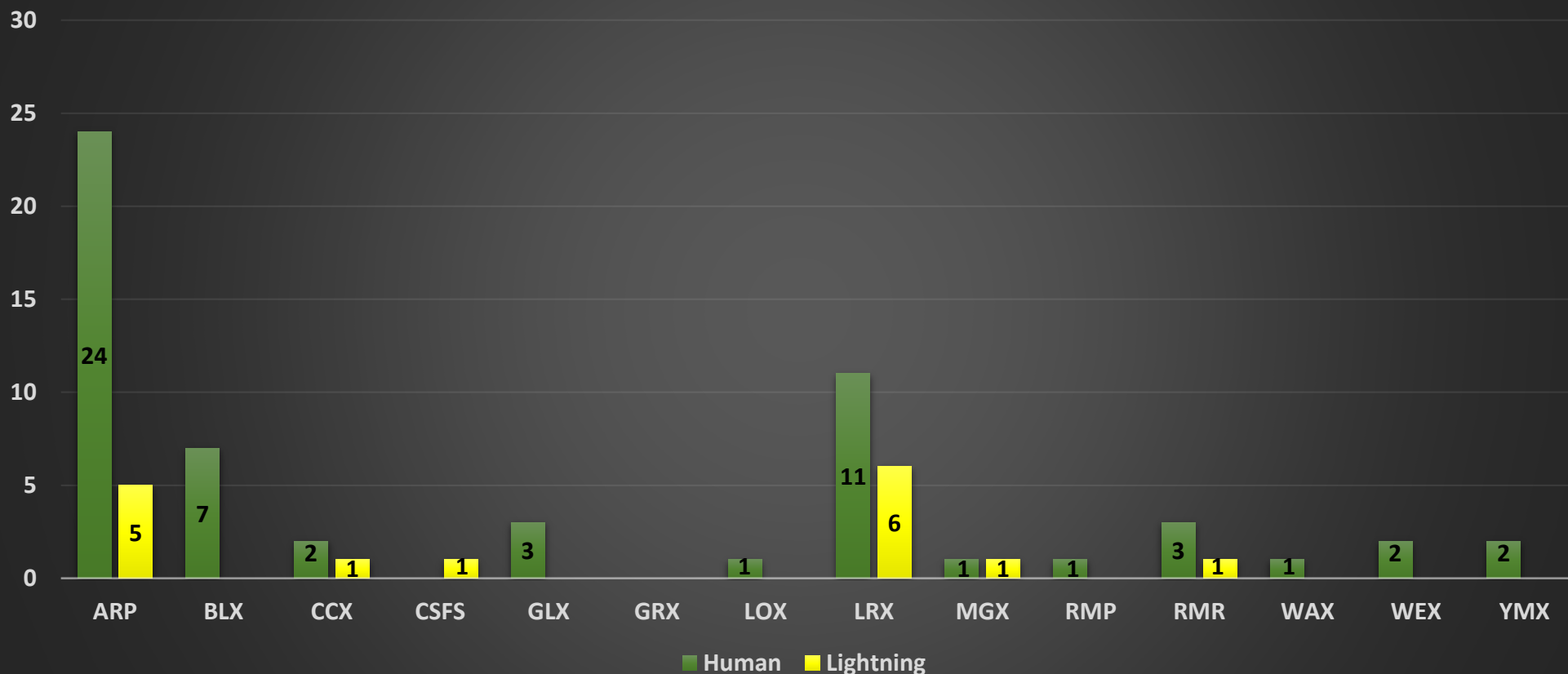
The two largest fires within the zone were both late in the season, Kruger Mountain and Marshall. Kruger Mountain was caused by a downed powerline on November 16, 2021 and quickly grew with high winds. Unfortunately, T-860 crashed the first night of the fire resulting in the fatality of pilot Marc “Thor” Olson. T-860 was attempting to perform night retardant drops, the first of it’s kind by a fixed wing aircraft, when the aircraft went down.



The most destructive fire in Colorado history, the Marshall fire, started on December 30, 2021 and because of winds of 100+ mph, the fire burned through the towns of Superior, CO and Louisville, CO. The fire’s footprint was 6,026 acres. Left in the fire’s path were 1,091 structures (including houses, apartment buildings, and commercial businesses) destroyed, 179 structures damaged, and 2 lives lost. Estimated costs for all these structures is upwards of \$1M. A snowstorm on New Year’s Eve 2021, delivering about 8” of snow across the fire area, helped stop the spread of this ferocious fire. Dan Dallas’ Rocky Mountain Type 1 team was assigned to this fire. The cause of this fire was still under investigation at the time of this report.



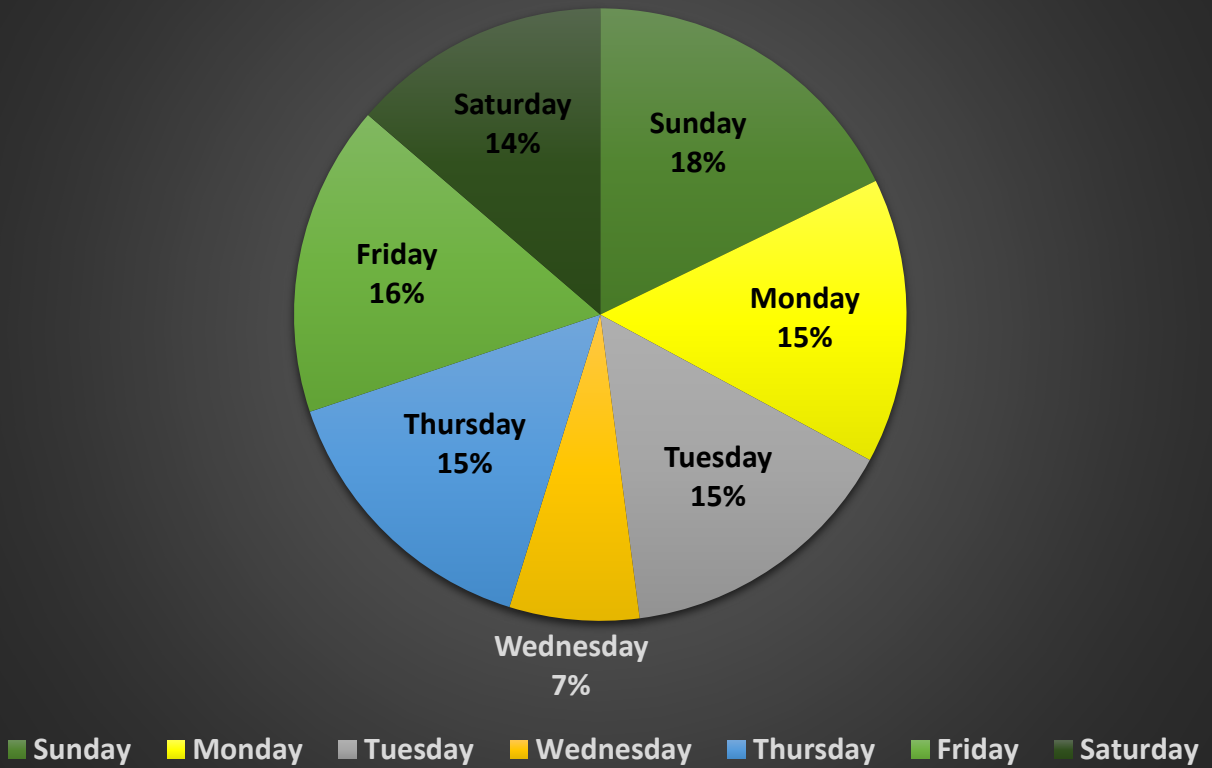
## Fires by Agency and Cause



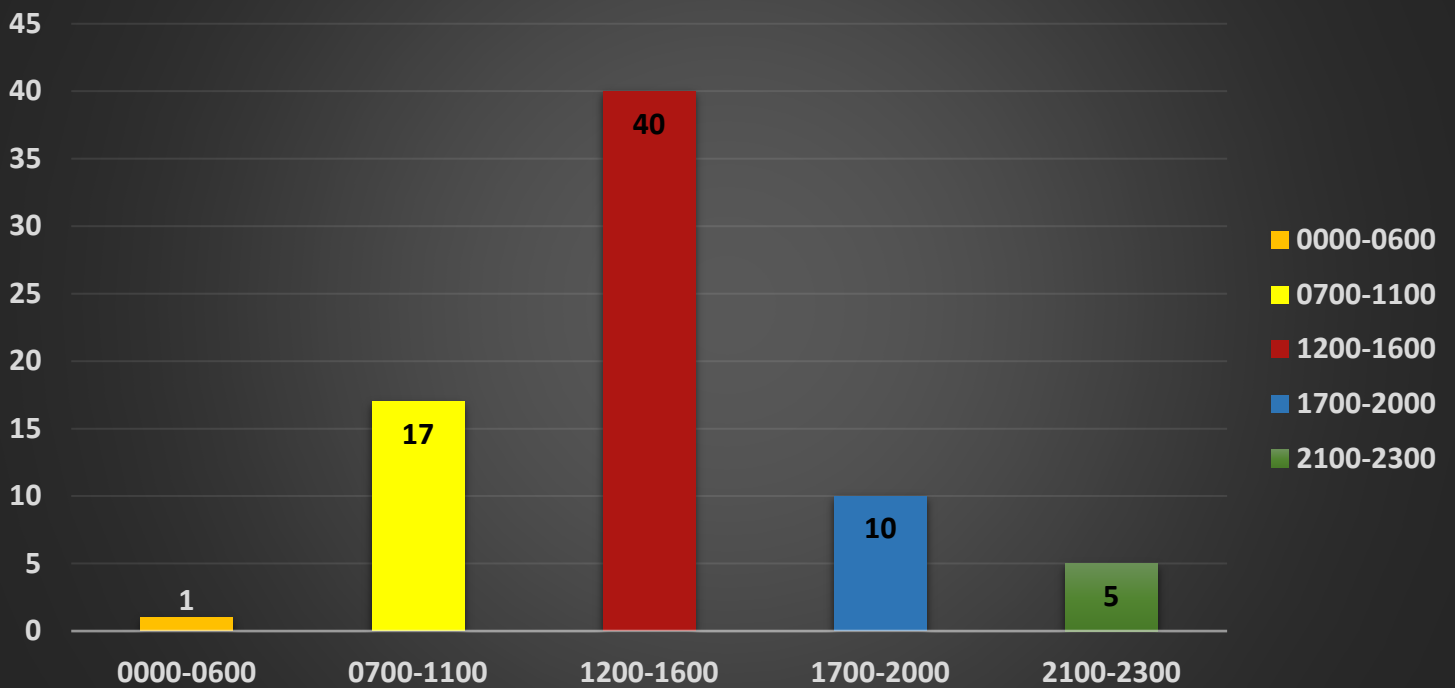
	ARP	BLX	CCX	CSFS	GLX	GRX	LOX	LRX	MGX	RMP	RMR	WAX	WEX	YMX
<b>Human Acres</b>	66.1	6,052.7	0.1	0	0.25	0	807	169.34	0	0.1	0.3	750	607	956
<b>Lightning Acres</b>	0.75	0	15.1	3.4	0.7	0	0	38.07	3,083	0	0.1	0	0	0
<b>Total Acres</b>	<b>66.85</b>	<b>6,052.7</b>	<b>15.2</b>	<b>3.4</b>	<b>0.95</b>	<b>0</b>	<b>807</b>	<b>207.41</b>	<b>3,083</b>	<b>0.1</b>	<b>0.4</b>	<b>750</b>	<b>607</b>	<b>956</b>

<sup>1</sup> ARP: Arapaho-Roosevelt NF & Pawnee NG, BLX: Boulder County, CCX: Clear Creek County, CSFS: Colorado State Forest Service, GLX: Gilpin County, GRX: Grand County, LOX: Logan County, LRX: Larimer County, MGX: Morgan County, RMP: Rocky Mountain National Park, RMR: Rocky Mountain Arsenal (Fish & Wildlife), WAX: Washington County, WEX: Weld County, and YMX: Yuma County

## Wildfire Incident Occurrence by Day



## Wildfire Incident Occurrence by Hour



## **Fort Collins Zone WildCAD Incidents**

Fort Collins Interagency Dispatch Center processed 994 WildCAD incidents in 2021. Aircraft tracking, processing resource orders, and miscellaneous incidents account for 78% of the WildCAD incidents.

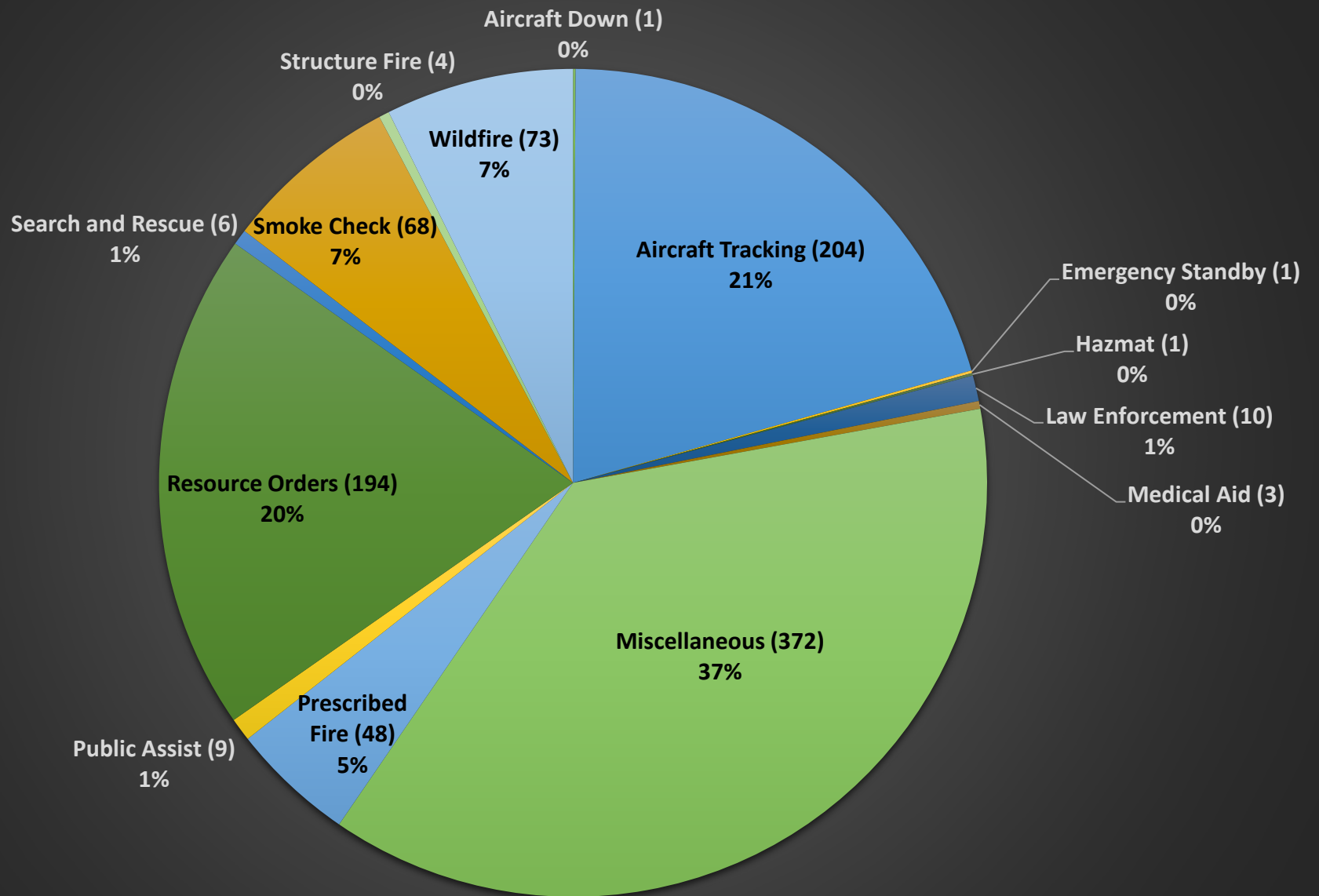
Aircraft tracking includes flight following any aircraft coming into or out of the FTC Zone. Along with tracking their vitals using automated flight following (AFF) and entering them into WildCAD, flight strips for these aircraft are completed and uploaded to a SharePoint site used by neighboring dispatch centers. When any aircraft comes into or goes out of the FTC Zone, information is relayed to/from the neighboring dispatch centers using a Microsoft Teams channel set up by RMACC.

Resource order processing takes the most time for our dispatchers. Most of the resource orders were for out of area assignments in 2021, which is in stark contrast to 2020 when FTC was ordering in resources due to within zone fires.

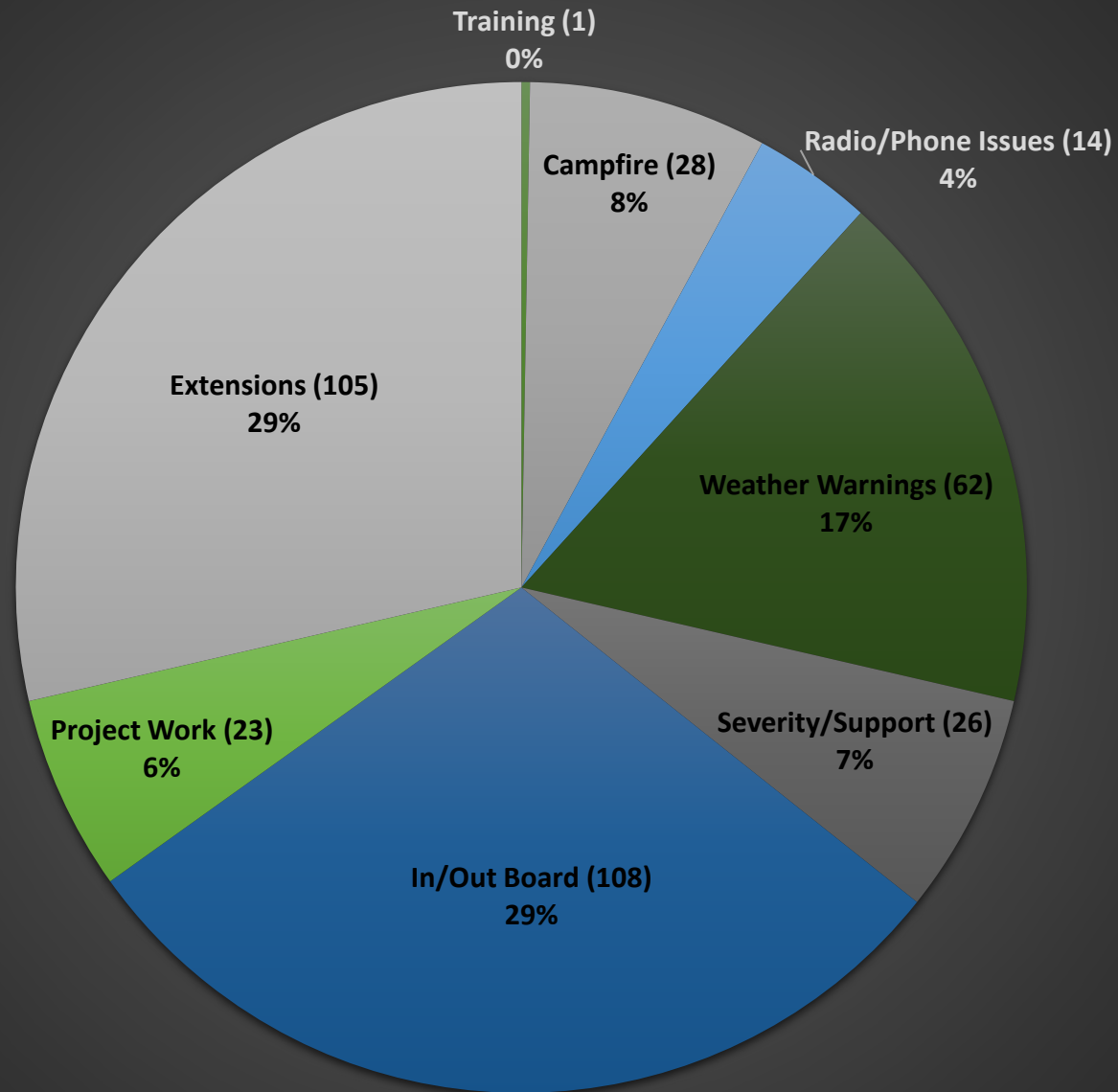
The bulk of the workload were classified as miscellaneous incident types. Miscellaneous incidents are further broken down into the following categories: training, campfires, radio/phone issues, weather warnings (red flag, flash flood, high wind), severity/support, Region 2 In and Out Board (R2IOB), project work, Rocky Mountain Area Coordination Center (RMACC) aircraft extensions, RMACC crew extensions, and ARF extensions.

Tracking down overdue Forest personnel on the R2IOB accounted for the largest number of incidents with 108 (11% of all the incidents and 30% of the miscellaneous incidents). The majority of these incidents were due to Forest personnel not clearing themselves off the R2IOB. There were several incidents when dispatch could not get a hold of the overdue person or their first line supervisor which caused extra phone calls up the phone tree.

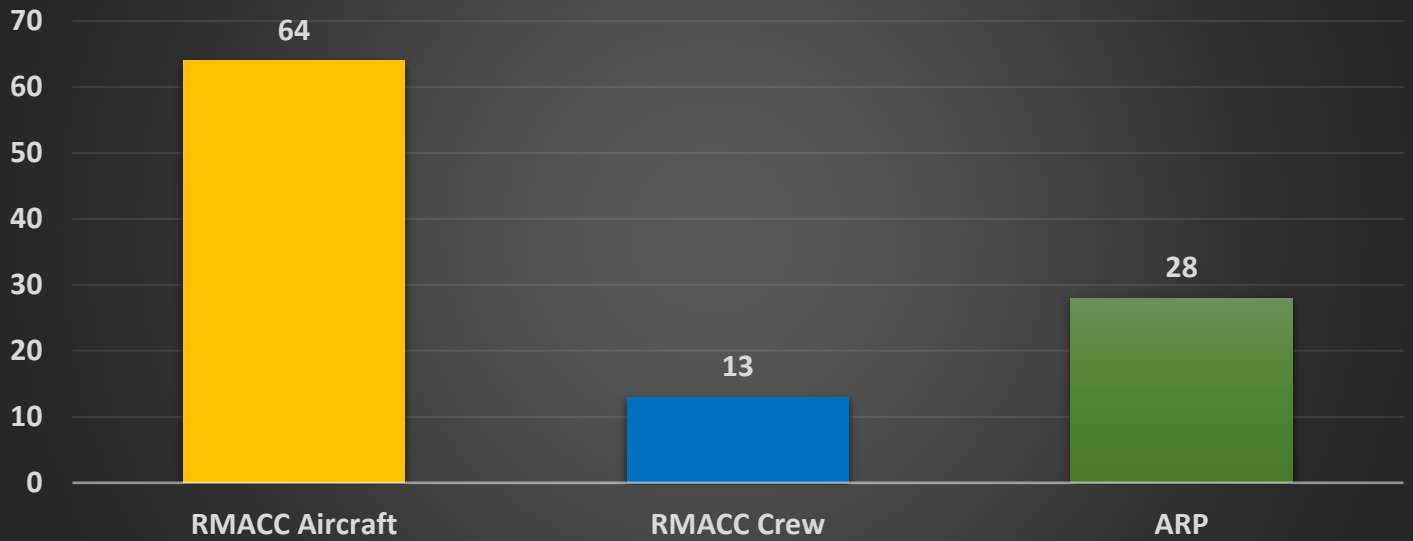
# WildCAD Incidents By Type



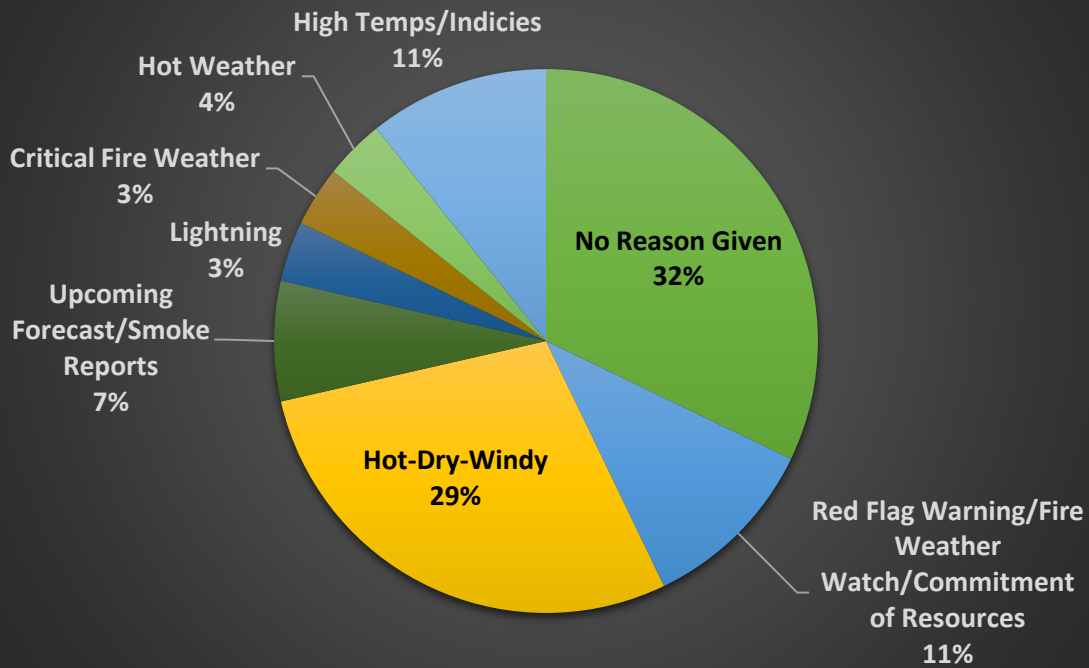
## Miscellaneous Sub Incident Type



## Extensions by Entity



## ARF Extensions by Reason



The ARP extended Forest resources 28 times from June to September. There were a total of seven fires that occurred across the zone after 1800 during this timeframe; three fires were started on the ARP during the daily extension period and four fires were started on county lands.



## **Fort Collins Zone Resource Orders<sup>2</sup>**

In the last 20 years, 2002, 2008, and 2012 are the only previous fire years when the National Preparedness Level (PL) has been increased to PL4 in the month of the June (June 22, 2021). Because of the increased fire activity and lack of available resources, the National PL moved up to PL5 on July 14<sup>th</sup>, the earliest we ever have, and stayed in PL 5 until September 28<sup>th</sup>. The highest PL for both FTC and Rocky Mountain was 3.

Due to the lack of resources across the country, and low PL levels for both the FTC Zone and GACC, many of the FTC Zone resources spent a considerable amount of time out of the zone helping other areas in fire suppression efforts across the western U.S.

The 2021 fire season was the first year that dispatch centers were the only entity that could reserve a NERV (National Emergency Rental Vehicles) vehicle for resources needing vehicles for an assignment. This created a large workload that isn't captured in the numbers below because they are not resource orders. We processed 71 NERV vehicle requests over the course of the 2021 fire season. Due to crew vehicle breakdowns, we processed equipment resource orders for NERV vehicles to support the Roosevelt Hotshots and Alpine Hotshots. Of the total equipment resource orders, 6% (8) were NERV vehicles for the two crews.

To support the ARP, we ordered in a Prevention Team in May, a Community Mitigation Assistance Team (CMAT) in October, and a Critical Incident Stress Management (CISM) Team in November. The Prevention Team helped prepare the Forest for fire restrictions and preventing wildfires conversations with the public. The CMAT worked with the ARP and Grand County to discuss future mitigation efforts that could be done within the county to combat wildfires such as East Troublesome. The CISM Team was ordered to help any fire personnel cope with the fatality on the Kruger Mountain fire.

Overall, Fort Collins Dispatch processed 952 resource orders to order resources into the FTC Zone and 1,632 for sending resources out of the FTC Zone, totaling 2,584 processed resource orders.

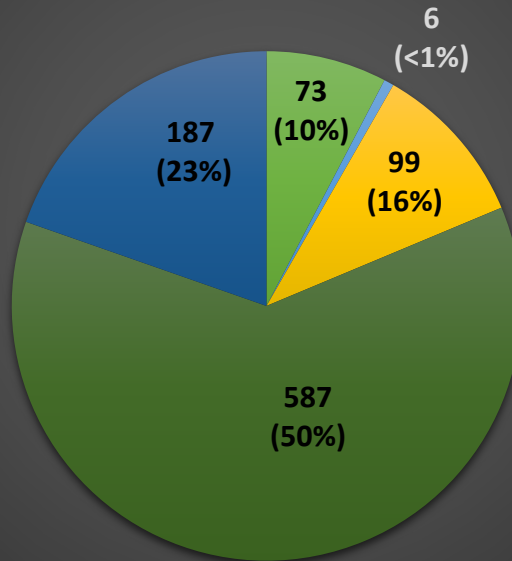
---

<sup>2</sup> In previous annual reports, overhead resource order request totals did not include subordinate requests. Any suppression module, overhead team, engine, or aircraft orders were only counted in their respective bins as one order. For the 2021 annual report, all subordinate requests were tallied in the overhead total count.

## In Zone Resource Requests

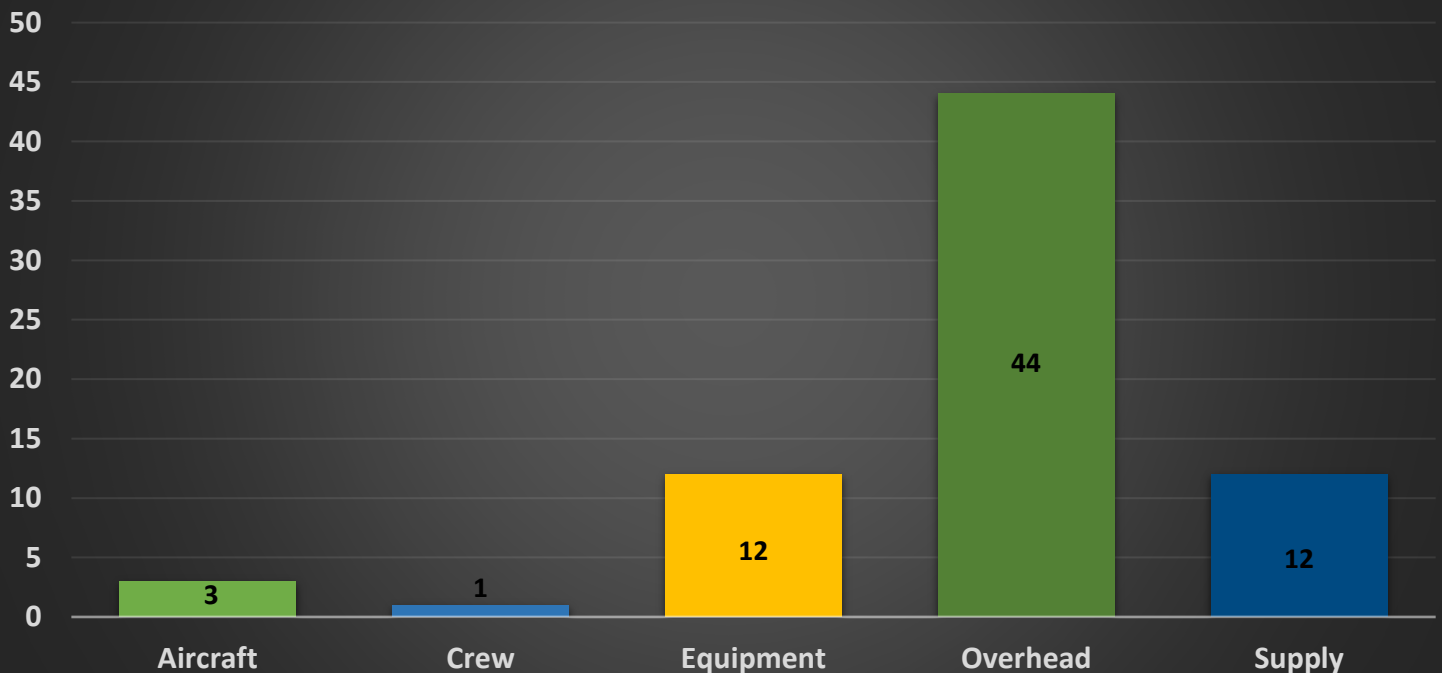
### In Zone Resource Requests

■ Aircraft ■ Crew ■ Equipment ■ Overhead ■ Supply

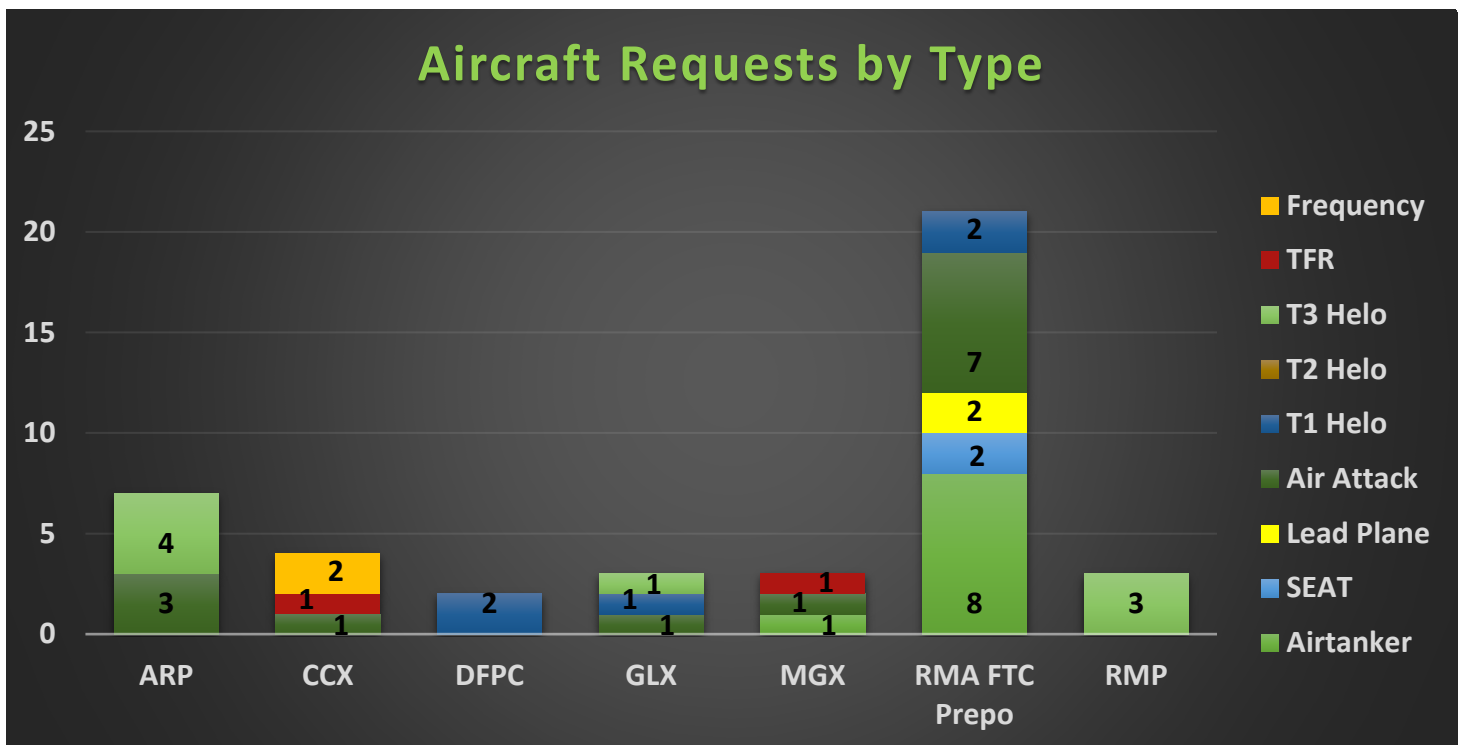
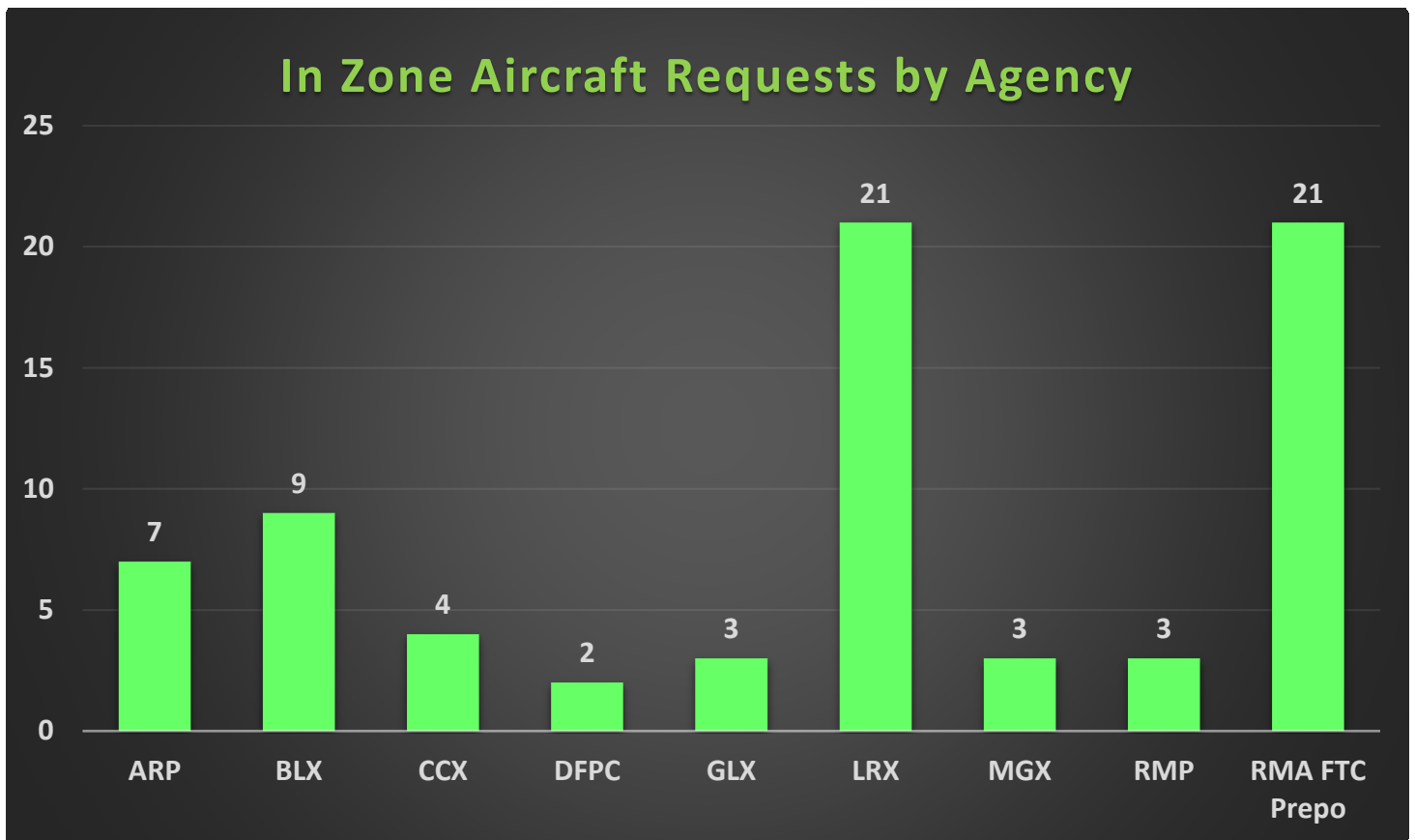


Not all of the resource orders processed for incidents within the FTC Zone were filled. Of the 952 resource orders created, 72 (8%) were canceled or UTF'd (unable to be filled).

### In Zone Resource Orders Canceled/UTF'd

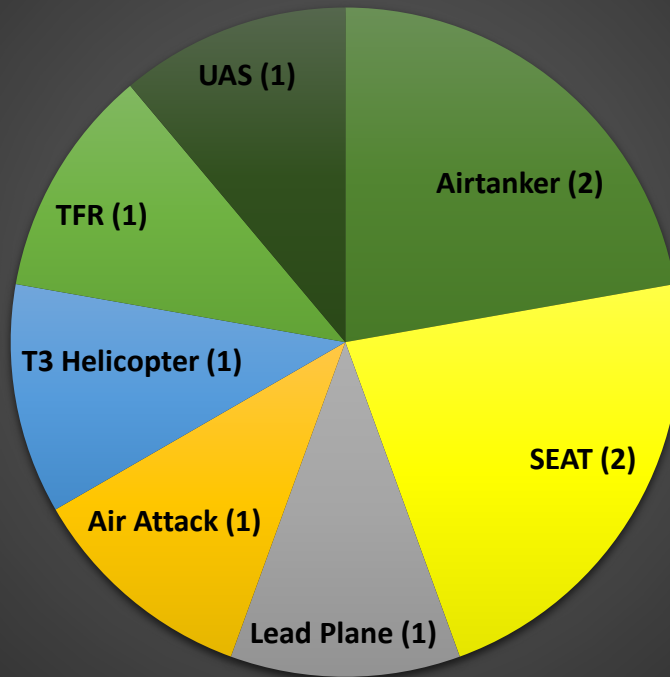


**In Zone Resource Requests Broken Down by Requesting Agency<sup>3</sup>**

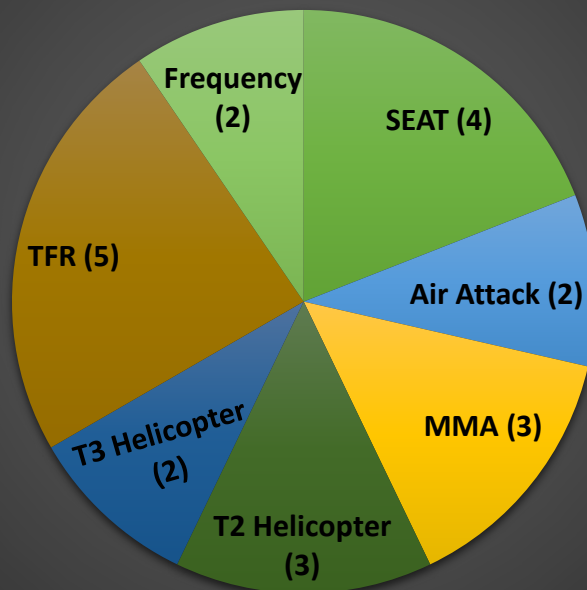


<sup>3</sup> ARP: Arapaho-Roosevelt NF & Pawnee NG, BLX: Boulder County, CCX: Clear Creek County, DFPC: Colorado Division of Fire Prevention and Control, FTC: Fort Collins Interagency Dispatch Center, GLX: Gilpin County, LRX: Larimer County, MGX: Morgan County, RMP: Rocky Mountain National Park, and RMA FTC Prepo: Rocky Mountain Area Coordination Center.

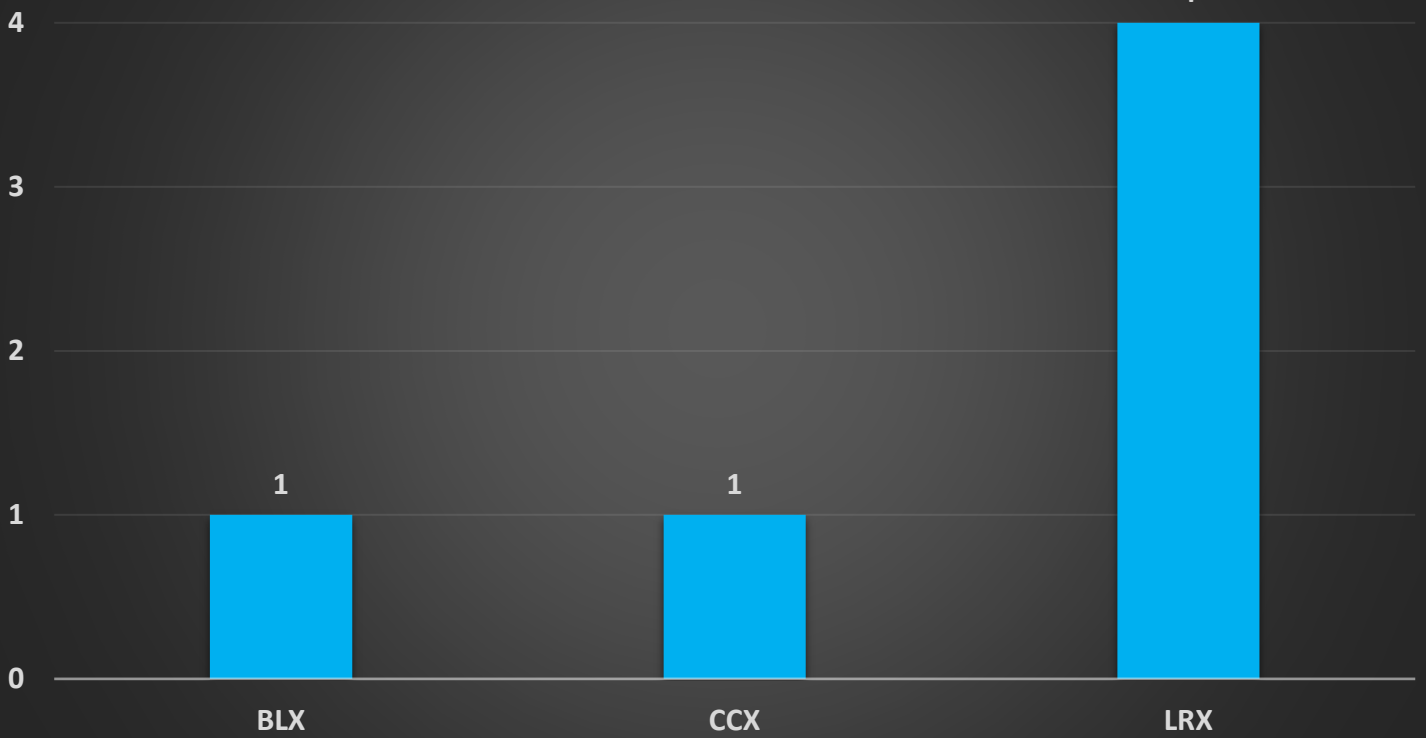
## BLX Aircraft Requests



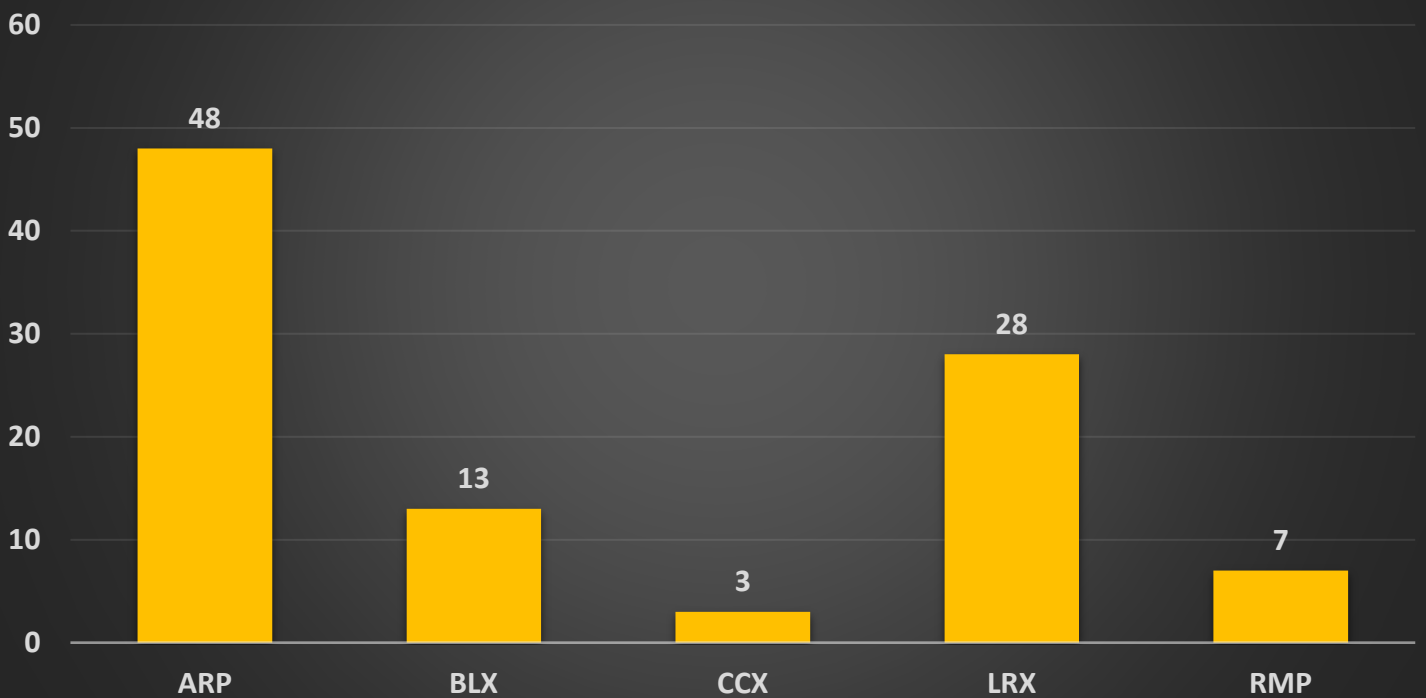
## LRX Aircraft Requests



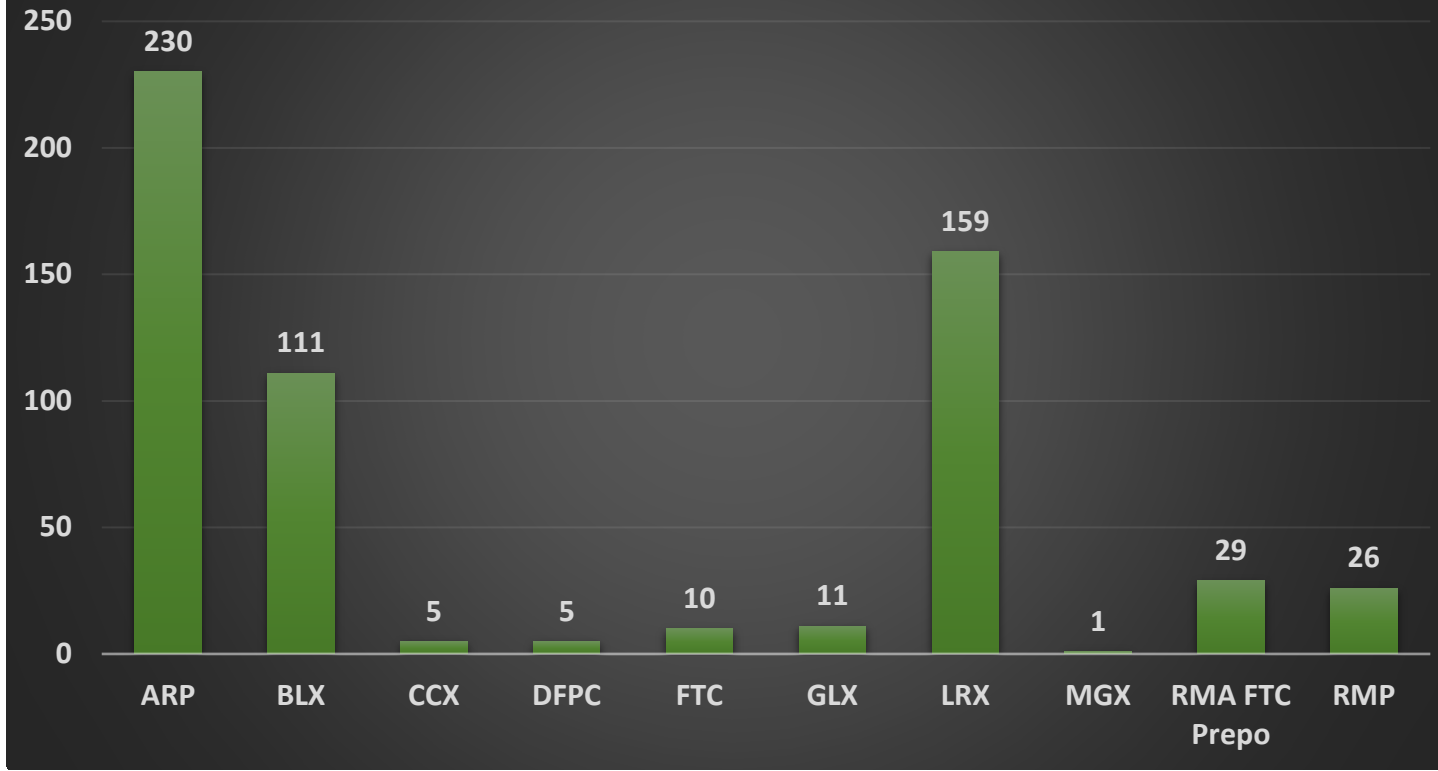
### In Zone Crew Requests by Agency



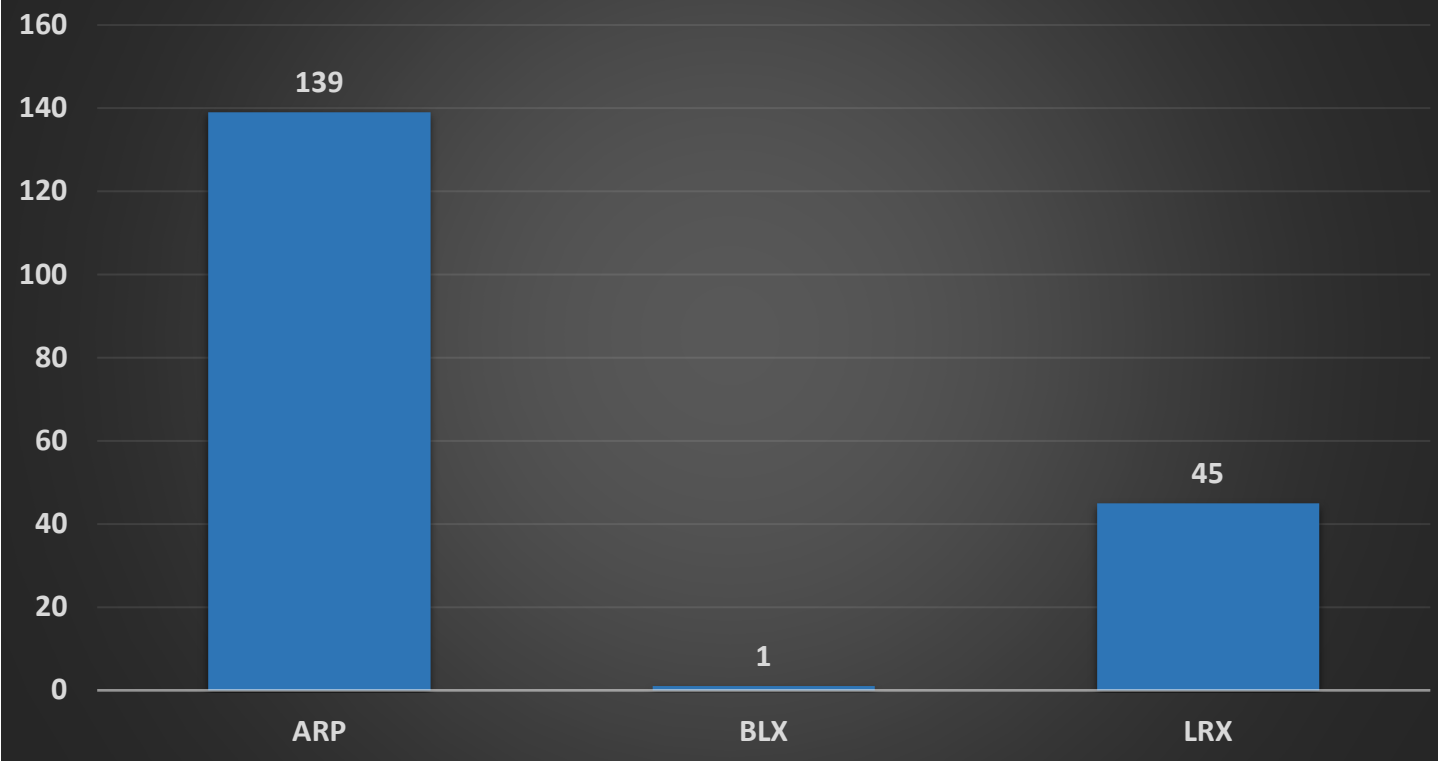
### In Zone Equipment Requests by Agency



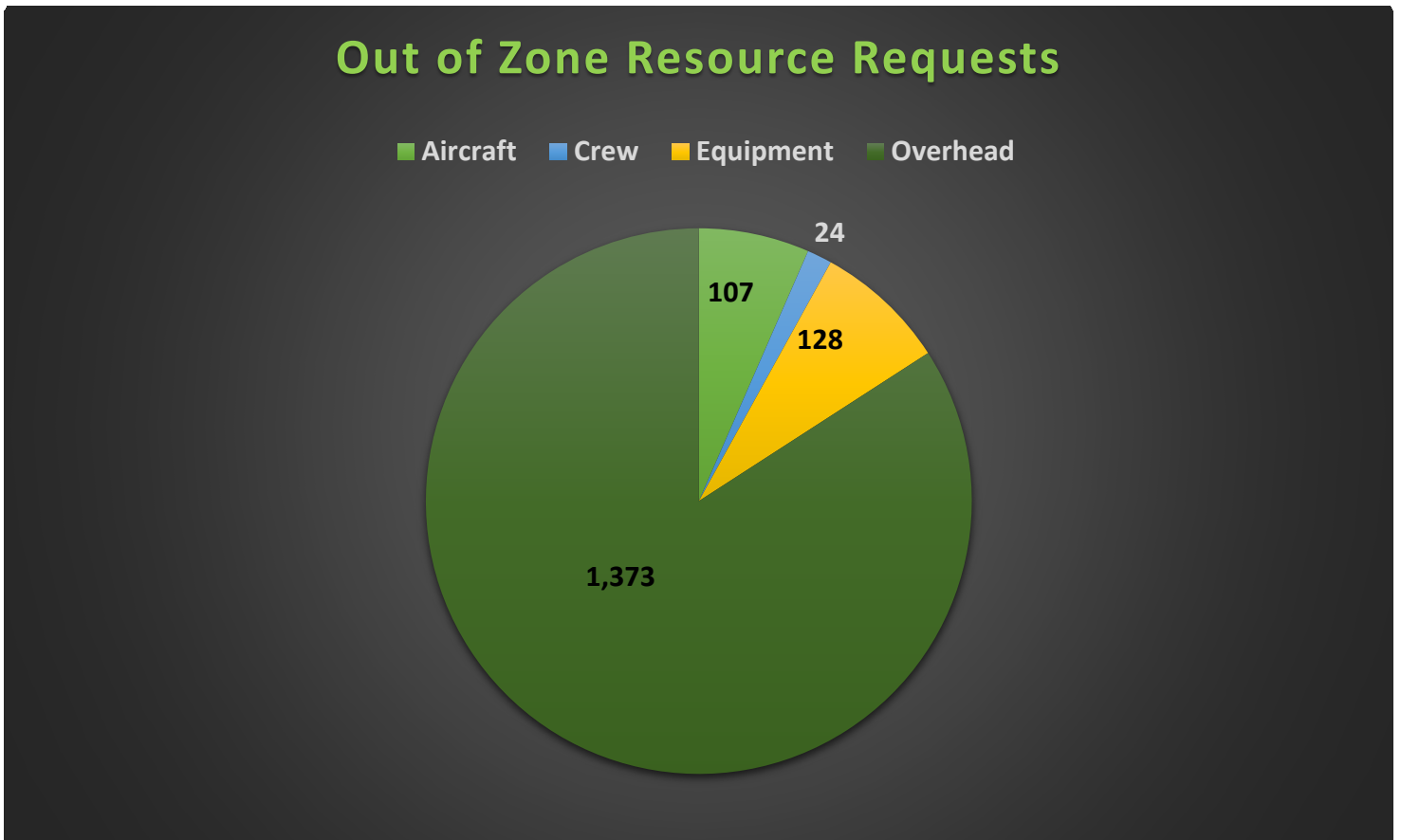
## In Zone Overhead Requests by Agency



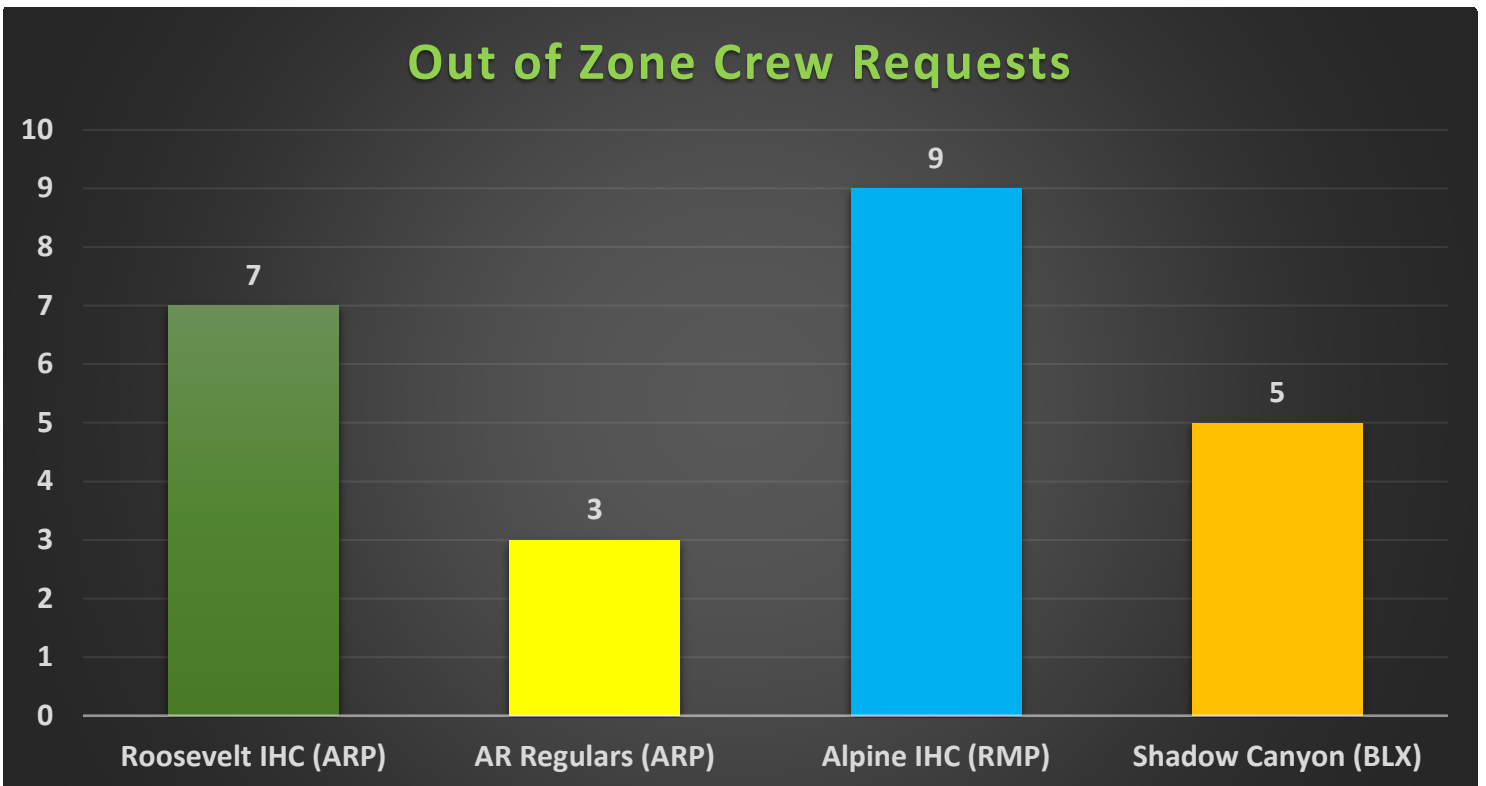
## In Zone Supply Requests by Agency



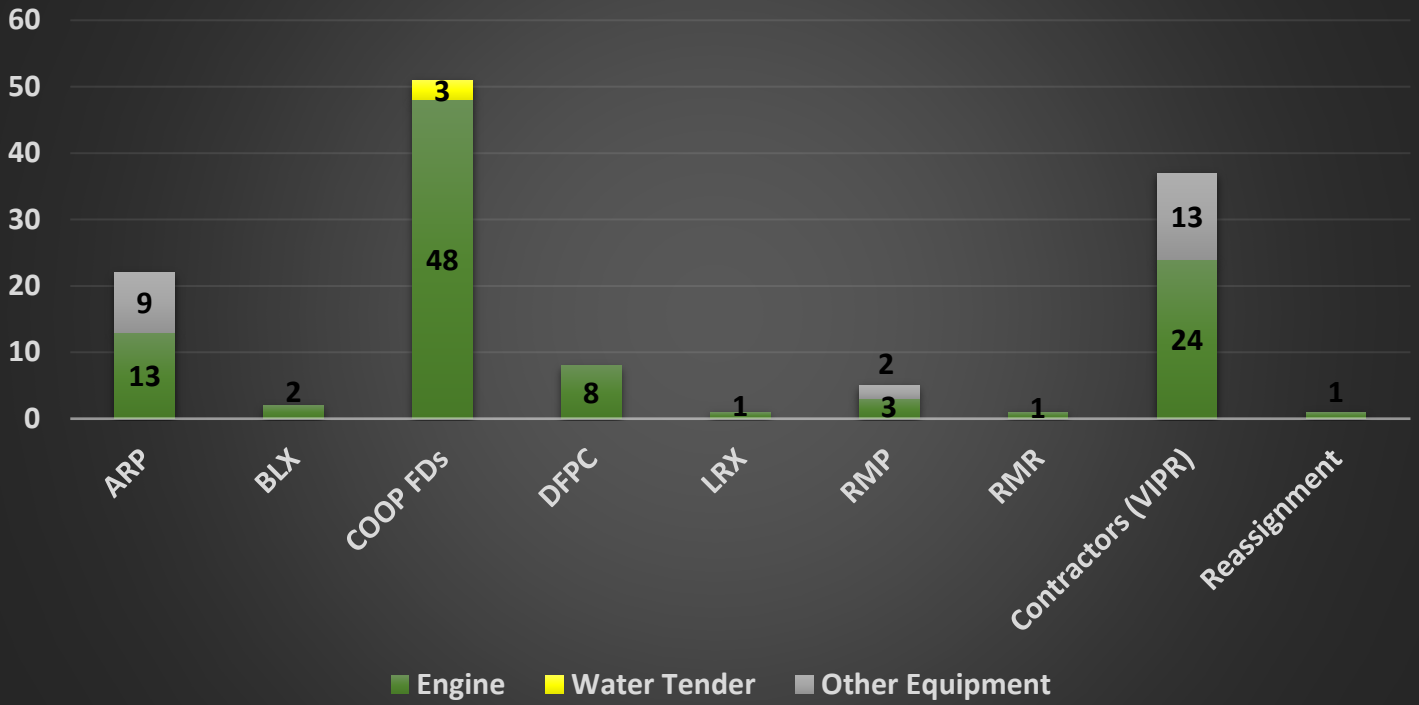
## Out of Zone Resource Requests



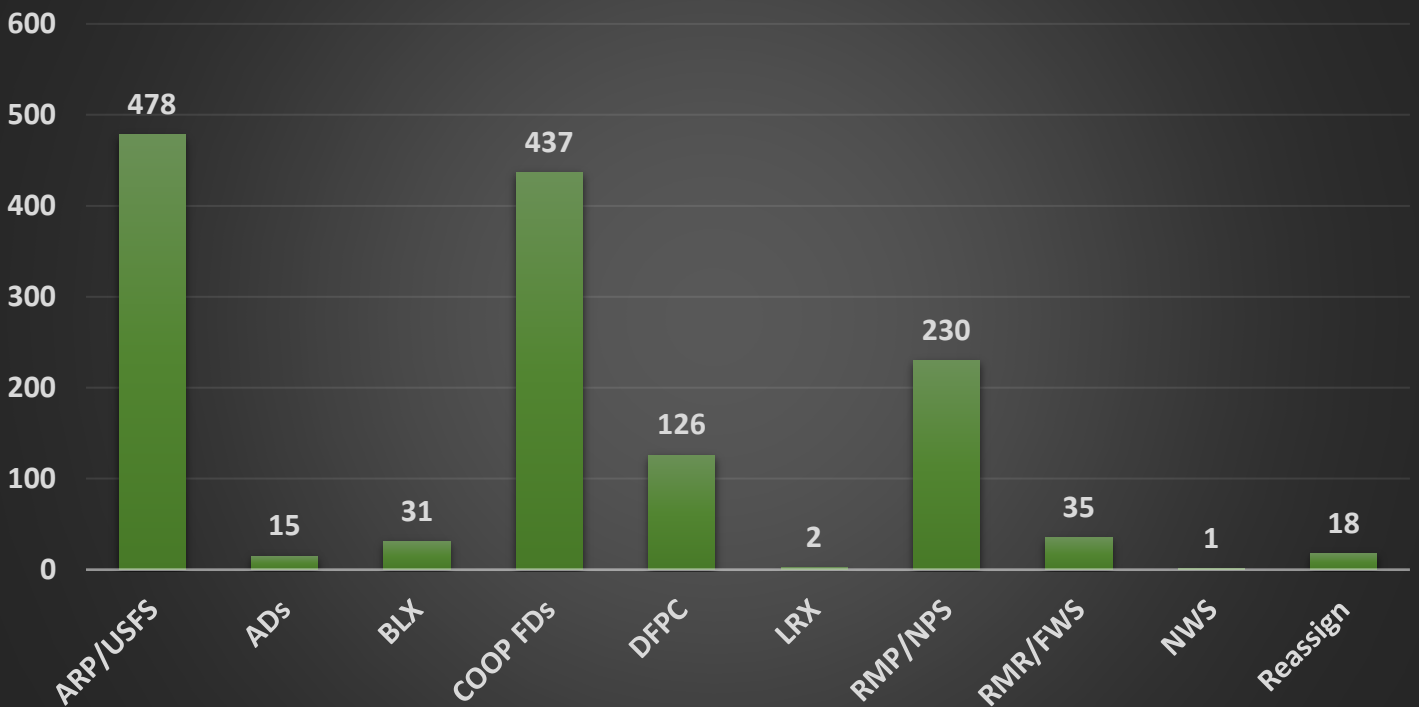
## Out of Zone Resource Requests Filled by Agency



## Out of Zone Equipment Requests



## Out of Zone Overhead Requests



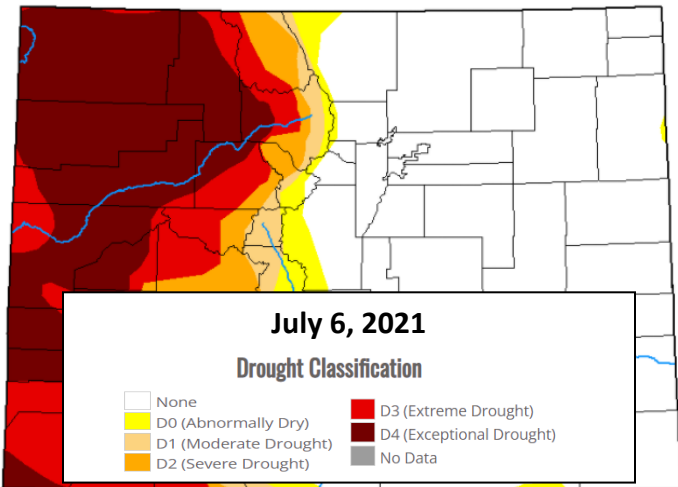
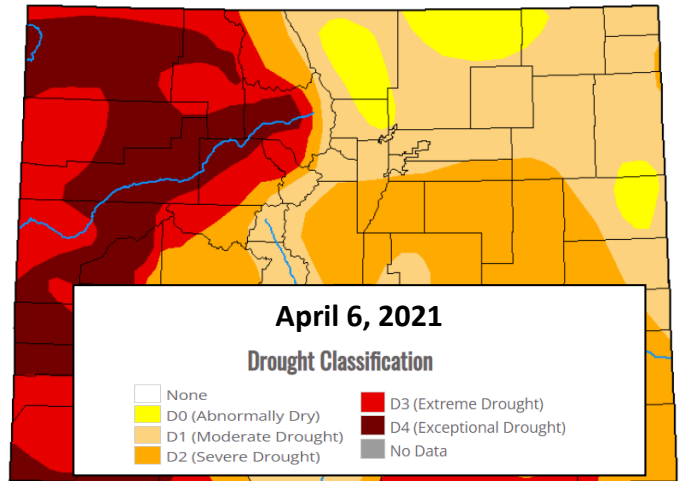
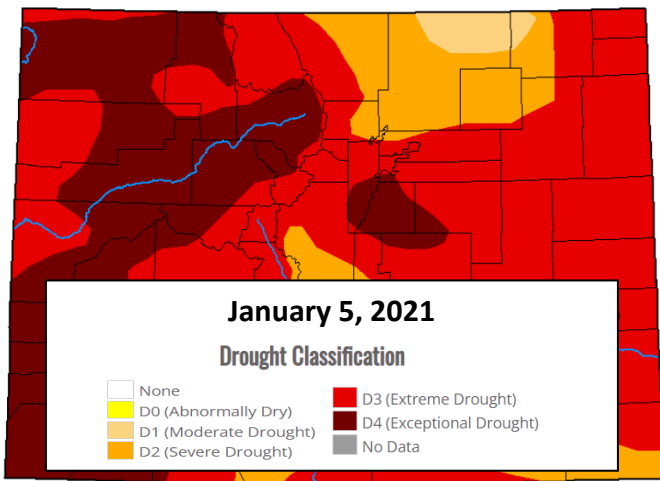


## Fort Collins Zone Fire Danger

A new Fire Danger Operating Plan (FDOP) was signed in June and implemented using the new 2016 National Fire Danger Rating System (NFDRS) procedures. Five fire danger rating areas (FDRA) were created to cover the zone: East Plains, West Plains, Foothills, East Divide, and West Divide. Each of these FDRAs were broken up into response areas as well (up to 9 per rating area). The fire business thresholds for the 2021 fire season were determined by FDRA. Overall, the indices across the zone seemed to be higher than what the actual conditions on the ground were.

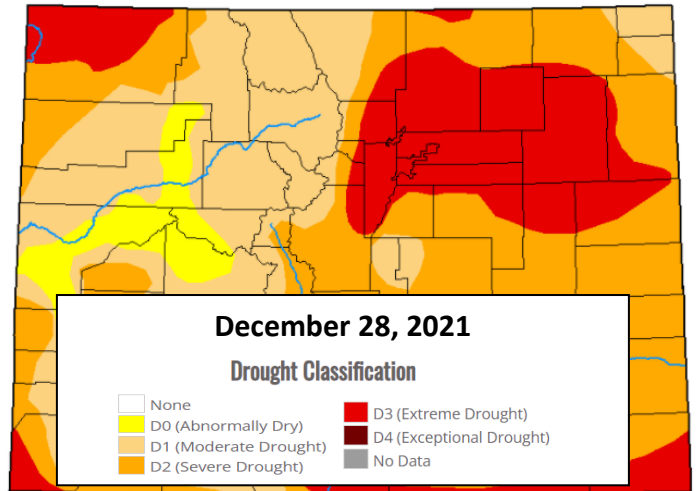
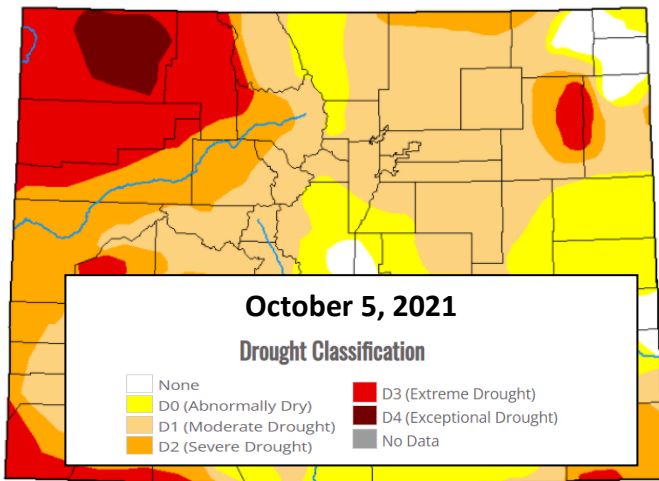
The 2021 FDOP covers the period of April – October (“fire season”) and so no indices cover the shoulder season. It was determined that the zone should go to a year-round period due to threat of wildfires in any given month. An updated FDOP in 2022 will include year-round analysis.

The year began with extremely dry conditions from January to the beginning of March. A good snowstorm in mid-March helped to decrease the drought conditions across the zone.

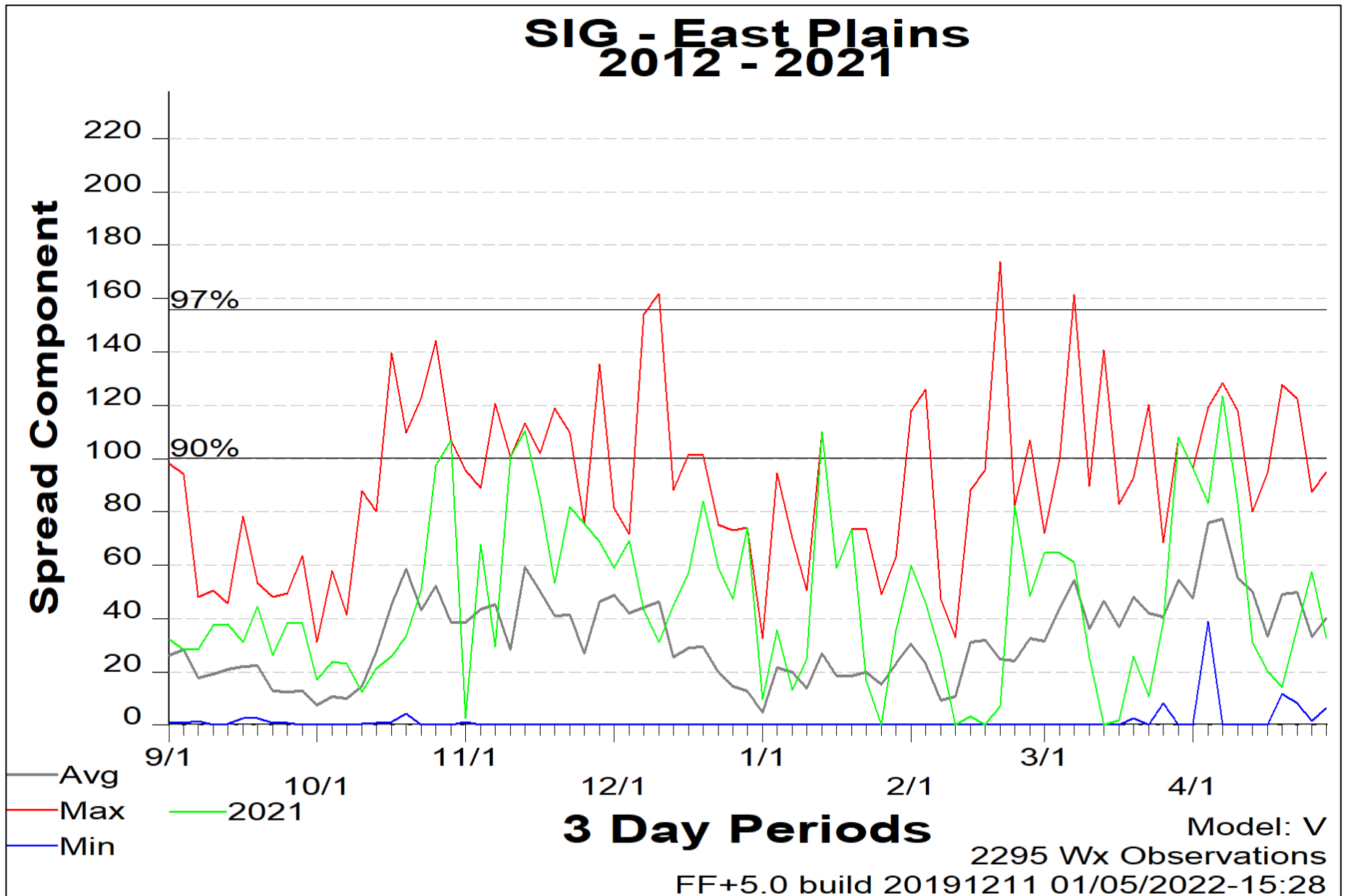


The zone continued to get good moisture through mid-August. Heavy rains began to become an issue over the 2020 Cameron Peak and East Troublesome fire scars. On July 20<sup>th</sup>, a thunderstorm set up over the Black Hollow area of the upper Poudre Canyon causing catastrophic flooding and leading to four fatalities. Over the 18 days the FTC Zone received rain between June 25<sup>th</sup> and August 16<sup>th</sup>, several areas including Larimer County Road 44H, Colorado Highway 125 in Grand County, and the Glen Haven area were impacted by mudslides.

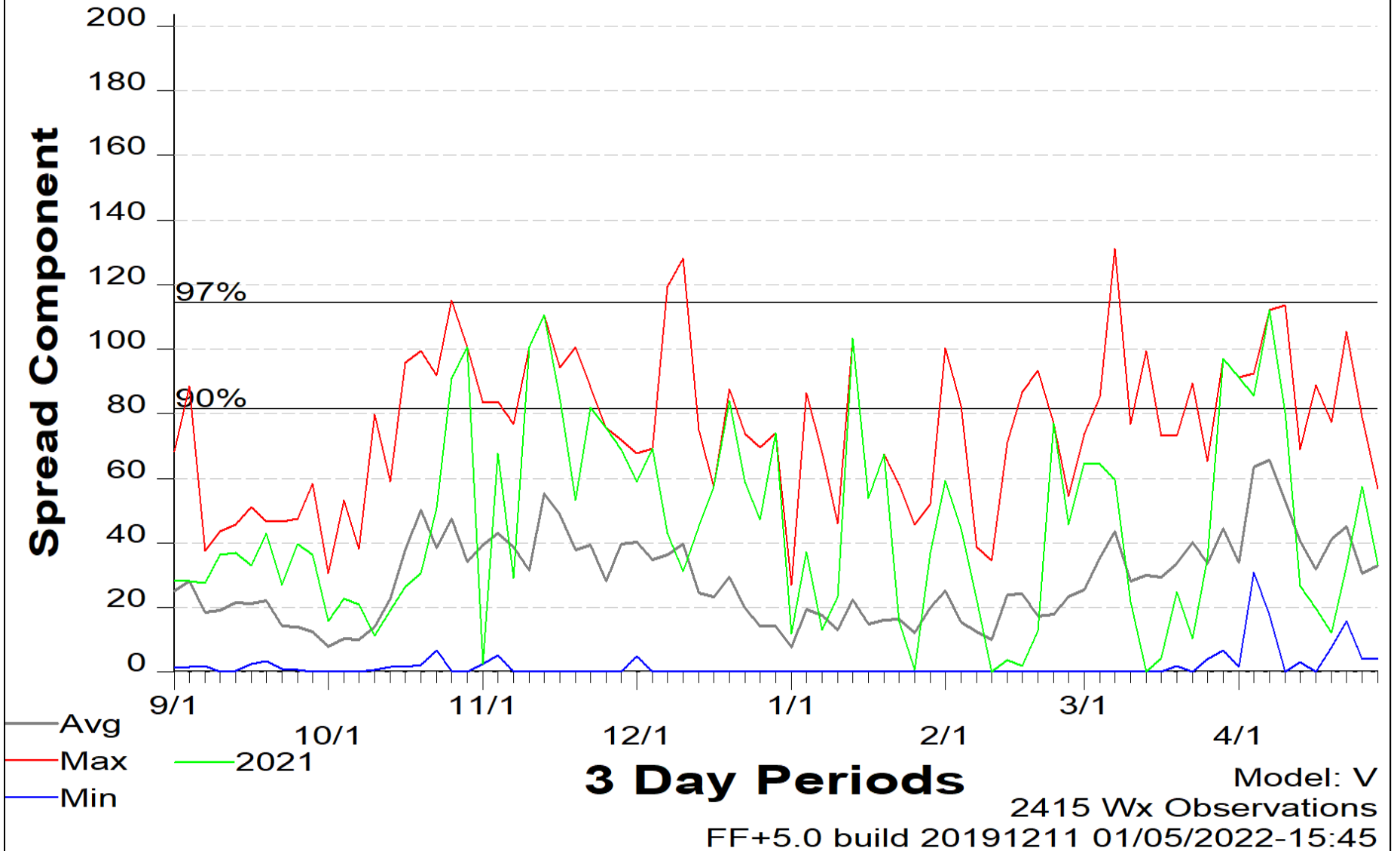
By late summer, the moisture began to dry up creating very dry conditions and increasing drought severity going into late summer, fall, and the first part of winter. As it began to get drier, fire restrictions were put into place across the zone.



FTC Zone Entity	Fire Restriction Date	Days in Restriction
ARP (east of Divide)	6/25/2021 – 8/10/2021	46
ARP (west of Divide)	6/25/2021 – 9/28/2021	95
ARP (east of Divide)	12/1/2021 – 12/31/2021	31
<b>ARP Total Days in Restriction</b>		<b>172</b>
Boulder County	6/24/2021 – 8/10/2021	47
Boulder County	11/20/2021 – 12/31/2021	42
<b>BLX Total Days in Restriction</b>		<b>89</b>
Clear Creek County	6/17/2021 – 8/10/2021	55
Clear Creek County	11/15/2021 – 12/31/2021	47
<b>CCX Total Days in Restriction</b>		<b>102</b>
Gilpin County	11/19/2021 – 12/31/2021	43
<b>GLX Total Days in Restriction</b>		<b>43</b>
Grand County	6/16/2021 – 9/28/2021	105
<b>GRX Total Days in Restriction</b>		<b>105</b>

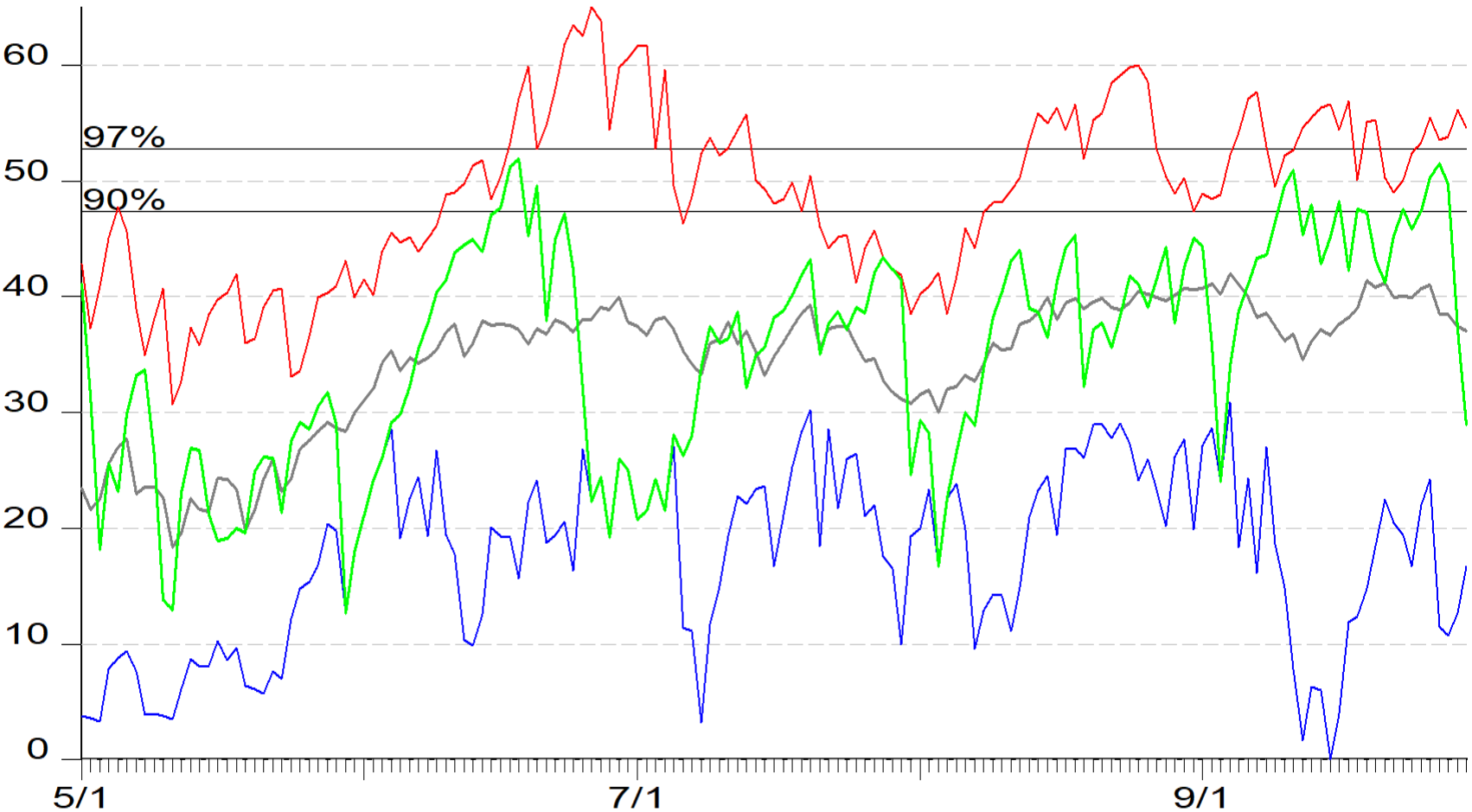


# SIG - West Plains 2012 - 2021



# SIG - Foothills 2010 - 2021

Energy Release Component



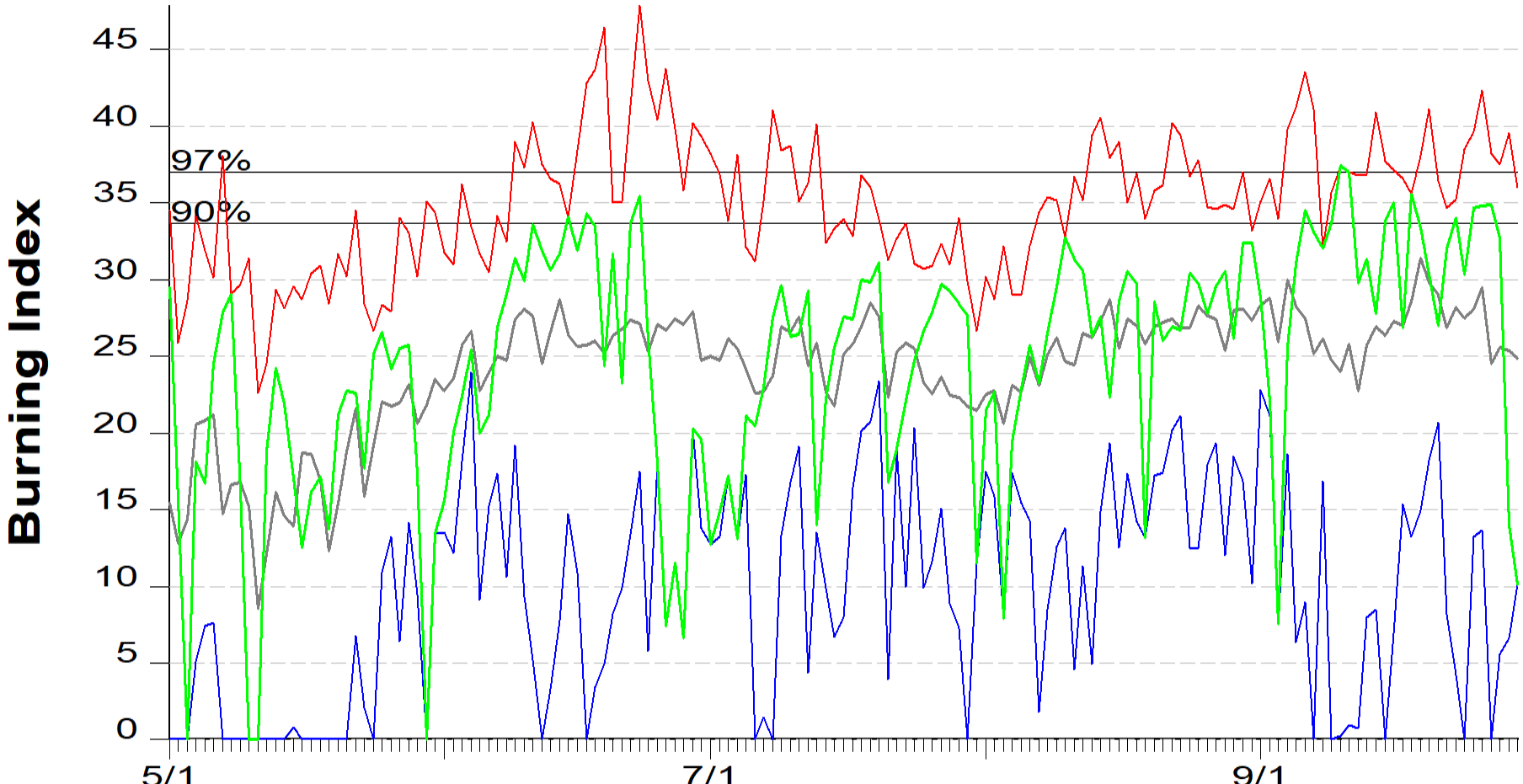
— Avg  
— Max  
— Min  
— 2021

1 Day Periods

Model: Y  
1836 Wx Observations

FF+5.0 build 20191211 01/05/2022-15:54

# SIG - Foothills 2010 - 2021



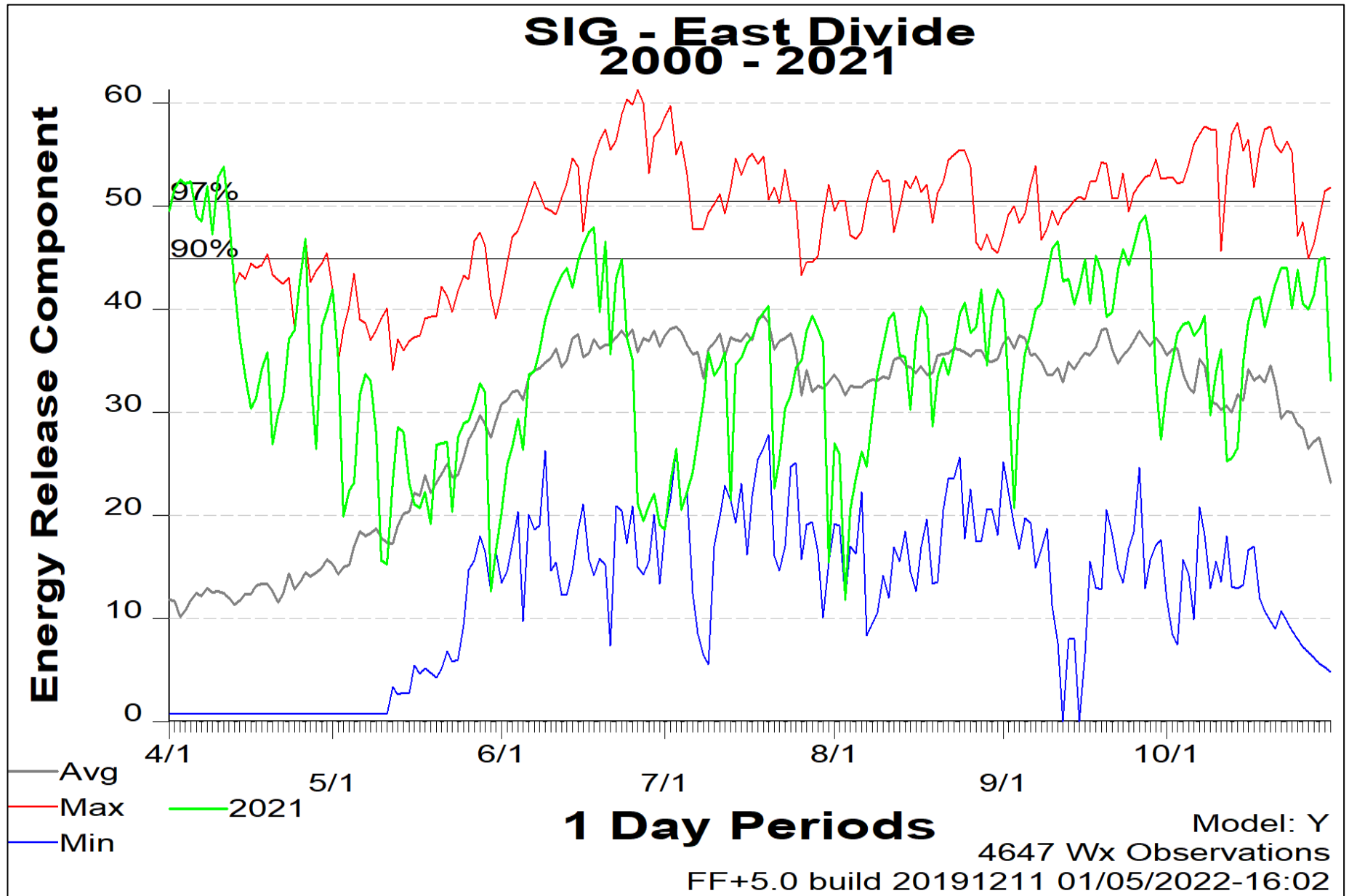
— Avg  
— Max  
— Min

— 2021

## 1 Day Periods

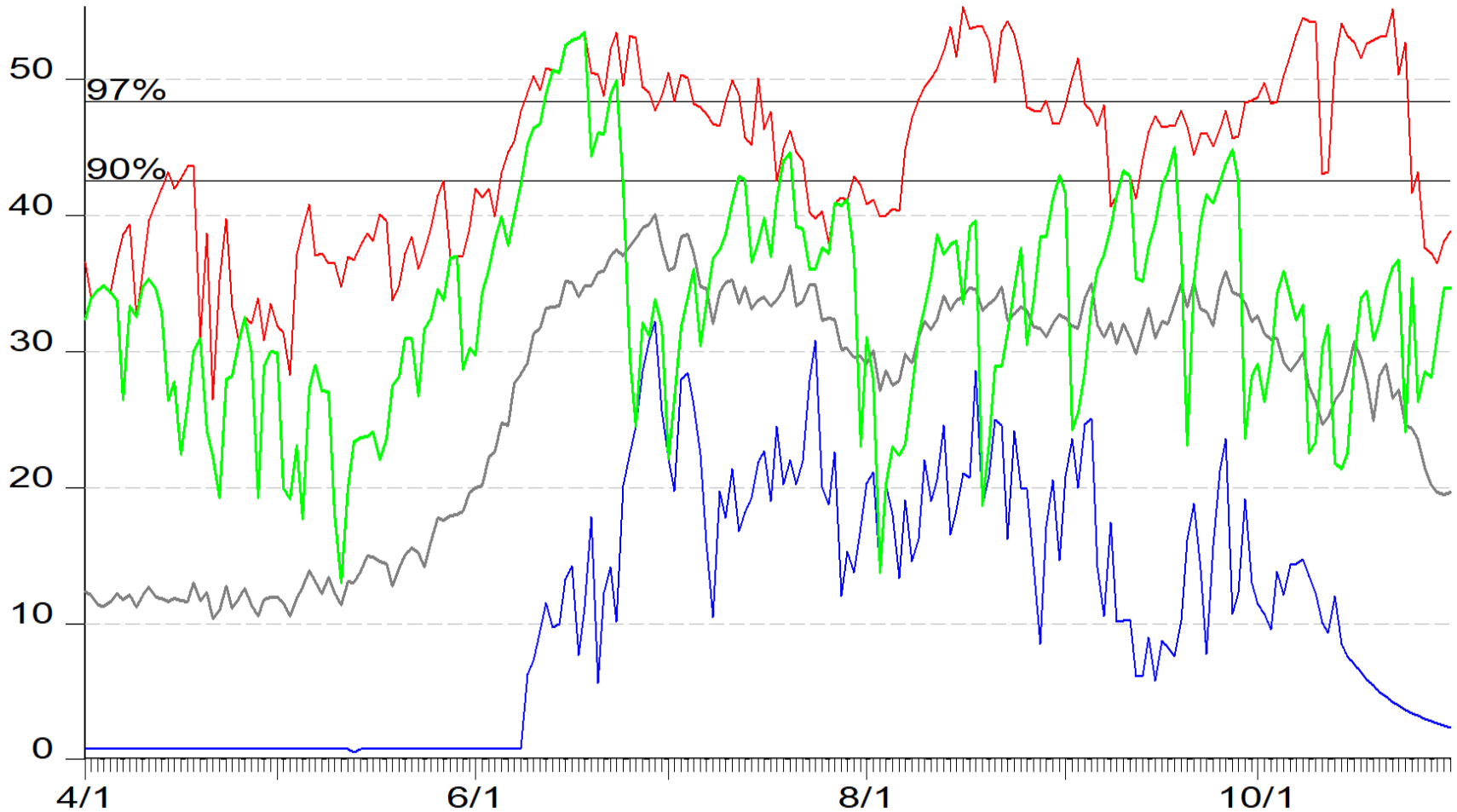
Model: Y  
1836 Wx Observations

FF+5.0 build 20191211 01/05/2022-15:54



# SIG - West Divide 2010 - 2021

Energy Release Component



— Avg  
— Max  
— Min

— 2021

**1 Day Periods**

Model: Y  
2568 Wx Observations

FF+5.0 build 20191211 01/05/2022-16:06



## Fort Collins Zone Aviation Summary

The ARP managed three helicopters over the 2021 fire season, H-126BH (Type 3), H-562AJ (Type 1) and H-949CH (Type 1). H-6BH was on an exclusive use contract for the Northern Colorado Helitack crew. H-9CH and H-2AJ were both surge contracted helicopters. Most of the summer H-6BH stayed within the FTC Zone due to conditions across the Forest. Both H-2AJ and H-9CH were out of the zone providing support to other areas across the country almost the entire summer.

### ARP Managed Aircraft Summary

Tail Number	Type of Contract	# of IA Fires	# of Extended Attack Fires	Flight Time	Gallons of Water Dropped	Gallons of Retardant Dropped
N126BH	EU*	23	5	114.5	70,664	0
N562AJ	Surge	7	7	174.1	1,131,974	0
N949CH	Surge	5	7	266.3	1,287,022	176,366
<b>Total</b>		<b>35</b>	<b>19</b>	<b>554.9</b>	<b>2,489,660</b>	<b>176,366</b>

\*EU: Exclusive Use

The Fort Collins Dispatch Zone hosted two DFPC SEATs (T-862 and T-864) at FNL (Fort Collins-Loveland Airport). Both SEATs were used on incidents within the zone, flying 35 missions. They were moved to the Grand Junction area in late July when the FTC Zone began to receive moisture.

### NOCO SEAT Base Summary

Missions Flown: 35	
Gallons of Water Dropped	Gallons of Retardant Dropped
6,630	17,915
<b>Total Gallons Dropped: 24,545</b>	

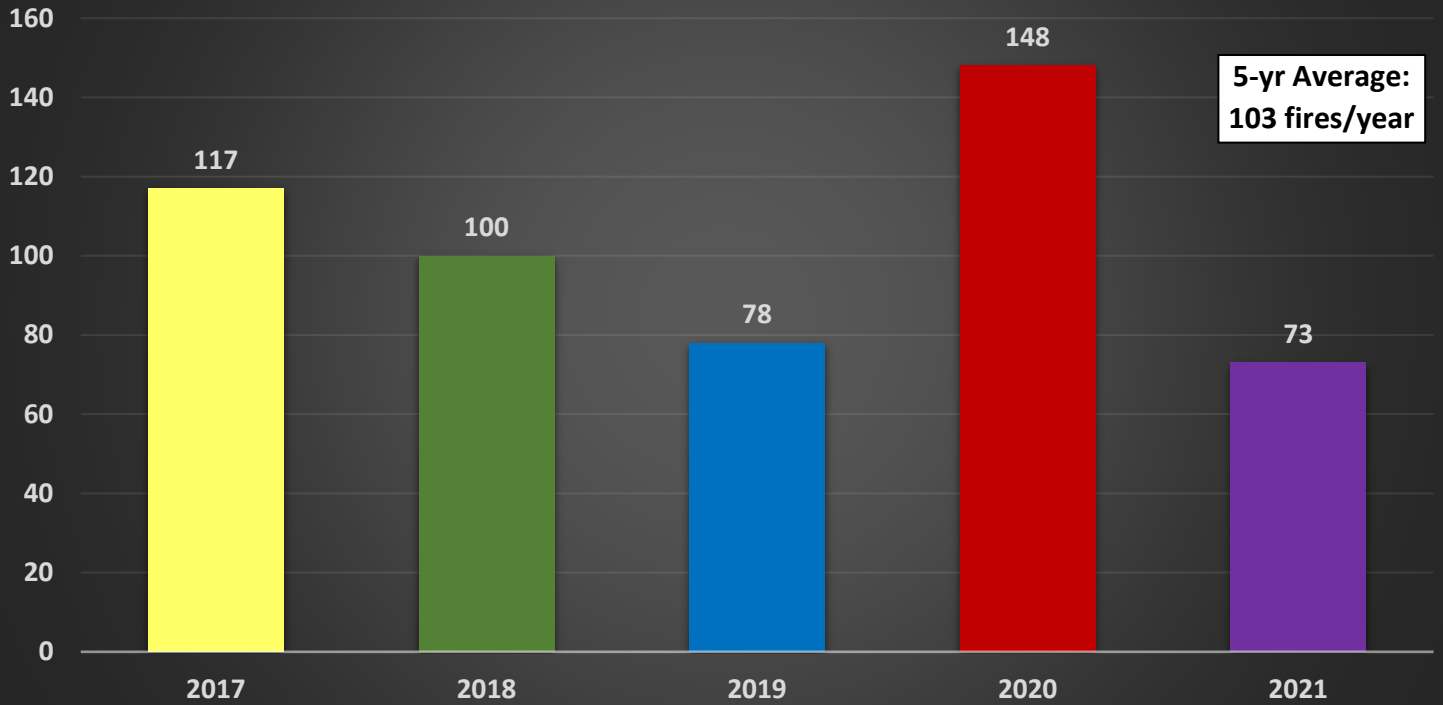
The Jeffco Airtanker Base (BJC) hosted DFPC's T-10 for the 2021 fire season. BJC loaded airtankers for both in zone fires and out of zone fires. In May, the annual MAFFS (Modular Airborne Fire Fighting Systems) training for military C-130s took place and BJC was used as one of the training bases.

### Jeffco Tanker Base Summary

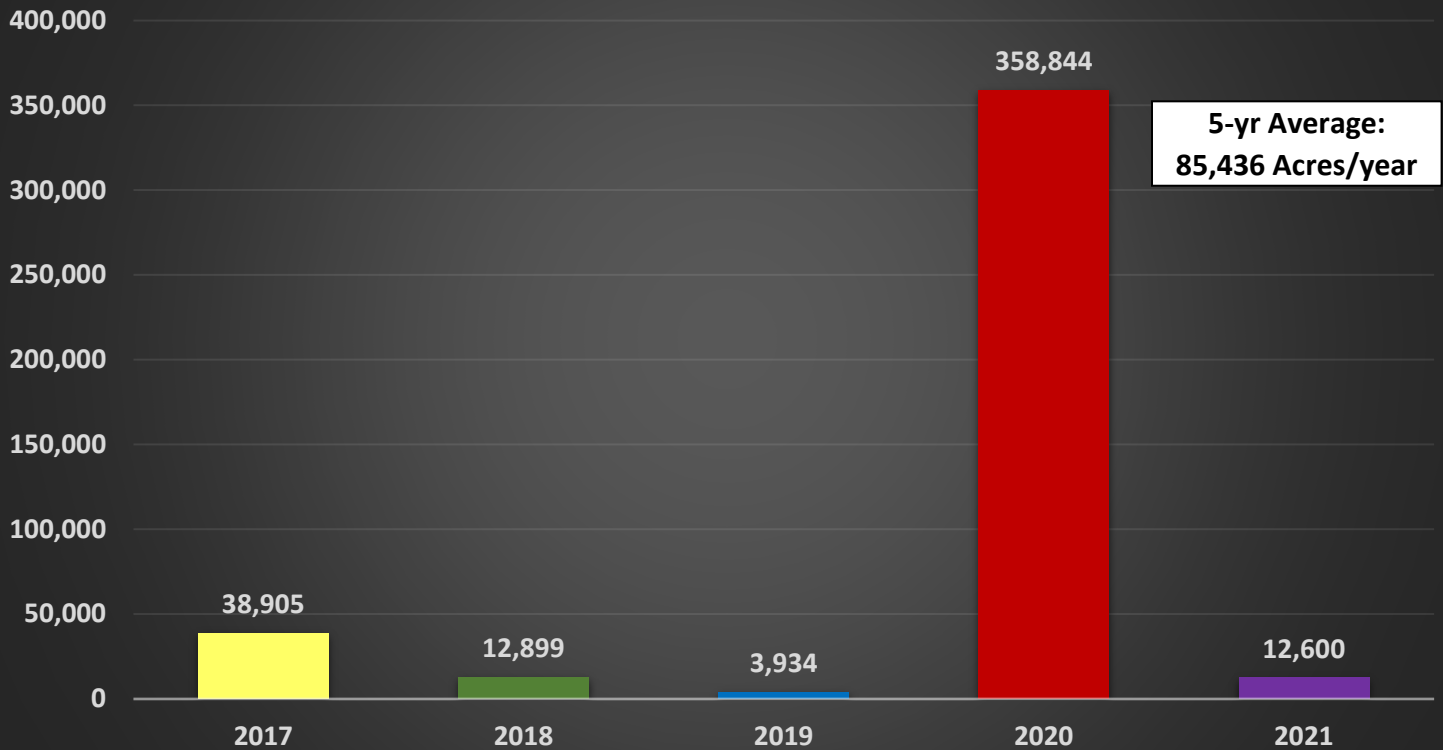
Aircraft	# of Missions	Gallons of Water	Gallons of Retardant
Large Airtanker	115	8,859	319,412
SEATs	4	0	2,919
MAFFS Training	59	173,163	0
<b>Total</b>	<b>178</b>	<b>182,022</b>	<b>322,331</b>

## Fort Collins Zone 5-yr Averages

### Number of Fires Across the FTC Zone



### Acres Burned Across FTC Zone



# Resource Requests - In Zone and Out of Zone

