

# 2019

## Boise Interagency Dispatch Center

# ANNUAL REPORT



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## AREA OF RESPONSIBILITY

The Boise Interagency Dispatch Center continued its interagency success in providing safe, cost effective service for wildland fires within southwest Idaho for Boise District Bureau of Land Management, Boise National Forest, and Southwest Idaho Department of Lands. Listed below is the total acreage responsibility of Boise Interagency Dispatch Center and each agency's ownership and protection areas.



	OWNERSHIP ACRES	PROTECTION ACRES
<b>BOISE DISTRICT BLM</b>	3,825,552	6,480,234
<b>BOISE NATIONAL FOREST</b>	2,080,390	2,194,031
<b>SOUTHWEST AREA IDL</b>	504,361	454,198
<b>BOISE DISPATCH TOTAL</b>	<b>6,410,303</b>	<b>9,128,463</b>

OWNERSHIP ACRES BY PROTECTION AREA			
	BOISE DISTRICT BLM	BOISE NATIONAL FOREST	SOUTHWEST AREA IDL
<b>BLM</b>	3,791,516	13,794	20,242
<b>BOR</b>	29,320	63,652	1,423
<b>HISTORIC WATER</b>	23,006	5,368	895
<b>LOCAL GOVERNMENT</b>	38,359	142	1,492
<b>MILITARY/USACE</b>	13,013	972	971
<b>NATIONAL WILDLIFE REFUGE</b>	11,443	0	0
<b>PRIVATE</b>	2,137,298	131,756	227,030
<b>STATE</b>	401,013	44,180	59,168
<b>STATE - FISH &amp; GAME</b>	20,527	4,254	1,272
<b>STATE - PARKS &amp; REC</b>	5,736	0	0
<b>USFS</b>	8,771	1,929,914	141,705
<b>OTHER FEDERAL</b>	233	0	0

# DISPATCH

## DISPATCH PERSONNEL

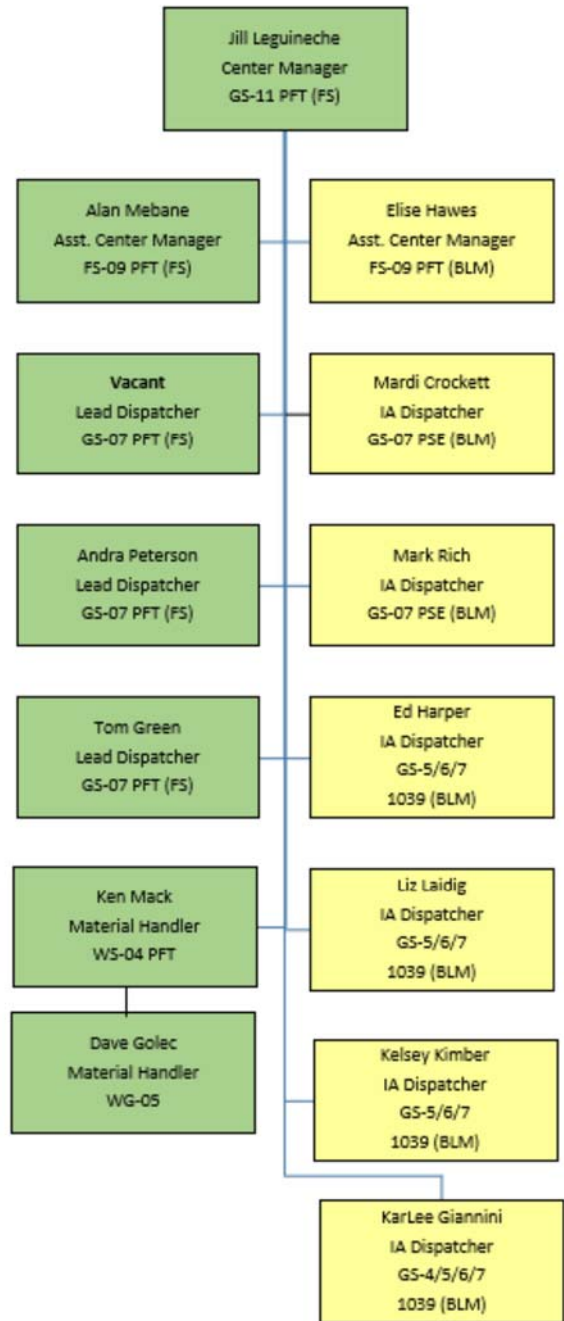
Boise Dispatch Center staffing consists of: one Center Manager, two Assistant Center Managers, and nine Initial Attack Dispatchers. The Center Manager position serves as the primary floor supervisor and liaison with the duty officers. The primary duties of the Assistant Center Managers are Logistics, Intelligence, and covering the Center Manager duties when needed. Alan Mebane serves as the Logistics Assistant and Elise Hawes serves as the Intelligence Assistant. Of the nine primary IA dispatchers, two are assigned as Aviation Dispatchers and one as Night dispatcher. Each dispatcher also has an area of responsibility which could include Bureau of Land Management, Southern Boise National Forest, Northern Boise National Forest or Southwest Idaho Forest Protective District.

This was a year of details at Boise Dispatch. Jill Leguineche, the Center Manager, took a detail as the Deputy Branch Chief for the Forest Service Washington Office – Fire and Aviation Management Incident Business Branch from March until July. Elise Hawes was able to fill in behind Jill as the Center Manager during that time. Two dispatch leads, Mardi Crockett and Matt Sorensen, detailed into the Intelligence position behind Elise. In the Fall, Alan Mebane took a detail as the Aircraft Coordinator at the Southern Area Coordination Center, and we were able to have two details behind him with, Mark Rich and Andra Peterson each covering 60 days.

There were some new additions and some departures from Boise Dispatch this year. We hired 2 new seasonal dispatchers that had previous dispatch experience: Liz Laidig from South Idaho Dispatch and KarLee Giannini that came to us from Central Idaho Dispatch. Matt Sorensen took a Logistics Dispatcher position at NICC and left for his new job at the end of June. Matt’s position was vacant for the fire season, but we were able to detail Stevee Alletag (Emmett Ranger District), to help with Fall and Winter dispatch coverage. Ken Mack, the warehouse manager, was able to hire an assistant and Dave Golec filled that position.

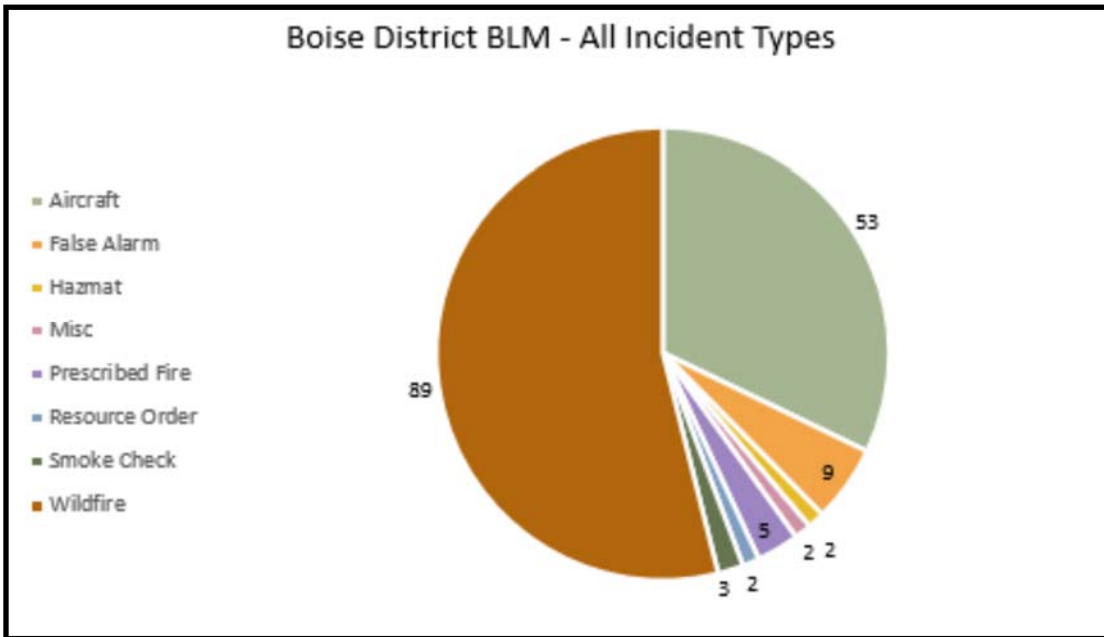
The 2019 fire season saw a reduction in fire activity nationwide while the Boise Dispatch area saw close to the average number of ignitions, but total acres were down considerably from our historical averages. Nationally, NICC never reached PL 4 or above which lowered our logistical workload as well. We shut expanded down at the end of July and did not need to re-open it for the rest of the season, in comparison, we usually have expanded open until the end of September. Although the acreages were down, fire activity was consistent through the summer, starting at the beginning of June and not ending until mid-November. Night shift started on July 5<sup>th</sup> and went through September 27<sup>th</sup>. We hosted 7 Wildland Fire Apprentices this year, most of whom saw time on the IA floor. We were also able to get a few dispatchers out on assignments and work on task books.

Dispatch hosted numerous formal and informal tours showing our Tier 3 dispatch center and its operations. Formally hosted tours consisted of a diverse variety of groups that included: Office of Wildland Fire, Interior Operations Center, Department of Defense – Veteran’s Transition Program, the Acting Director for the Bureau of Land Management, Deputy Director of Lands and Minerals for the Bureau of Land Management, Idaho Youth Conservation Crew, IROC Project Developers, DC-Pilots from NASA/NOAA, Bureau of Land Management RAC, Channel 2 CBS and our D-110 class.



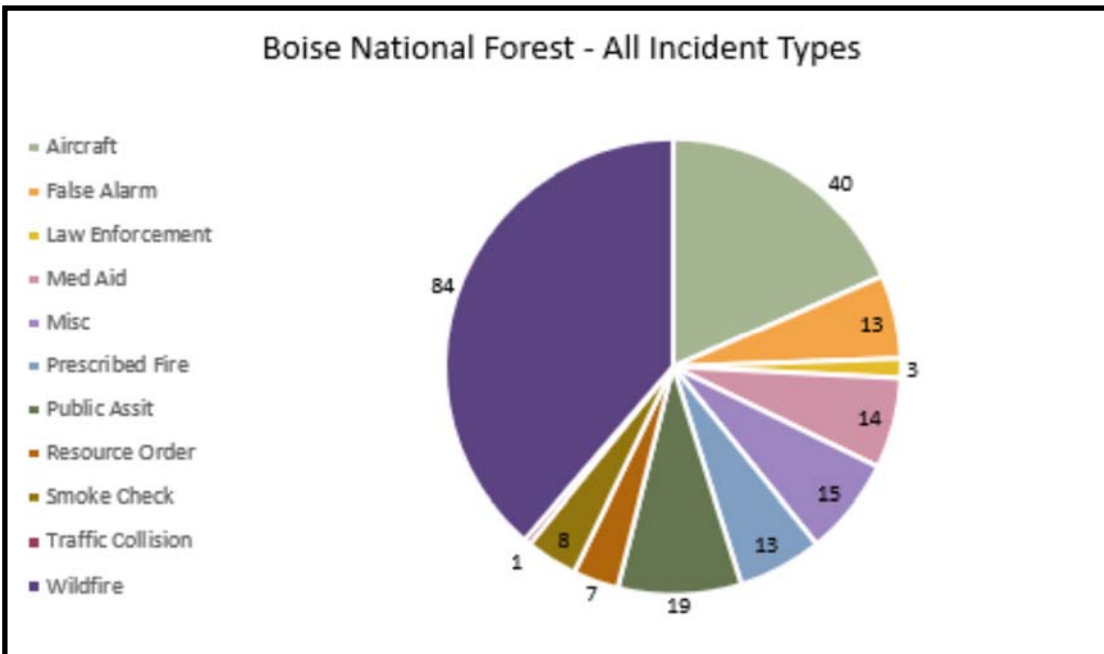
## WildCAD WORKLOAD REPORTS

### Boise District BLM– All Incident Types



As the chart to the left shows, Wildfire (89) was the largest workload for the BLM. Aircraft (53) came in at second. This number is a big jump from last years count (12) due to the increased use of UAS.

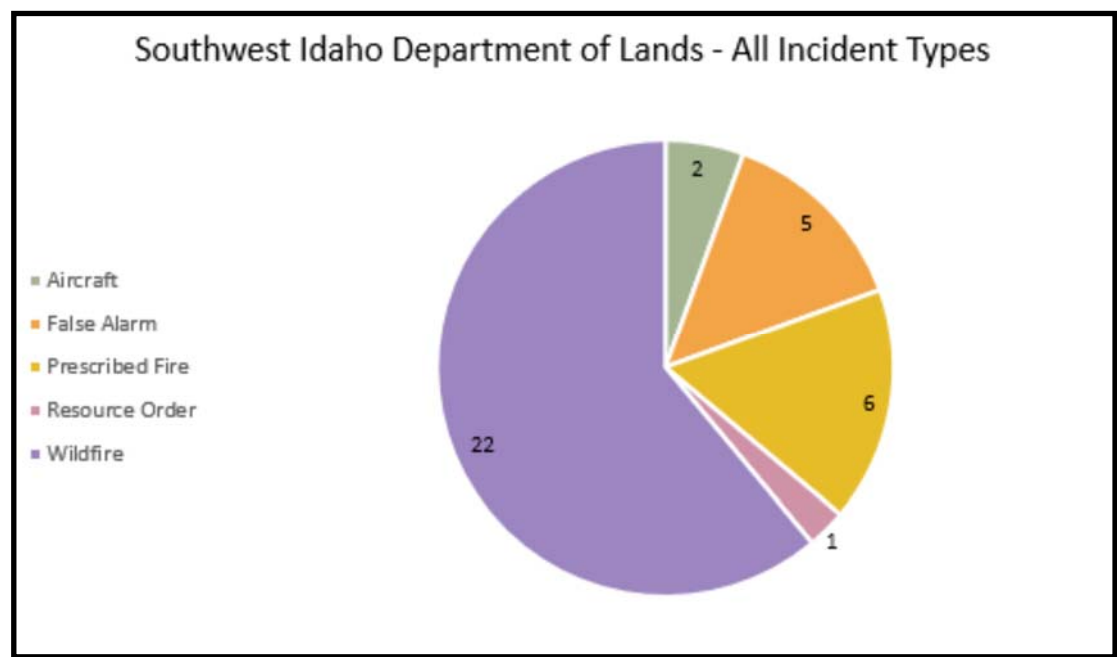
### Boise National Forest– All Incident Types



This pie chart and data show that Wildfire (84) and Aircraft (40) accounted for much of the workload for the Forest Service. As with the BLM, the Forest Service saw a dramatic increase in Aircraft incidents from the previous year (6), due to increased use of UAS.

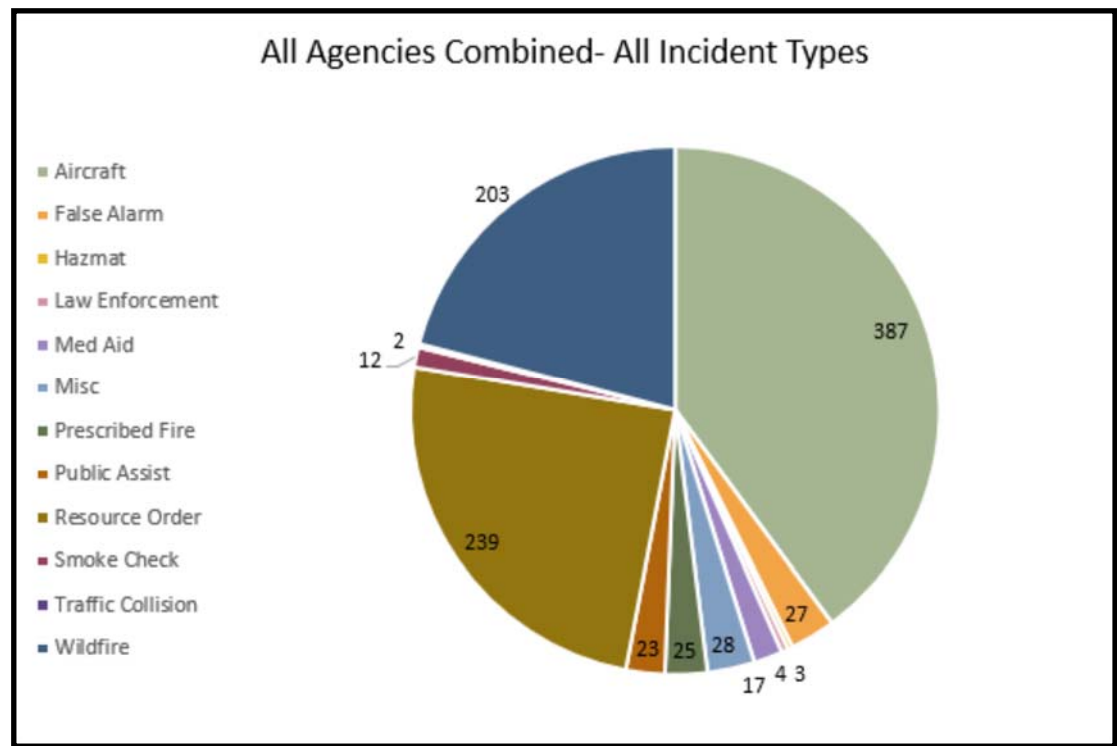
WildCAD WORKLOAD REPORTS

Southwest Idaho Department of Lands– All Incident Types



Wildfire (22) was the biggest workload for IDL, Prescribed Fire (6) being the 2nd most created incident.

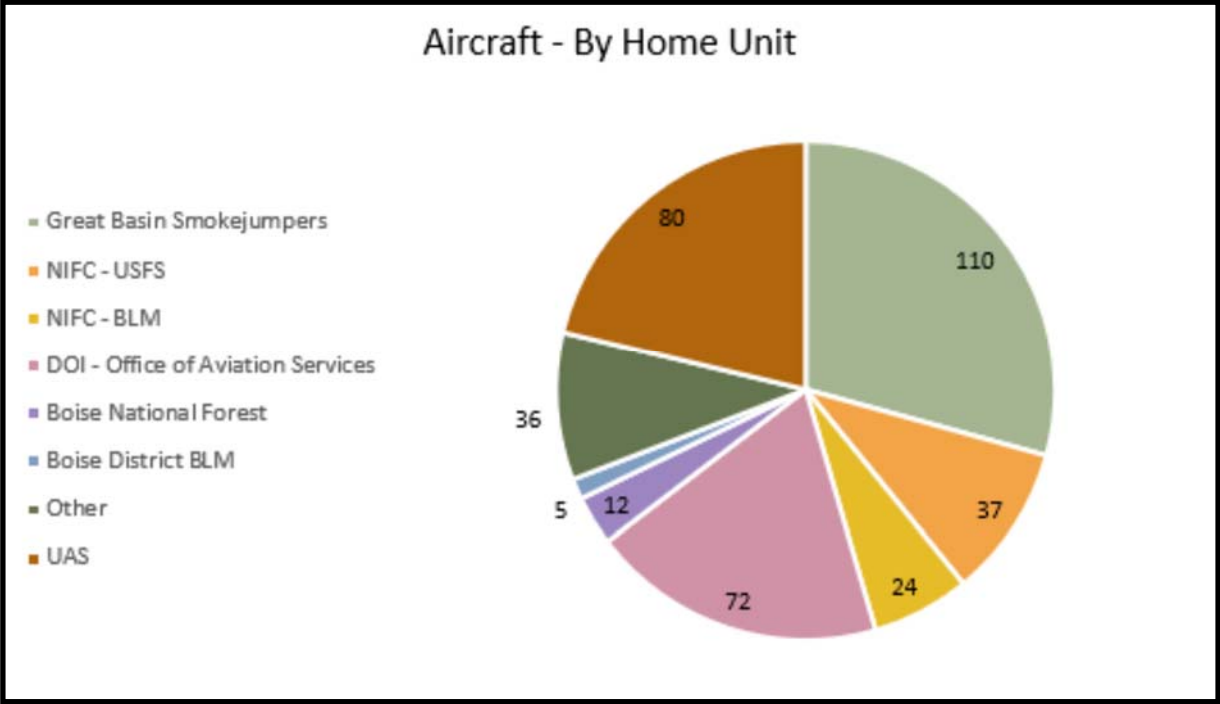
All Agencies Combined– All Incident Types



Aircraft incidents (387) were the biggest workload. Resource Orders (239) were second, with Wildfire (203) coming in third.

# WildCAD WORKLOAD REPORTS

## Aircraft



The chart above shows Boise Dispatch’s workload for Aircraft. The biggest workload was for the Boise Smokejumpers (110). A majority of this tracking was done during the spring, due to training and proficiency jumps that prepare them for the fire season. Our second largest Aircraft workload was for UAS (80), coming in third was Office of Aviation Services (72) doing proficiency training with their helicopter pilots.

## Orchard Training Range

Orchard Training Range (OTR) leases land from the Boise District BLM, so any fire that occurs within their protection area must be recorded in the BLM 1202 Fire Reporting system because it burnt BLM owned land. This data is input by dispatch throughout the summer and in the fall. In 2019, there were 27 fires that burned 10.35 acres. These were all human starts caused by military training activities. 2019 stats were far lower than previous years, in 2018 OTR had 181 fires that burned 1080.3 acres, in 2017 530 fires burned 4327 acres.



## **FIRE ACTIVITY**

### **HISTORICAL COMPARISONS - ALL AGENCIES**

In 2019, Boise Interagency Dispatch Center dispatched a total of 195 wildland fire incidents for 8,738 acres. Compared to the 10 year average the amount of fires is just below the average, however, the acreage is significantly less at 6%.

*The table below shows this year's number of fires and acres broken out by protection agency, and also Southwest Idaho as a whole, and compares them to the 5 year (2015-2019), 10 year (2010-2019), and 25 year(1995-2019) averages.*

	BOISE DISTRICT BLM		BOISE NATIONAL FOREST		SW IDAHO DEPT OF LANDS		BDC- SW IDAHO	
	FIRES	ACRES	FIRES	ACRES	FIRES	ACRES	FIRES	ACRES
<b>2019</b>	<b>89</b>	<b>8,109</b>	<b>84</b>	<b>623</b>	<b>22</b>	<b>6</b>	<b>195</b>	<b>8,738</b>
5 YR AVG	95	86,207	51	46,224	20	2,351	166	134,782
% OF 5 YR AVG	93%	9%	165%	1%	110%	< 1%	117%	6%
10 YR AVG	102	97,828	77	54,989	24	2,544	203	155,361
% OF 10 YR AVG	87%	8%	110%	1%	92%	< 1%	96%	6%
25 YR AVG	105	82,143	122	41,700	25	1,524	252	125,368
% OF 25 YR AVG	85%	10%	69%	1%	89%	< 1%	77%	7%

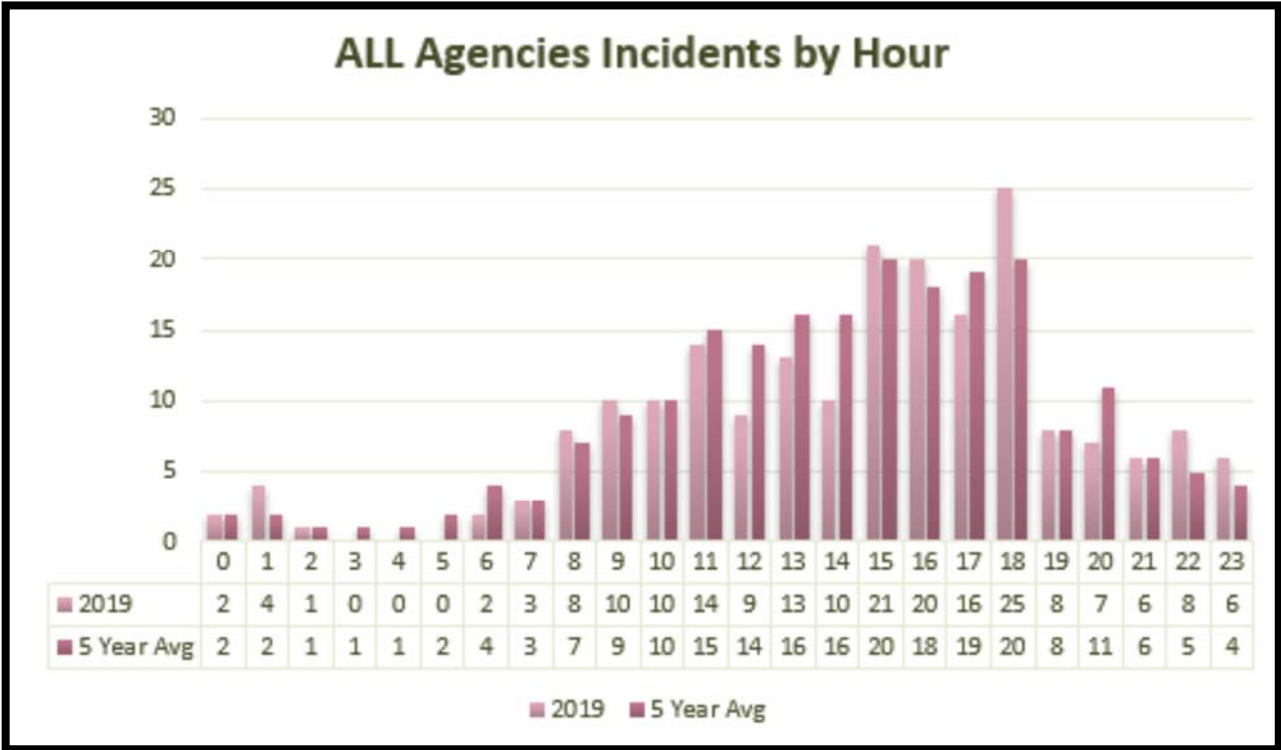
When compared to all time frames in the above table: The Boise District BLM was near average for the number of fires and well below average in acres burned. The Boise National Forest was slightly above average for number of fires and at 1% of average acres burned. Southwest Idaho Department of Lands was slightly below average for number of fires and less than 1% of average acres burned. Southwest Idaho, as a whole, was below the average number of fires and well below the average annual acreage.

*The following table shows the last 10 years of fire data by protection agency compared to the 10 year average.*

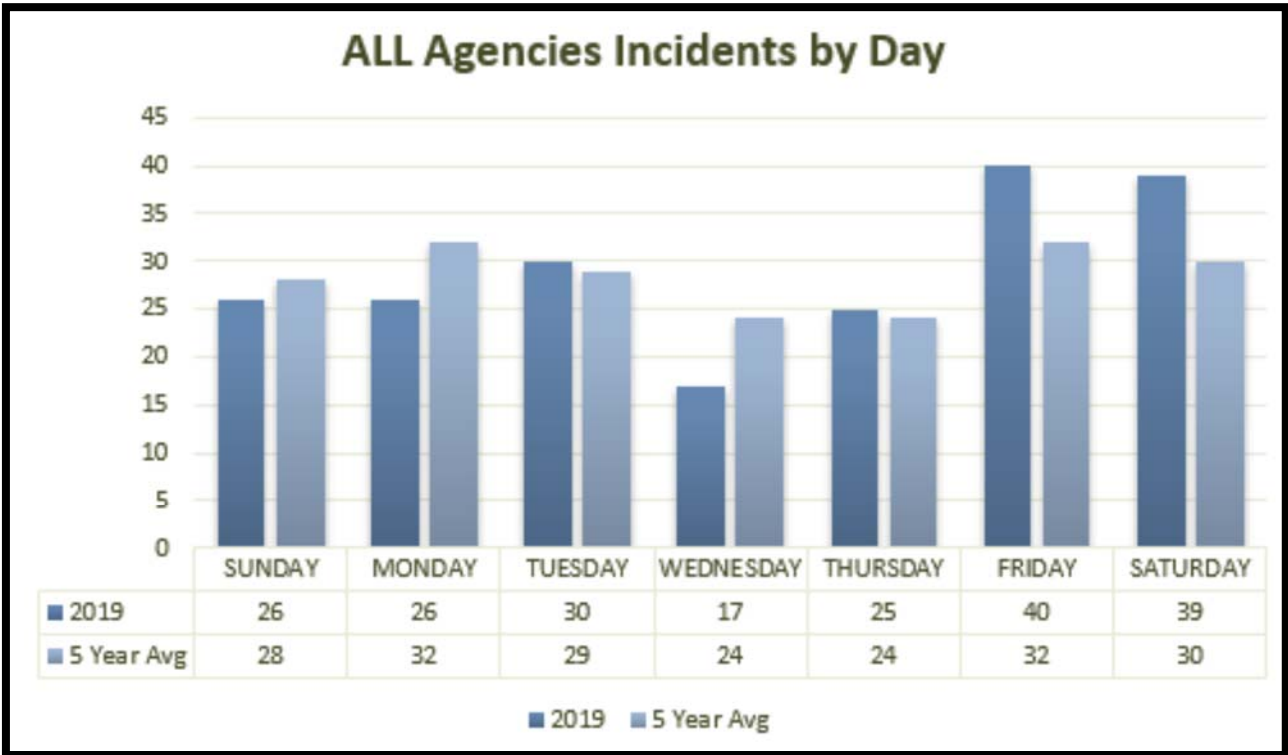
YEAR	BOISE DISTRICT BLM		BOISE NATIONAL FOREST		IDAHO DEPARTMENT OF LANDS	
	# OF FIRES	TOTAL ACRES	# OF FIRES	TOTAL ACRES	# OF FIRES	TOTAL ACRES
10 YR AVG	102	97,828	77	54,989	24	2,544
2019	89	8,109	84	623	22	6
2018	100	69,003	31	6,419	16	5,184
2017	119	31,756	31	28,246	18	205
2016	71	13,123	43	194,232	16	43
2015	89	309,046	66	1,600	28	6,317
2014	64	7,179	122	9,170	27	7,823
2013	119	172,027	134	139,282	48	3,201
2012	148	156,726	62	153,540	20	802
2011	118	153,070	105	4,954	21	179
2010	98	58,244	89	11,821	24	1,676

HISTORICAL COMPARISONS– ALL AGENCIES

The chart below compares occurrences of ignitions in 2019, by time of day, compared to the 5 year average for all agencies.



The chart below compares occurrences of ignitions in 2019, by day, compared to the 5 year average for all agencies.



# **FIRE ACTIVITY**

## **BY PROTECTION AGENCY– Boise District BLM**

<b>BOD PROTECTION TOTAL FIRES &amp; ACRES</b>		
	FIRES	ACRES
HUMAN CAUSED	63	4420
LIGHTNING CAUSED	26	3689
<b>TOTAL</b>	<b>89</b>	<b>8109</b>

<b>BOD PROTECTION ASSISTS FIRES &amp; ACRES</b>		
	FIRES	ACRES
FEDERAL AND STATE ASSISTS	10	N/A
RURAL FIRE COUNTY ASSISTS	8	15

<b>BOD PROTECTION FIRES &amp; ACRES BY LAND OWNERSHIP</b>						
LAND OWNERSHIP	HUMAN CAUSED	HUMAN ACRES	LIGHTNING CAUSED	LIGHTNING ACRES	TOTAL FIRES	TOTAL ACRES
BLM-ID-BOD	34	1769.9	22	1767.65	56	3537.55
USFS-ID-BOF	1	.1	0	0	1	.1
IDL-ID-SWS	8	281.69	2	13.6	10	295.29
PRIVATE	14	2123.4	1	1710	15	3833.4
FWS-ID-DFR	2	.65	0	0	2	.65
MILITARY-ID-MHQ	0	0	0	0	0	0
MILITARY-ID-LPE	2	7.3	0	0	2	7.3
BOR-ID-SRL	2	236.5	1	198	3	434.5
OTHER	—	0	—	0	—	0
<b>COMBINED TOTALS</b>	<b>63</b>	<b>4419.54</b>	<b>26</b>	<b>3689.25</b>	<b>89</b>	<b>8108.79</b>

BY PROTECTION AGENCY– Boise District BLM

The table below shows how many fires started and how many acres burned in each field office. \*Note acres burned are only BLM land ownership acres.\*

FIELD OFFICE STATISTICS - BLM OWNED ACRES				
	# FIRES	HUMAN ACRES	LIGHTNING ACRES	TOTAL ACRES
BIRDS OF PREY	16	1051.95	0	1051.95
BRUNEAU	10	550	803.4	1353.4
FOUR RIVERS	53	2816.49	2884.9	5701.39
OWYHEE	9	1	0.95	1.95

The table below shows how many fires burned in areas of concern and also how many times certain tactics were used to suppress fire.

MANAGEMENT STATISTICS - BOD PROTECTION	
AREA OF CONCERN OR STRATEGY USED	TOTAL OCCURANCES
DOZER LINE USED	25
LEPA AREA	3
RETARDANT USED	14
RFD RESPONSE	50
RFPA RESPONSE	13
SAGE-GROUSE	23
WILDERNESS/JMSFMA	5
WUI	6

This table shows how fires were reported to ID-BDC. It gives the total number by method and the percentage of reports in relation to the total number of fires.

FIRE DETECTION - BOD PROTECTION		
DETECTION METHOD	TOTAL	PERCENTAGE
AGENCY PERSONNEL	21	24%
AIRCRAFT	9	10%
COUNTY DISPATCH	44	49%
LOOKOUTS	2	2%
PRIVATE CITIZEN	13	15%

FIRE SIZE OCCURANCE - BOD PROTECTION	
A (0-.25 acres)	21
B (.26-9 acres)	34
C (10-99 acres)	19
D (100-299 acres)	6
E (300-999 acres)	6
F (1000-4999 acres)	3
G (5000+ acres)	0
TOTAL	89



## BY PROTECTION AGENCY - Boise District BLM

### SIGNIFICANT ACREAGE

The following chart includes all the Boise District BLM protection area fires that burned 300 acres or more.

ID-BOD PROTECTION FIRES OVER 300 ACRES					
DATE	NAME	FIRE CODE	FILED OFFICE	CAUSE	ACRES
06/15/2019	BENDER	MA0G	BFO	L	313
07/02/2019	HOTSPRINGS	MC4V	BFO	H	521
07/13/2019	CANMAY	ME54	FRFO	L	1012
07/14/2019	HEART	ME9K	FRFO	L	1529
07/16/2019	MM80 HWY51	MFU7	BOP	H	361
07/23/2019	BUCK	MG1J	BFO	L	300
08/08/2019	VISTA	MLB1	FRFO	H	329
08/15/2019	PROSPECT	MM0X	FRFO	H	373
08/15/2019	MAYFIELD	MM0Z	FRFO	H	1218

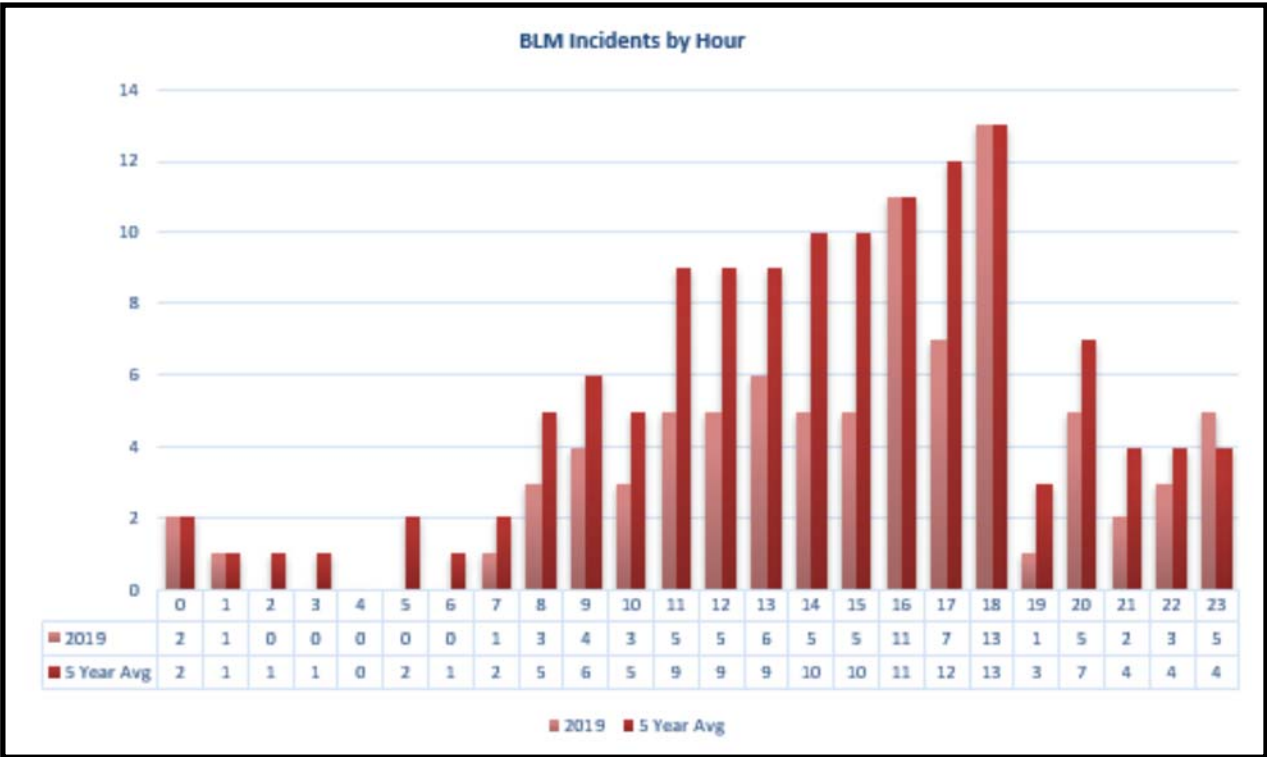


ID-BOD PROTECTION FIRES & ACRES BY MONTH				
	TOTAL # FIRES	HUMAN FIRES	LIGHTNING FIRES	ACRES
JANUARY	1	1	0	5
FEBRUARY	0	0	0	0
MARCH	1	1	0	0.5
APRIL	0	0	0	0
MAY	1	1	0	0.3
JUNE	10	8	2	427.1
JULY	33	17	16	4492.24
AUGUST	24	19	5	2348.15
SEPTEMBER	9	6	3	102.5
OCTOBER	4	4	0	327.5
NOVEMBER	6	6	0	405.5
DECEMBER	0	0	0	0
TOTAL	89	63	26	8108.79

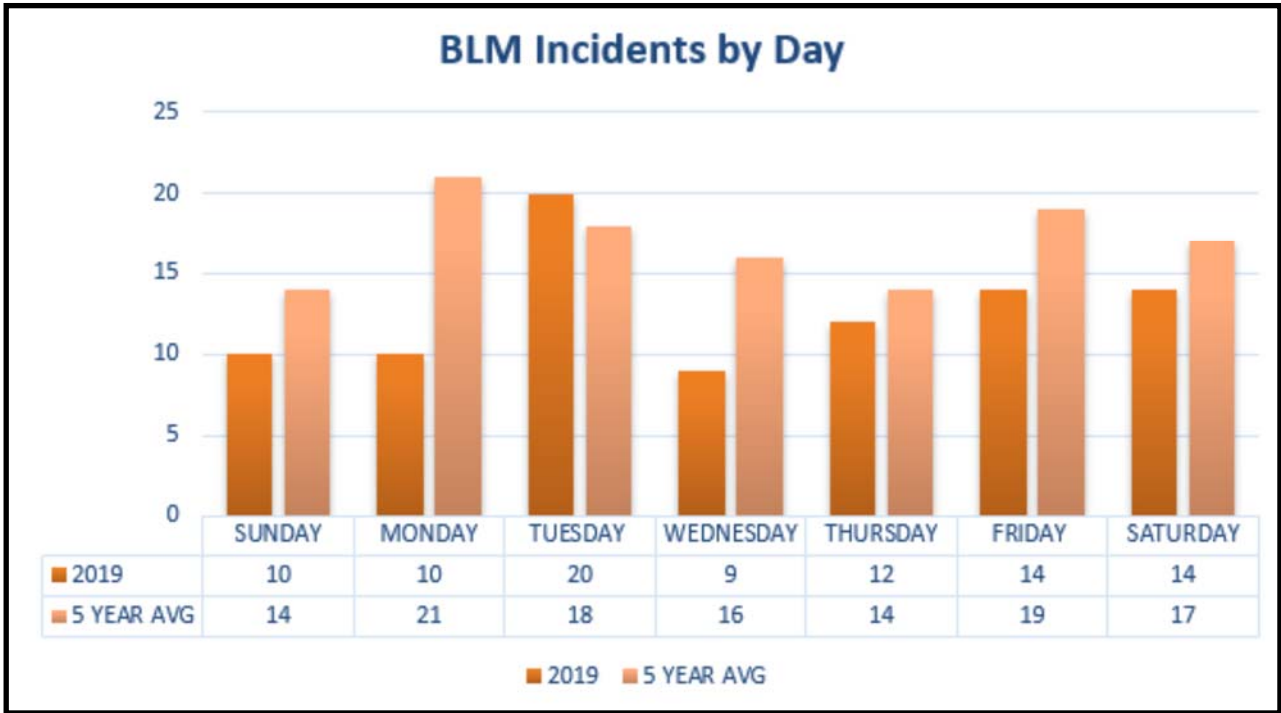
BY PROTECTION AGENCY– Boise District BLM

WildCAD REPORTS

The chart below compares occurrences of ignition in 2019, by time of day, as compared to the 5 year average for the Boise District BLM.



The chart below compares occurrences of ignition in 2019, by day, as compared to the 5 year average for the Boise District BLM.



## BY PROTECTION AGENCY - Boise National Forest

BOF PROTECTION TOTAL FIRES & ACRES		
	FIRES	ACRES
HUMAN CAUSED	31	258.22
LIGHTNING CAUSED	53	364.5
<b>TOTAL</b>	<b>84</b>	<b>622.72</b>

BOF PROTECTION ASSISTS FIRES & ACRES		
	FIRES	ACRES
FEDERAL AND STATE ASSISTS	32	N/A
RURAL FIRE COUNTY ASSISTS	1	4

BOF PROTECTION FIRES & ACRES BY LAND OWNERSHIP						
LAND OWNERSHIP	HUMAN CAUSED	HUMAN ACRES	LIGHTNING CAUSED	LIGHTNING ACRES	TOTAL FIRES	TOTAL ACRES
USFS-ID-BOF	21	8.76	49	351.5	70	360.26
BLM-ID-BOD	2	93	0	0	2	93
IDL-ID-SWS	3	64.75	2	4.8	5	69.55
PRIVATE	1	14.26	2	0.2	3	14.46
MILITARY-ID-LPE	2	42.1	0	0	2	42.1
BOR-ID-SRL	2	35.35	0	0	2	35.35
OTHER	0	0	0	8	0	8
<b>COMBINED TOTALS</b>	<b>31</b>	<b>258.22</b>	<b>53</b>	<b>364.5</b>	<b>84</b>	<b>622.72</b>

BY PROTECTION AGENCY– Boise National Forest

The table below shows how many fires started and how many acres burned in each district. \*Note acres burned are only USFS land ownership acres, but this does include fires protected by other agencies that started on USFS land\*

FIELD OFFICE STATISTICS - USFS OWNED ACRES				
	# FIRES	HUMAN ACRES	LIGHTNING ACRES	TOTAL ACRES
MOUNTAIN HOME	14	172.51	1.6	174.11
IDAHO CITY	13	0.25	7.1	7.35
CASCADE	16	3.4	1	4.4
LOWMAN	28	2.91	349.6	352.51
EMMETT	12	0	5.1	5.1

The table below shows how many fires burned in areas of concern and also how many times certain tactics were used to suppress fire.

MANAGEMENT STATISTICS - USFS PROTECTION	
AREA OF CONCERN OR STRATEGY USED	TOTAL OCCURANCES
RETARDANT USED	8
RFD RESPONSE	7
WUI	2

This table shows how fires were reported to ID-BDC. It gives the total number by method and the percentage of reports in relation to the total number of fires.

FIRE DETECTION - USFS PROTECTION		
DETECTION METHOD	TOTAL	PERCENTAGE
AGENCY PERSONNEL	23	27%
AIRCRAFT	16	19%
COUNTY DISPATCH	21	25%
LOOKOUTS	16	19%
PRIVATE CITIZEN	8	10%

FIRE SIZE OCCURANCE - USFS PROTECTION	
A (0-.25 acres)	62
B (.26-9 acres)	17
C (10-99 acres)	3
D (100-299 acres)	1
E (300-999 acres)	1
F (1000-4999 acres)	0
G (5000+ acres)	0
TOTAL	84



BY PROTECTION AGENCY - Boise National Forest

The following chart includes all the Boise National Forest protection area fires that burned 10 acres or more.

ID-BOF PROTECTION FIRES OVER 10 ACRES					
DATE	NAME	FIRE CODE	DISTRICT	CAUSE	ACRES
07/14/2019	CANYON	ME9L	D5	L	327
08/01/2019	LUCKY	MJ18	D1	H	106
08/02/2019	LIZZY	EKW2	D5	L	13
08/30/2019	MM2 HWY17	MP5A	D6	H	78
10/16/2019	HONEY	MV0J	D1	H	64

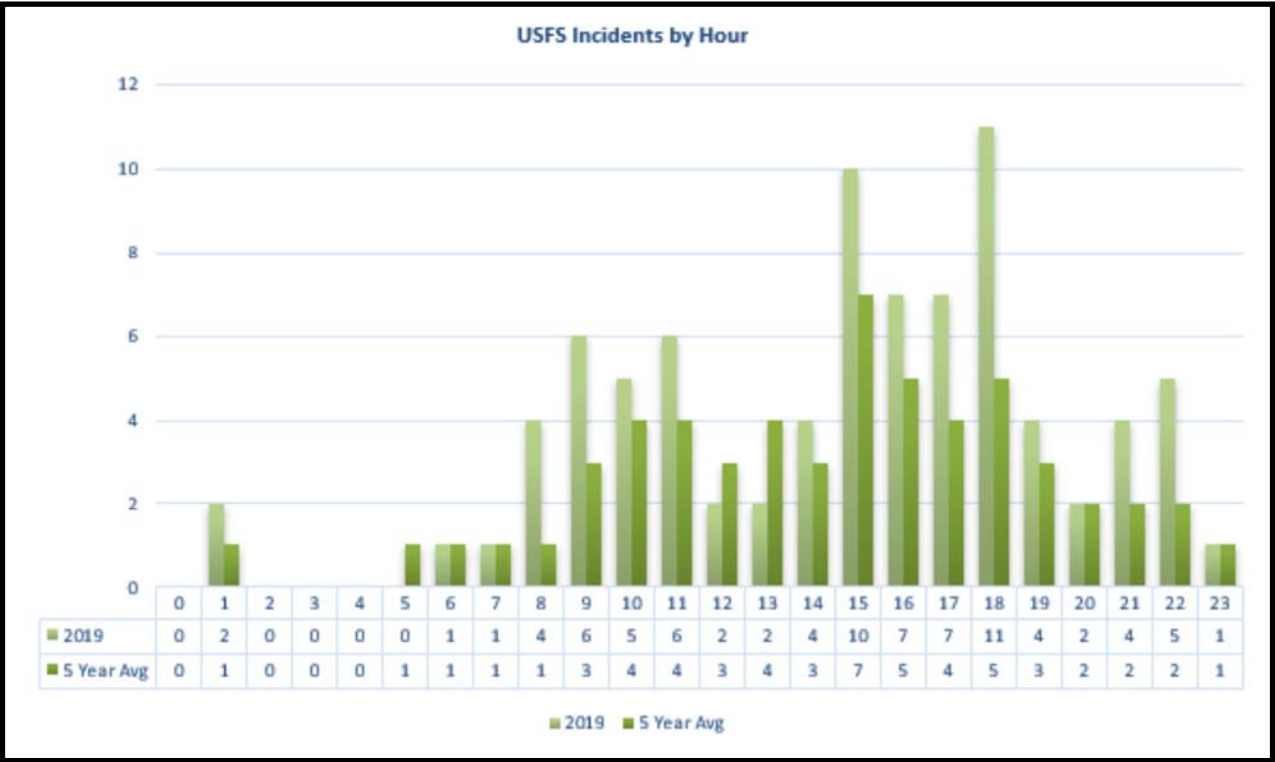


ID-BOF PROTECTION FIRES & ACRES BY MONTH				
	TOTAL # FIRES	HUMAN FIRES	LIGHTNING FIRES	ACRES
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	0	0	0	0
APRIL	0	0	0	0
MAY	3	2	1	0.3
JUNE	5	3	2	3.06
JULY	18	3	15	336.11
AUGUST	32	9	23	209.7
SEPTEMBER	20	8	12	8.5
OCTOBER	6	6	0	65.05
NOVEMBER	0	0	0	0
DECEMBER	0	0	0	0
TOTAL	84	31	53	622.72

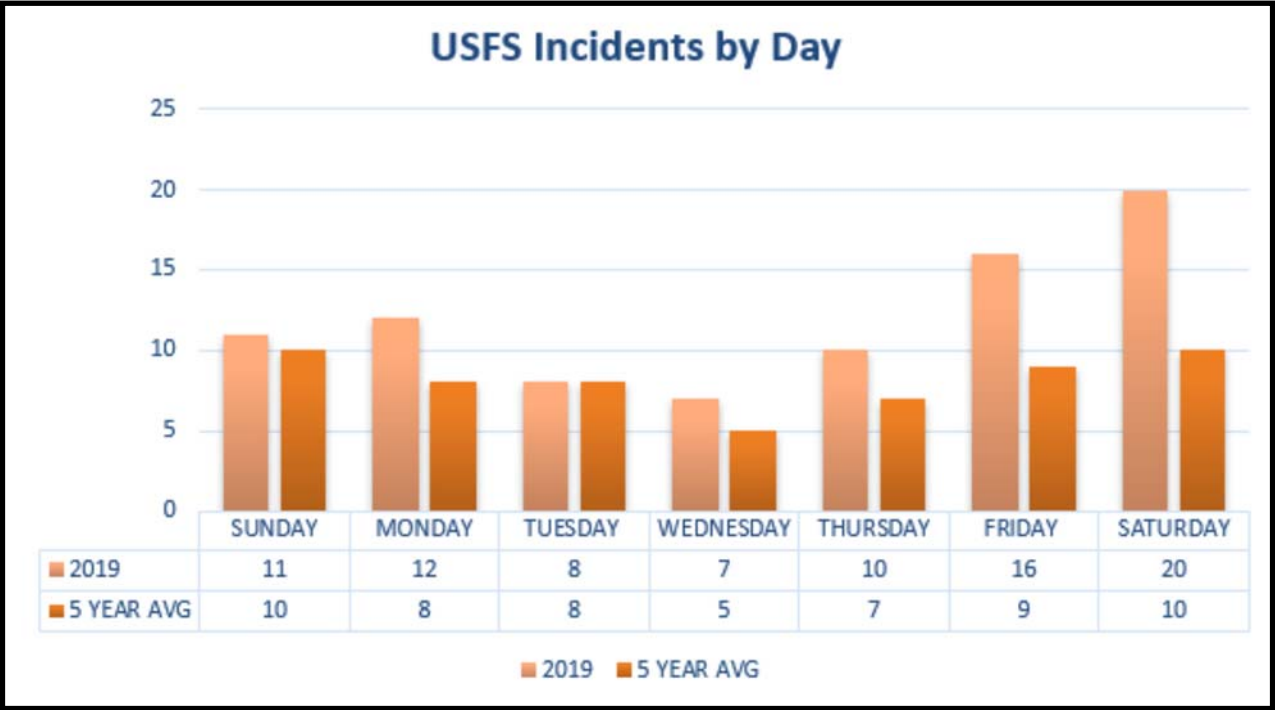
BY PROTECTION AGENCY - Boise National Forest

WildCAD Reports

The chart below compares occurrences of ignition in 2019, by time of day, as compared to the 5 year average for the Boise National Forest.



The chart below compares occurrences of ignition in 2019, by day, as compared to the 5 year average for the Boise National Forest.



BY PROTECTION AGENCY - Southwest Idaho Department of Lands

SWS PROTECTION TOTAL FIRES & ACRES		
	FIRES	ACRES
HUMAN CAUSED	10	3.45
LIGHTNING CAUSED	12	2.5
TOTAL	22	5.95

SWS PROTECTION ASSISTS FIRES & ACRES		
	FIRES	ACRES
FEDERAL ASSISTS	4	N/A
RURAL FIRE COUNTY ASSISTS	0	0



IDL personnel working on the MM2 HWY17 fire.

SWS PROTECTION FIRES & ACRES BY LAND OWNERSHIP						
LAND	HUMAN CAUSED	HUMAN ACRES	LIGHTNING CAUSED	LIGHTNING ACRES	TOTAL FIRES	TOTAL ACRES
IDL-ID-SWS	0	0	2	0.2	2	0.2
USFS-ID-BOF	3	0.7	6	1.6	9	2.3
BLM-ID-BOD	0	0	2	0.5	2	0.5
PRIVATE	7	2.75	2	0.2	9	2.95
MILITARY-ID-LPE	0	0	0	0	0	0
BOR-ID-SRL	0	0	0	0	0	0
COMBINED TOTALS	10	3.45	12	2.5	22	5.95



BY PROTECTION AGENCY– Southwest Idaho Department of Lands

The table below shows how many fires burned in areas of concern and also how many times certain tactics were used to suppress fire.

MANAGEMENT STATISTICS - IDL PROTECTION	
AREA OF CONCERN OR STRATEGY USED	TOTAL OCCURANCES
RETARDANT USED	0
RFD RESPONSE	12
WUI	4

This table shows how fires were reported to ID-BDC. It gives the total number by method and the percentage of reports in relation to the total number of fires.

FIRE DETECTION - IDL PROTECTION		
DETECTION METHOD	TOTAL	PERCENTAGE
AGENCY PERSONNEL	3	14%
AIRCRAFT	2	9%
COUNTY DISPATCH	10	45%
LOOKOUTS	4	18%
PRIVATE CITIZEN	3	14%



IDL Crew 6 working on the TRIPLE fire.

FIRE SIZE OCCURANCE - IDL PROTECTION	
A (0-.25 acres)	17
B (.26-9 acres)	5
C (10-99 acres)	0
D (100-299 acres)	0
E (300-999 acres)	0
F (1000-4999 acres)	0
G (5000+ acres)	0
TOTAL	22



BY PROTECTION AGENCY - Southwest Idaho Department of Lands

The following chart includes the Southwest Idaho Department of Lands protection areas largest fire. They did not have a fire that burned 10 acres or more. This was also their last fire of the season.

ID-SWS PROTECTION LARGEST FIRE (NO FIRES OVER 10 ACRES)				
DATE	NAME	FIRE CODE	CAUSE	ACRES
11/25/2019	ROBIE	MYZ0	H	1.2

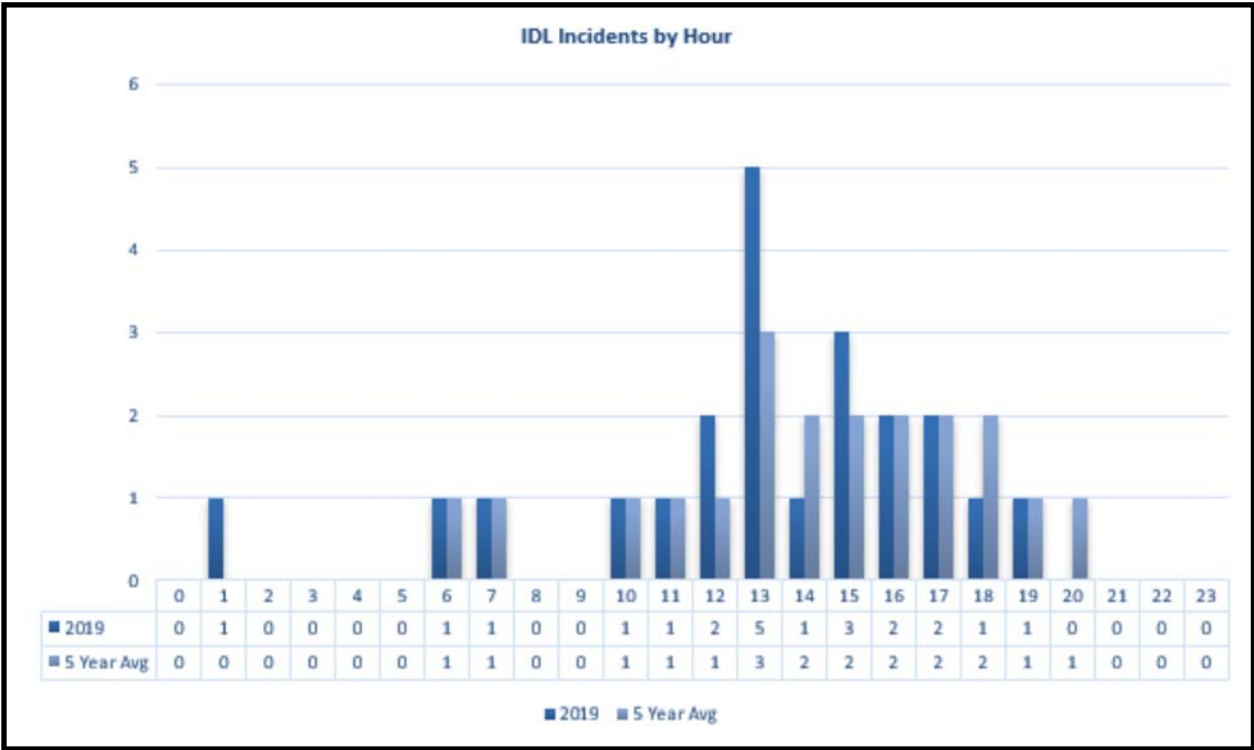


ID-SWS PROTECTION FIRES & ACRES BY MONTH				
	TOTAL # FIRES	HUMAN FIRES	LIGHTNING FIRES	ACRES
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	0	0	0	0
APRIL	1	1	0	0.1
MAY	1	1	0	0.2
JUNE	1	0	1	0.1
JULY	3	2	1	0.55
AUGUST	9	4	5	3.2
SEPTEMBER	5	1	4	0.5
OCTOBER	1	0	1	0.1
NOVEMBER	1	1	0	1.2
DECEMBER	0	0	0	0
TOTAL	22	10	12	5.95

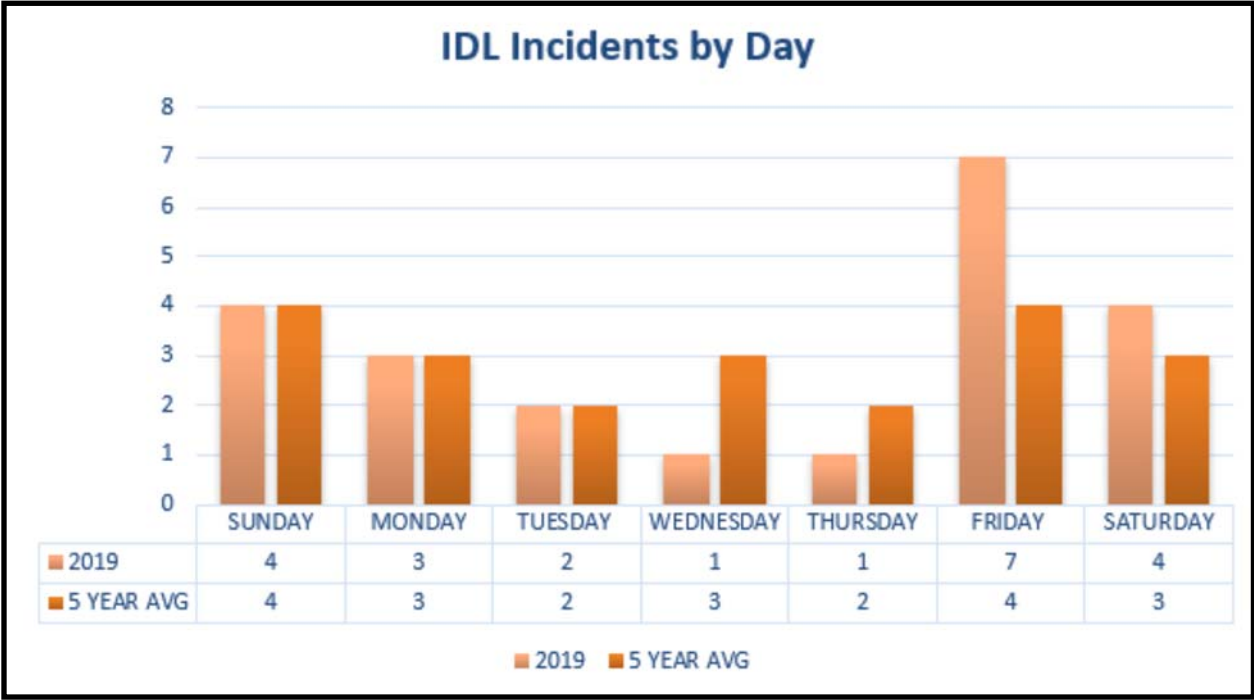
BY PROTECTION AGENCY - Southwest Idaho Department of Lands

WildCAD Reports

The chart below compares occurrences of ignition in 2019, by time of day, as compared to the 5 year average for the Southwest Area Idaho Department of Lands.



The chart below compares occurrences of ignition in 2019, by day, as compared to the 5 year average for the Southwest Area Idaho Department of Lands.



## LOGISTICAL ACTIVITY

Boise Dispatch Center mobilizes 1296 personnel representing the following agencies:

AGENCY	BOD	BOF	SWS	BOS	DFR	UT R04	ISO	DC WOI	NATIONAL INTERAGENCY FIRE CENTER							
									FCD	FCA	FCF	FCR	FCP	AMDH	AMRO	BFW
TOTAL # OF PERSONNEL	240	411	259	21	6	1	53	9	131	22	88	13	22	8	9	3
ADMINISTRATIVELY DETERMINED	90	68	1	0	0	0	0	0	0	0	0	0	0	0	0	0

**BOD** – Boise District BLM, **BOF** – Boise National Forest, **SWS** – Southwest Idaho Department of Lands, **BOS** – Boise Staff Office Idaho Department of Lands, **DFR** – Deer Flat National Wildlife Refuge, **UTR04** – Region 4- USFS, **ISO** – Idaho State Office BLM, **DCWOI** – Office of Wildland Fire Coordination, **FCD** – National Interagency Fire Center - Bureau of Land Management, **FCA** – National Interagency Fire Center - Bureau of Indian Affairs, **FCF** – National Interagency Fire Center - United States Forest Service, **FCR** – National Interagency Fire Center - Fish and Wildlife Service, **FCP** – National Interagency Fire Center - National Park Service, **AMDH** – Aviation Management National Business Center Headquarters, **AMRO** – Aviation Management Western Regional Office, **BFW** – Boise Fire Weather

## MOBILIZATION

The chart below shows how many of our resources supported each geographic area. \*Note 2019 overhead requests do not include engine and crew subordinate requests.\*

	ALASKA	EASTERN AR-EA	GREAT BASIN	NORTHERN CALIFORNIA	NORTHERN ROCKIES	NORTHWEST	ROCKY MOUNTAIN	SOUTHERN AREA	SOUTHERN CALIFORNIA	SOUTHWEST	AUSTRALIA	CANADA	NATIONAL INTERAGENCY COORDINATION
OVERHEAD	262	72	2274	120	137	214	279	73	156	319	14	3	3
CREW	4	0	93	10	3	0	10	0	0	4	0	0	0
EQUIPMENT	0	0	541	1	0	0	6	0	1	2	0	0	0
AIRCRAFT	8	0	180	4	12	39	15	2	21	59	0	0	0

## WORKLOAD

Boise Interagency Dispatch Center processed **15,777** resource orders in 2019. Below is a chart showing the breakdown of the type of work processed. In comparison, last year we processed **29,347** orders. The five year average (2015-2019) is **30,127** orders processed.

	ENTER	DELETE	PLACE	RETRIEVE	FILL	UN-FILL	REASSIGN	RELEASE	CANCEL	CANCEL UTF	UTF
AIRCRAFT	365	3	159	18	520	36	129	265	47	6	12
CREW	77	0	19	2	102	12	23	56	7	2	1
EQUIPMENT	515	15	35	0	532	10	30	491	8	2	16
OVERHEAD	2593	1	211	20	3001	59	841	1499	58	6	146
SUPPLY	1734	106	855	132	873	0	0	78	42	7	0
TOTAL	5284	125	1279	172	5028	117	1023	2389	162	23	175

# **FIRE SUPPRESSION RESOURCES**

*Below is the list of resources that are dispatched through BDC.*

AGENCY	BLM	USFS	IDL
UNIT IDENTIFICATION	ID-BOD	ID-BOF	ID-SWS
AIR ATTACK PLATFORM	1	1	0
TYPE 1 HELICOPTER	1	1	0
TYPE 2 HELICOPTER	0	1	0
TYPE 3 HELICOPTER	0	1	0
HELITACK PERSONNEL	24	22	0
TYPE 1 IHC	0	2	0
TYPE 2 REGULAR IA CREW	0	3	0
TYPE 2 CREW	0	0	0
WILDLAND MODULE	0	1	0
SUPER HEAVY ENGINE (TYPE 3)	2	0	0
TYPE 4 ENGINE	13	8	0
TYPE 5/6/7 ENGINE	0	0	3
TYPE 5/6/7 PATROL/PREVENTION	0	9	0
WATER TENDER	3	0	0
DOZER	4	0	0
FUEL TRUCK	1	0	0
MOBILE COMMUNICATIONS TRAILER	1	0	0
MOBILE CACHE/COMMAND TRAILER	1	1	0
<b>CONTRACT RESOURCES</b>			
NATIONAL TYPE 2 IA CREW		2	
REGIONAL ENGINES TYPE 3		3	
REGIONAL ENGINES TYPE 4		10	
REGIONAL ENGINES TYPE 6		19	
NATIONAL BUSES – CREW CARRIER		8	
REGIONAL WATER TENDERS - TACTICAL		6	
REGIONAL WATER TENDERS - SUPPORT		18	
CHIPPER		13	
CLERICAL SUPPORT UNIT		7	
DOZERS		14	
EXCAVATORS		5	
FALLER MODULE		8	
SINGLE FALLER		10	
ROAD GRADERS		3	
SKIDDER		4	
HELICOPTER OPERATIONS SUPPORT TRAILER		8	
TRANSPORTS TRACTOR/TRAILER		3	
FELLER BUNCHER		2	
MECHANICS/SERVICE TRUCK		4	
REFRIGERATED TRUCK/TRAILER		5	
WEED WASHING UNIT		8	
FUEL TENDER		4	
GRAY WATER TRUCK		3	
POTABLE WATER TRUCK		9	
HANDWASHING STATION – TRAILER MOUNTED		8	
COMMUNICATION TRAILER		18	
GIS TRAILER		13	
MULCHER/MASTICATOR		3	
PICKUP		32	
SOFTTRACK		2	
SUV		5	
STAKESIDE		8	
VAN		3	
TENT		0	
MOBILE SLEEPER UNIT		2	



## LOCAL RESOURCE ACTIVITY

### CREWS - IHC

The 2019 season started in R2, Colorado, for Boise IHC and in Idaho for Idaho City IHC. On June 7th Boise IHC was committed to the Reveille fire in Colorado while Idaho City IHC was assigned to the Pikes fire in Idaho on June 2nd. For the rest of the season, the crews spent time in AK, NV, CO, ID, and UT. Boise IHC finished off the year on the Middle Mamm in Colorado and Idaho City IHC on the Black Rock in Utah.

	DATE OF FIRST FIRE	DATE OF LAST ASSIGNMENT	DAYS CREW ASSEMBLED	DAYS IN TRAVEL STATUS	PROJECT WORK	DAYS – COMMITTED	DAYS UNPAID	14 DAY TOURS	LARGE FIRE ASSIGNMENTS	IA FIRE ASSIGNMENTS	MILES TRAVELED	TRAINEE ASSIGNMENTS
<b>BOISE IHC</b>	06/07	10/05	158	16	26	104	15	4	11	5	32,392	29
<b>IDAHO CITY IHC</b>	06/02	09/18	153	11	10	90	7	4	14	14	54,000	44



### CREWS - Type 2 IA

The Type 2 Crews in our area are an essential part of our fire organization. Our area has 3 agency type 2 initial attack crews: Crew 3 out of Idaho City, Crew 5 off the Lowman Ranger District and Crew 8 which is provided from the newly formed Boise Wildland Firefighter Academy (BWFA). We also dispatch two national contract IA crews from PatRick Environmental. These crews are critical to our success in initial attack at the local level. They also had off-unit assignments to Idaho, Utah, California, Colorado and Nevada.

	CREW 3	CREW 5	CREW 8	CREW 13A	CREW 13B
<b>AGENCY</b>	BOISE NATIONAL FOREST	BOISE NATIONAL FOREST	BOF BWFA	PATRICK ENVIRONMENTAL INC	PATRICK ENVIRONMENTAL INC
<b>DATE FIRST ASSIGNMENT (ON OR OFF UNIT)</b>	07/07	07/11	06/27	07/14	07/23
<b>OFF-UNIT ASSIGNMENTS</b>	2	2	3	5	4

ENGINES

Below shows the activity the engine crews received off-unit which included traveling to the Twin Falls District, Payette National Forest and Nevada.

	BLM	USFS	IDL	CONTRACT
STAFFED TYPE 3 ENGINES	2	0	0	3
STAFFED TYPE 4 ENGINES	13	8	0	10
STAFFED TYPE 6 ENGINES	0	0	2	19
TOTAL NUMBER OF OFF-UNIT INCIDENT ASSIGNMENTS	10	11	0	12
DATE OF FIRST OFF-UNIT ASSIGNMENT	6/20	7/7	N/A	7/23



E-461 on assignment in Winnemucca, NV on the KELLY fire.



# AIRCRAFT

## HELICOPTERS

The USFS had a new Type 2 EXU contract helicopter at Lucky Peak this year.

	BLM	USFS	USFS	USFS
IDENTIFICATION NUMBER	<b>N803PJ</b>	<b>N85PP</b>	<b>N13FH</b>	<b>N864H</b>
TYPE OF AIRCRAFT	UH-60A+	Bell 212HP	UH-60A	Bell 407
CATEGORY TYPE	1	2	1	3
MANDATORY AVAILABILITY PERIOD	135	120	120	115
DAYS ON EXTENTION	0	0	44	27
BASE LOCATION	Boise, ID	Lucky Peak Helibase	Lucky Peak Helibase	Garden Valley (U88)
CREW SIZE	24	12	1	9
TOTAL FLIGHT HOURS	254.7	151.1	231.9	197.9
FIRE MANAGEMENT HOURS	253.1	151.1	231.9	183.4
OTHER HOURS	1.6	0	0	6.4
INITIAL ATTACK INCIDENTS	29	15	17	45
LARGE FIRE INCIDENTS	13	8	9	2
PERSON DAYS ON FIRES		338	N/A	260
% IA SUPPORTED WITH BUCKET	100%	60%	100%	85%
GALLONS OF WATER	1,071,613	46,590	1,367,874	111,844
GALLONS OF RETARDANT	3,960	0	0	0
PERSONNEL TRANSPORTED	664	553	N/A	815
OPERATIONAL RAPPELS	N/A	19	N/A	N/A
FIRES STAFFED BY RAPPELLERS	N/A	3	N/A	N/A
POUNDS OF INTERNAL CARGO	79,369	96,425	0	67,515
POUNDS OF EXTERNAL CARGO	4,500	19,975	0	51,215
AERIAL IGNITION HOURS	0	0	0	0
HELITACK VEHICLE MILE-AGE	5 VEHICLES 72,392	4 VEHICLES 30,600	0	3 VEHICLES 42,000
DETAILER TOTAL DAYS	95	0	120	63
TOTAL OPERATIONAL COST	\$2,776,091.02	\$864,543.90	\$2,835,868.00	\$704,152.87



BLM Exclusive Use type 1, N803PJ.



USFS Exclusive Use type 2, N85PP, in Alaska.



# AIRCRAFT

## FIXED WING

	BLM	USFS
IDENTIFICATION NUMBER	N425DT	N711PB
TYPE OF AIRCRAFT	AERO COMMANDER 690B	AERO COMMANDER 690B
DAYS UNDER CONTRACT	112	120
BASE LOCATION	BOI	BOI
AMOUNT OF INCIDENTS	41	70
DAYS USED	51	75
TOTAL FLIGHT TIME	211.6	280
TOTAL COST	\$435,260.00	\$626,120.60



LUCKY fire, ID-BOF.

## MOUNTAIN HOME SEAT BASE– BLM

Base Operational Dates	07/14/19 – 09/15/19
Water (Total Gal.)	2,150
Retardant (Total Gal.)	79,917
# of Loads	117
# of Aircraft Support	11
Total Flight Time	114.2
# Fires Supported	32
Retardant Cost	\$399,759.30
Aircraft Cost (FT, EP, etc.)	\$827,653.03
Misc. Cost	\$53,846.80
<b>Gallons by User</b>	
ID-BDC dispatch area	33,131
Outside of ID-BDC dispatch area	46,786
ID-BOD	23,535
ID-BOF	8,196
ID-SWS	0
DOD	18,767
<b>1st Load Out</b>	
MM80 HWY51 FIRE (ID-BOD) - 07/16/19	
<b>Last Load Out</b>	
NORTH WILSON FIRE (ID-JMX) - 09/09/19	
<b>One Day Record</b>	
08/06/19    6 AIRCRAFT    2 FIRES	20,118 gallons
<b>Personnel</b>	
# Gov personnel assigned	1
# detailers / temp support	5



SEATs at the Boise air tanker base.

AIRCRAFT

BOISE TANKER BASE– USFS

Base Operational Dates	06/01/19 – 09/30/19
Water (Total Gal.)	12,000
Retardant (Total Gal.)	291,130
# of Loads	146
# of Aircraft Support	21
Total Flight Time	183.47
# Fires Supported	47
Retardant Cost	\$1,000,550.40
Aircraft Cost (FT & ES)	\$2,137,644.46
1st Load Out	
DURBIN CREEK FIRE (OR-VAD) - 06/15/19	
Last Load Out	
CIELO (ID-BLX) - 09/23/19	
One Day Record	
08/04/19	5 AIRCRAFT 6 FIRES 56,290 gallons



Air tanker 137 was on a new contract this year, it is a converted 737 passenger jet.

FUELS MANAGEMENT

BOISE DISTRICT BLM

BOD FUELS ACCOMPLISHMENTS*		
TYPE OF PROJECT	2019 ACRES COMPLETED	2018 ACRES COMPLETED
PRESCRIBED BURNING	14,461	2,960
MECHANICAL TREATMENT	42,501	8,430
OTHER FUEL REDUCTION CONTROL	1,144	2,784
TOTAL	58,106	14,174

\*Numbers are reported by fiscal year



Trout Springs RX, ID-BOD

BOISE NATIONAL FOREST

RANGER DISTRICT	BOF FUELS ACCOMPLISHMENTS (ACRES)					
	NON-WUI		WUI		TOTAL	
	PRESCRIBED FIRE	MECHANICAL	PRESCRIBED FIRE	MECHANICAL	PRESCRIBED FIRE	MECHANICAL
MOUNTAIN HOME	150	350	30	0	180	350
IDAHO CITY	0	0	5,710	2,132	5,710	2,132
CASCADE	80	131	360	0	440	131
LOWMAN	0	1,749	145	146	145	1,895
EMMETT	289	344	0	0	289	344
TOTAL	519	2,574	6,245	2,278	6,764	4,852



Horsethief RX, Cascade District

IDAHO DEPARTMENT OF LANDS

SWS FUELS ACCOMPLISHMENTS	
TYPE OF PROJECT	ACRES
Prescribed Fire	1,335
TOTAL	1,335



## **PREVENTION & MITIGATION**

### **BOISE DISTRICT BLM**

In 2019 the Mitigation and Prevention program spent a lot of time on the road. During the month of May the Prevention program did a Wildfire Awareness Tour that took us through 18 communities and 27 locations in SW Idaho. Smokey Bear turned 75 this year and we celebrated it through a photo tour with Smokey at popular landmarks in SW Idaho and by taking Smokey to the Boise Hawks game twice. We continued our support of the Caldwell Night Rodeo with Smokey Bear and the Bruneau Round-up with Smokey presenting a Smokey Buckle for one lucky Mutton Busting participant.

The wildland Fire Curriculum continues to grow, we presented the curriculum at the West Ada Sustainability Summit in Meridian and got the West Ada County School District to join the program and shortly after that added the Shoshone-Paiute Reservation as well.

The Mitigation program continues to build relationships within our SW Idaho area seeing meaningful projects being done to protect communities. The South West Idaho RC&D is using our grant dollars to help Surprise Valley complete the third phase of a fuel break project around their community and to help the community of Avimor, with the assistance of Eagle Fire, to construct a Forage Kochia fuel break around their community. We also added 10,000 Forage Kochia plants to the fuel break around Canyon Point.



Humphrey the Hawk and Smokey, spreading the good word to fans at a Boise Hawks baseball game during the 2019 fire season.

# BOISE NATIONAL FOREST

## Program Overview

- Abandoned/unattended campfires 341
- Incident Reports 321
- Citations 16
- Wildland Fire Investigations 47
- Days on Fire or Assignment 201
- Days in Fire Restrictions 0
- Public Assists 112
- Public Contacts 27,198



### District 1

The Mountain Home Ranger District Fire Prevention/Patrol organization consists of four positions, staffing three Fire Stations. Mountain Home is the largest of the 5 Forest Districts, covering 650,000 acres. The District's challenges include lands on the Boise front country that are adjacent to a large Metro area of 670,000 people and a wide variety of vegetation types due to the elevation changes and proximity to the Snake River/Boise Mountain borderlands. This rangeland interface creates potentially longer exposure to unplanned human wildfires. The Mountain Home Fire Prevention group provides programs and events to the greater Treasure Valley communities and the rural areas of Pine, Featherville and Prairie.

### District 3

The 2019 Idaho City Ranger District Fire Prevention organization consists of one permanent 18/8 prevention employee and one permanent 13/13 prevention employee. Both PT-31 and PT-32 accepted fire assignments off district. Starting in mid-September PT-32 transitioned out of a patrol role and helped with a project records project due to a temporary medical condition. In 2019 the Boise National Forest did not go into fire restrictions.

### District 4

The Cascade Ranger District Fire Prevention organization consists of one permanent 18/8 prevention employee and one 13/13 prevention employee. We also have support from the district Recreation staff with one 18/8 and two 1039 Recreation Technicians. There are campground hosts at French Creek, Rainbow Point, Warm Lake and Shoreline Campgrounds. This summer we had three Severity Engine Units; one from the Humboldt-Toiyabe, one from the Ashley National Forest, and one from the Fort Hall Agency who assisted with patrolling and provided fire response for the district.

### District 5

The Lowman Fire Prevention Program consists of one permanent 18/8 fire prevention employee and one 13/13 fire prevention employee, which was filled this year by Mary Wright as a temporary. There were fewer abandoned campfires discovered by all district personnel than last year, but there was an increase in public contacts made by the Prevention Technicians. The Prevention Program conducted several education programs, including the Lowman Schoolhouse "Rake-the-School" and a separate education event, Free Fishing Day, Veteran's Fishing Day, Smokey's 75th Birthday Party, Lowman Community Meeting, and a Wapiti Summer Home Firewise meeting. The Prevention Program coordinated with the Wapiti Summer Homeowners; Boise County Wildfire and Mitigation Specialist, Trina Richardson; Engine 451; District FMO, Colin Good; and the Fuels Program to bring a rural community of 19 summer cabins into Firewise determination. Prevention Techs conducted 19 homeowner assessments, providing each cabin with a one-page write-up and photos for fuels reduction and "harden-the-home" suggestions. Engine 451 conducted fuels reduction and chipped vegetation in the "island" of the summer homes loop road.

### District 6

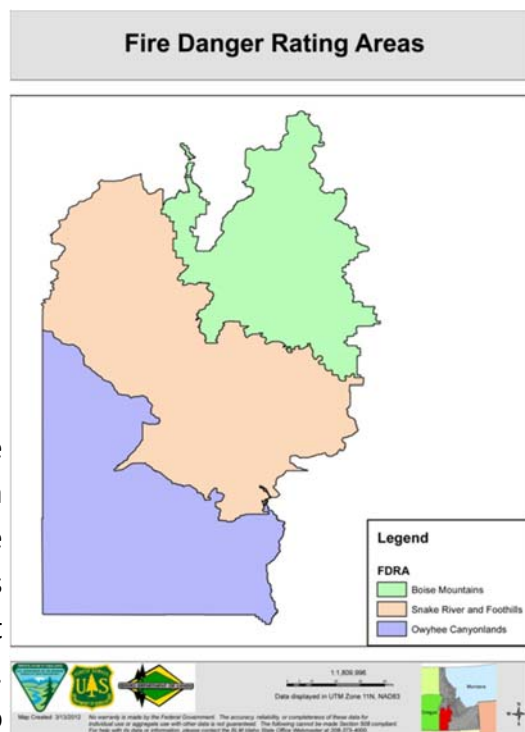
The Emmett Ranger District Fire Prevention organization consists of one permanent 18/8 prevention employee, one 13/13 prevention employee, and one 1039 prevention technician. Only the 13/13 and 1039 prevention positions were staffed for the 2019 year. The 13/13 position covered the west side of the district primarily, while the 1039 position often patrolled the middle fork portion with occasional assistance of Engine 461, the river ranger, and various engines staying on the forest for severity purposes. On the west side, there were two concierge campground hosts located at Antelope and Sagehen campgrounds, with a total of four developed campgrounds open to the public. On the east side of the district, there are around 8 developed campgrounds with 3 campgrounds being staffed by hosts.



## FIRE DANGER RATING AREAS

A Fire Danger Rating Area (FDRA) is defined as a large geographic area relatively homogenous with respect to climate, vegetation and topography. Because of these similarities, it can be assumed that the fire danger within a FDRA is relatively uniform. Fire Danger Rating Areas were delineated based upon an analysis of these three factors: climate, vegetation, and topography. After these environmental factors were considered, the draft FDRAs were edge-matched to existing administrative boundaries using Response Areas.

Each FDRA uses RAWs (remote automated weather stations) to obtain the weather information needed to produce fire danger outputs. Each area uses the weather data compiled with either ERC (energy release component) (Boise Mountains) or BI (burning index) (Snake River Foothills and Owyhee Canyonlands) to measure critical burning conditions and set staffing levels. Below is a list of each area with the weather stations used. Some the stations used are not managed by BDC but are used due to completeness of data and overall topographic representation.



RAWS STATIONS USED FOR EACH FDRA					
STATION NAME	STATION ID	LOCATION	ELEVATION	TYPE OF STATION	OWNER
<b>BOISE MOUNTAINS FDRA RAWs STATIONS</b>					
PINE CREEK	101222	6 MI SW OF SMITH'S FERRY	5600	FTS	BOISE NF
TOWN CREEK	101708	2 MI E OF PLACERVILLE	4500	FTS	BOISE NF
LITTLE ANDERSON	101710	2 MI NE OF GARDEN VALLEY	4560	FTS	BOISE NF
WAGONTOWN	102712	3 MI SW OF FEATHERVILLE	6200	FTS	BOISE NF
TEAPOT	101220	18 MI E OF MCCALL	5152	FTS	PAYETTE NF
<b>SNAKE RIVER FOOTHILLS FDRA RAWs</b>					
CATFISH	101402	10 MI NW OF WEISER	3570	FTS	BOISE BLM
MOUNTAIN HOME	102709	MOUNTAIN HOME AFB	3350	FTS	BOISE BLM
HORSE BUTTE	103205	37 MI SE OF GLENNS FERRY	5000	FTS	TWIN FALLS BLM
<b>OWYHEE CANYONLANDS FDRA RAWs</b>					
BRACE FLAT	103207	29 MI WNW OF RIDDLE	4900	FTS	BOISE BLM
TRIANGLE	103208	13 MI SE OF SILVER CITY	5330	FTS	BOISE BLM
OWYHEE RIDGE	353614	12 MI W OF HOMEDALE	4400	FTS	VALE BLM

# PREPAREDNESS LEVELS - FIRE DANGER LEVELS - DISPATCH LEVELS

## Southwest Idaho

PREPAREDNESS LEVEL	2019	5 YR AVG
	DAYS	DAYS
1	89	70
2	21	44
3	0	27
4	0	5
5	0	0

## Boise Mountains FDRA

BOISE MOUNTAINS FDRA	2019	5 YR AVG
FIRE DANGER RATING	DAYS	DAYS
LOW	57	31
MODERATE	57	51
HIGH	24	37
VERY HIGH	5	20
EXTREME	0	0

BOISE MOUNTAINS FDRA	2019	5 YR AVG
DISPATCH LEVEL	DAYS	DAYS
LOW	57	36
MODERATE	79	63
HIGH	8	45

## Snake River Foothills FDRA

SNAKE RIVER FOOTHILLS FDRA	2019	5 YR AVG
FIRE DANGER RATING	DAYS	DAYS
LOW	34	17
MODERATE	77	56
HIGH	26	34
VERY HIGH	6	28
EXTREME	0	1

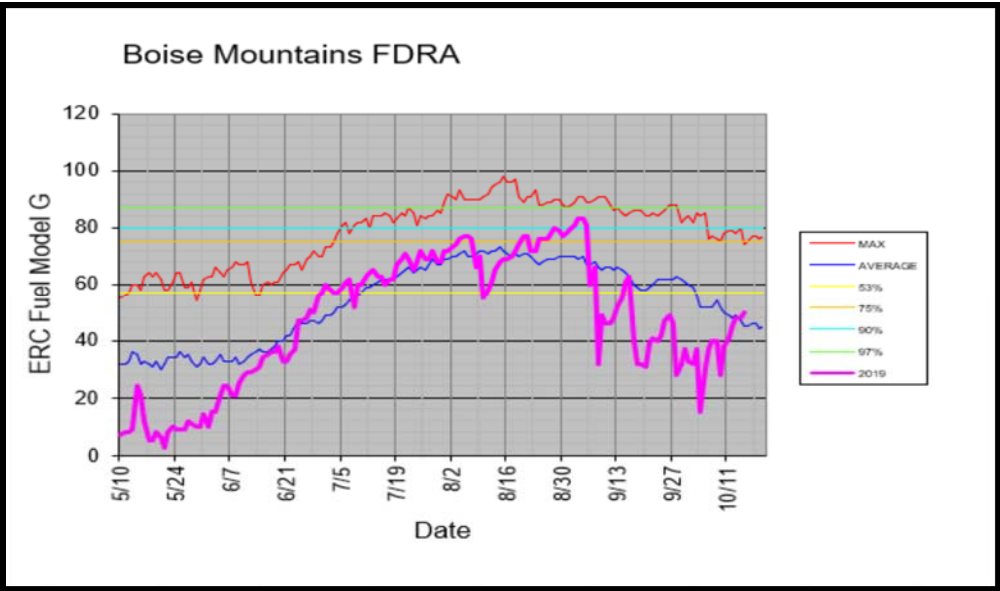
SNAKE RIVER FOOTHILLS FDRA	2019	5 YR AVG
DISPATCH LEVEL	DAYS	DAYS
LOW	45	33
MODERATE	95	90
HIGH	4	21

## Owyhee Canyonlands FDRA

OWHYEE CANYONLANDS FDRA	2019	5 YR AVG
FIRE DANGER RATING	DAYS	DAYS
LOW	45	28
MODERATE	84	73
HIGH	12	21
VERY HIGH	1	14
EXTREME	0	0

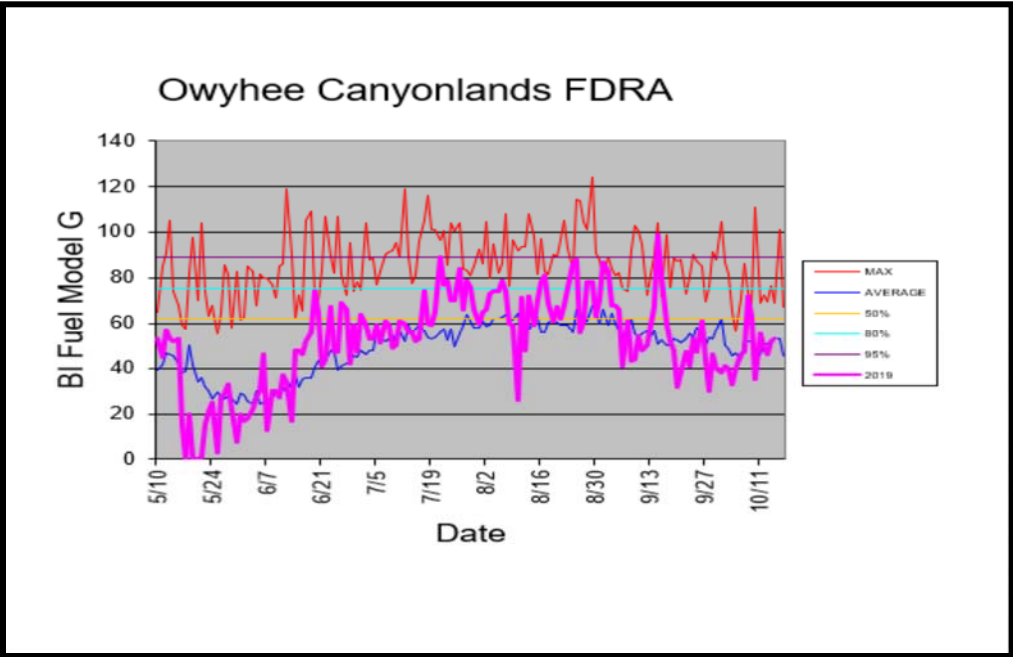
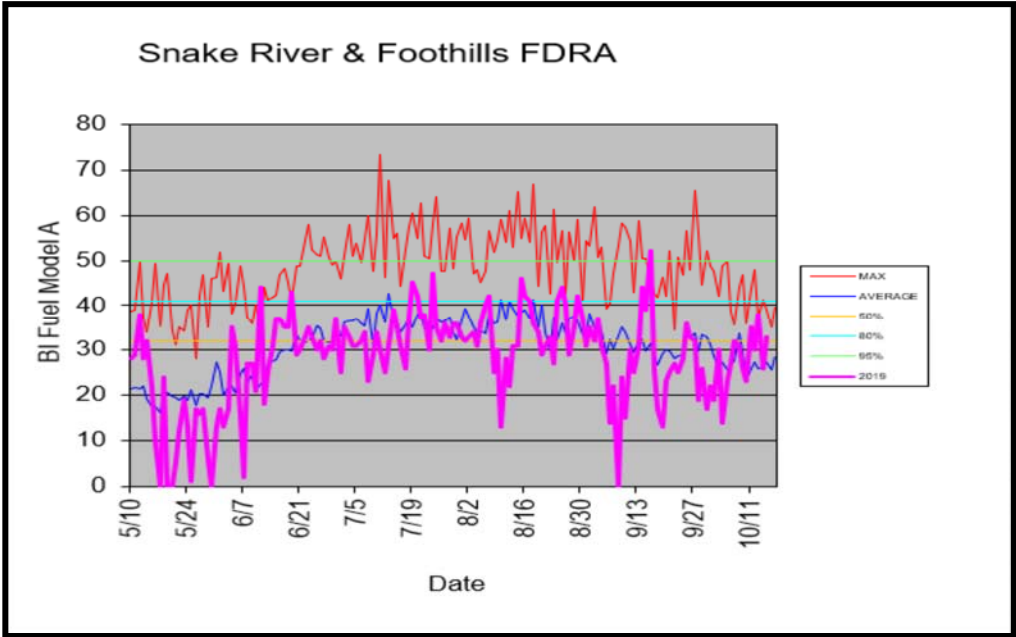
OWHYEE CANYONLANDS FDRA	2019	5 YR AVG
DISPATCH LEVEL	DAYS	DAYS
LOW	54	42
MODERATE	73	73
HIGH	17	28

OUTPUTS



The chart to the left shows this years ERC levels for the Boise Mountains FDRA compared to certain various percentages and also the average and max ERC levels determined from the Fire Danger Operating Plan.

The chart to the left shows this years BI levels for the Snake River Foothills FDRA compared to various threshold percentages and also the average and max BI levels determined from the Fire Danger Operating Plan.



The chart to the left shows this year's BI levels for the Owyhee Canyonlands FDRA compared to various threshold percentages and also the average and max BI levels determined from the Fire Danger Operating Plan.

**WEATHER**

**Boise National Weather Service**

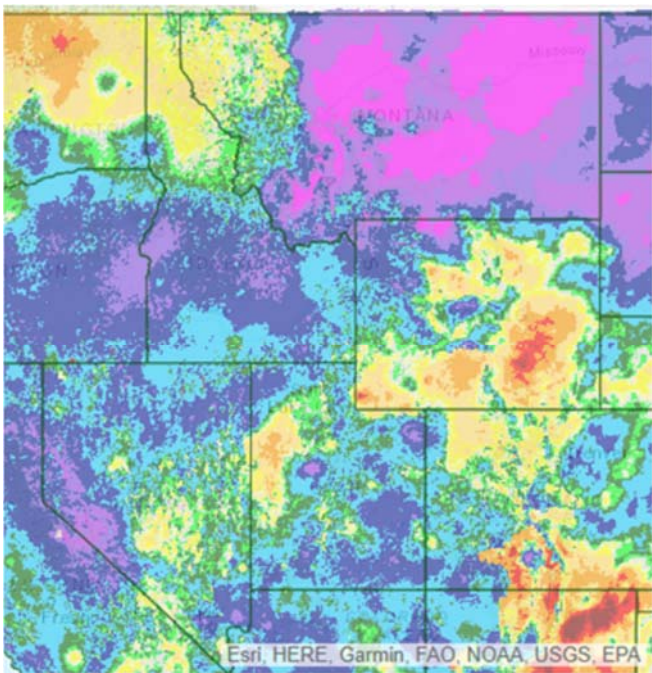
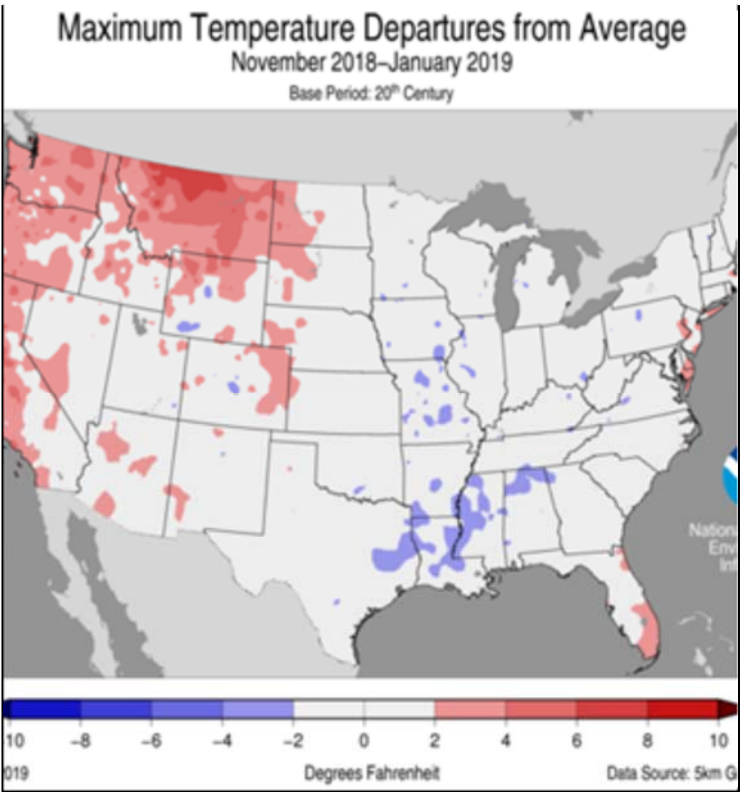
**Winter 2018-2019**

*Information taken directly from the Boise Weather Service 2019 Fire Weather Annual Report*

The month of December 2018 showed an early promise for a good winter with periods of rain and snow moving through the region. One of these early storms brought widespread snow throughout the Treasure Valley. This snow didn't last too long due to the winds aloft shifting more west/southwest by the middle to end of December. This brought widespread above normal temperatures to the region.

The northern branch of the Jetstream dropped out of Alaska and British Columbia and plunged into the Pacific Northwest allowing much colder temperatures into the region. This cold airmass combined with the southern branch, which brought abundant moisture from the tropics into the Great Basin.

By the middle of January, southwest flow aloft entrained abundant tropical moisture through the region. Boise reported nearly 0.75 inches of rain, which accounted for a majority of the monthly precipitation. During the December-January months, well above normal temperatures were recorded, but due to the very active and moist pattern well below normal temperatures were observed for the month of February.



**SPRING:**

The months of March and April were fairly quiet compared to what was to come during the month of May! May was a tale of two different weather patterns with the first being warm and dry as an upper ridge that was off the coast the first few days expanded eastward. By the middle of the month, this ridge pushed east as an upper trough settled into the Great Basin for the remainder of May (See Fig below). This brought abundant showers and thunderstorms, some of which produced locally heavy precipitation to the area. By the end of the month, Boise measured a total of 3.98 inches, which was 6<sup>th</sup> wettest on record.

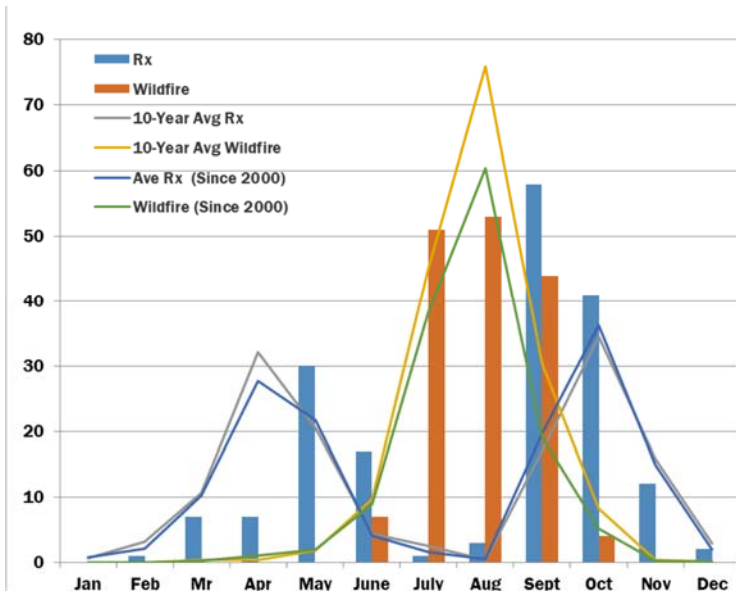
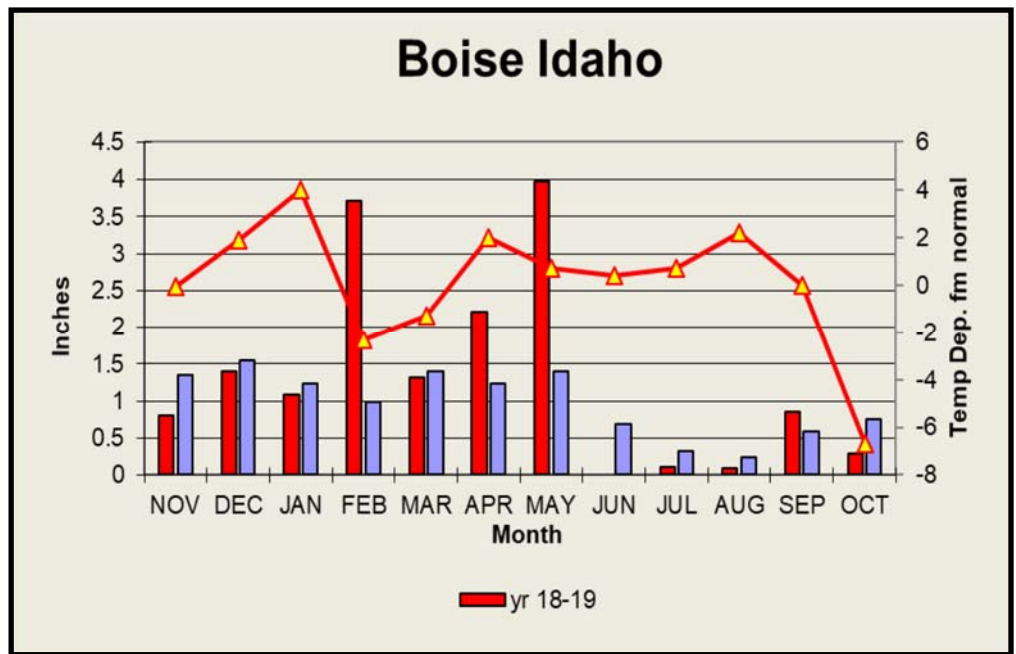
Site	2019	2019 Rank	Wettest	Year
Boise Area	12.07	2nd	14.27	1896
McCall	20.24	1st	20.24	2019
Garden Valley	17.45	9th	22.57	1996
Twin Falls	7.56	2nd	9.08	2005
Burns	10.04	3rd	27.84	1973
Rome	7.83	2nd	8.97	1998



## 2019 Review

It was apparent that the main contributor influencing the 2019 fire season was the amount of precipitation the region observed during the months of February and May. Another factor that may have contributed to the lackluster fire season could be the lack of precipitation/thunderstorms during the summer months due to a weak and late monsoonal moisture surge. A lack of extreme heat that was observed could have also hindered widespread fuel drying. As an example, during the years 2000-

2018, Boise normally records 11 days of triple digit heat, but this year it was only observed 3 times. For the larger cities (Boise, McCall, Burns, etc.), there were more days of temperatures over 90 in 2019 compared to normal, so most locations still recorded above normal temperatures during the summer months.



### Red Flag Warnings:

NWS-Boise issued 51 Red Flag Warnings (RFWs) for the 2019 fire season. Of these warnings, 33 verified as a "hit" and 22 had no verification. Additionally, there were 2 events in which red flag conditions occurred, but no warning was issued. With these numbers in mind, this gave us a Probability of Detection (POD) of 0.67 and a False Alarm Rate (FAR) of 0.06. Our average lead time was 10 hours. All the numbers showed improvement compared to the 2018 fire season.

### Spot Forecasts:

NWS-Boise completed almost 350 spot forecasts this past year, down from the previous year. Of the total spots completed, 181 were for prescribed burns, 159 were for wildfires and 2 for Search and Rescues. Similarly to the last few years, the bulk of these spot forecast requests came from the Payette National Forest (133 requests), Boise National Forest (93) and Burns BLM requested (40).

# **LIGHTNING SUMMARY**

## **Boise District BLM**

The first BLM lightning fire started on June 12th, the REYN fire. It was 1/4 acre. July 13th was the first multiple lightning fire day with 4 fires located and 1,217.7 acres burned. July 23rd was the largest lightning fire day with 5 fires located. Those fires only burned a total of 482.3 acres. On July 14th the largest lightning fire occurred, the HEART fire, it burned 1,529 acres. The HEART fire was only 6% of the largest lightning fire that occurred in 2018, the CAT fire that started July 24th, it burned 26,605 acres. 26 lightning caused fires burned 3,689 acres in 2019. In 2018, 27 lightning caused fires burned 58,080 acres.

## **Boise National Forest**

The first lightning fire on Forest protected land was May 29th, the CAMP fire, it burned 1/10 of an acre. The first day with multiple lightning responses was July 29th, with 9 fires for 5.8 acres. Between August 9th and 10th there were 12 lightning ignitions located. Those 12 ignitions burned a total of 1.2 acres. In total, there were 53 lightning caused fires that burned 364.5 acres. For comparison, there were 13 lightning caused fires for 152.1 acres in 2018.

## **Southwest Idaho Department of Lands**

The first lightning fire on IDL protected land occurred on June 2nd, the PINE fire, it burned 1/10 of an acre. 3 lightning fires occurred on August 11th, burning 1.2 acres. The IDL's 2nd, and last, lightning bust occurred on September 6th, igniting 4 fires that burned 0.4 of an acre. For the 2019 season, IDL had 12 lightning fire for a total of 2.5 acres burned. The total acreage for lightning fires in 2018 was 1.97 acres.



MONDAY fire, the last lightning caused fire for the Forest, it was spotted by an apprentice from D-4 on September 15th.

# FUEL MOISTURE

## Snake River Foothills and Owyhee Canyonlands Areas

The Boise District BLM Fuels program collects the live fuel moisture data at five different locations throughout the district. The following is a chart of their readings which are color coded by expected fire behavior. From the Guidelines for Fire Behavior and tactics based on Live Fuel Moisture Values in the Great Basin Fuel Project as described below: Fuel moistures from 101-125% will exhibit high fire behavior, therefore direct attack with engines and/or dozers would be nearly impossible on large fires. All fuel moisture sites had reached the high threshold by the middle of July and had reached extreme or advanced fire fuel moisture by the middle of August.

SAGEBRUSH	4/15	5/1	5/15	6/1	6/15	7/1	7/15	8/1	8/15	9/1	9/15
HAMMETT	220	185	ND	213	196	158	117	93	76	71	ND
HAMMETT AVG	233	206	182	163	140	109	100	89	85	82	80
KUNA	265	205	ND	190	140	118	93	86	70	63	ND
KUNA AVG	209	190	177	153	133	103	92	81	75	76	74
WILD WEST	242	204	ND	182	166	141	109	89	80	76	ND
WILD WEST AVG	217	205	186	148	130	108	91	79	74	73	71
TRIANGLE	ND	164	ND	217	208	173	146	108	98	98	ND
TRIANGLE AVG	158	187	209	207	192	143	123	102	97	94	81
BLACKSTONE	158	160	ND	175	164	112	84	72	67	62	ND
BLACKSTONE AVG	188	181	186	171	133	92	80	71	74	76	70

GREEN: Very Low and Low Fire Behavior. BLUE: Moderate Fire Behavior. YELLOW: High Fire Behavior. ORANGE: Extreme Fire Behavior. RED: Advanced Fire Behavior.

## FIRE BEHAVIOR AND TACTICS

### Live Fuel Moisture

**181% & Above** - Fires will exhibit **VERY LOW BEHAVIOR** with difficulty burning. Residual fine fuels from the previous year may carry the fire. Foliage will remain on the stems following the burn. Fires can generally be attacked at the head or flanks by persons using hand tools. Hand line should hold fire without any problems. Fires will normally go out as soon as wind dies down.

**151%-180%** - Fires will exhibit **LOW FIRE BEHAVIOR** with fire beginning to be carried in the live fuels. Both foliage and stem material up to 1/4 inch in diameter will be consumed by the fire. Burns will be generally patchy with many unburned islands. Engines may be necessary to catch fires at the head and handling will be more difficult to construct, but should hold at the head and the flanks.

**126%-150%** - Fires will exhibit **MODERATE FIRE BEHAVIOR** with a fast continuous rate of spread that will consume stem material up to 2 inches in diameter. These fires may be attacked at the head with engines but may require support of dozers and retardant aircraft. Handline will become ineffective at the fire head, but should still hold at the flanks. Under high winds and low humidity, indirect line should be given considerations.

**101%-125%** - Fires will exhibit **HIGH FIRE BEHAVIOR** leaving no material unburned. Head attack with fire engines and dozers will be nearly impossible on large fires, but may still be possible on smaller, developing fires. Retardant aircraft will be necessary on all these fires. Flanking attack by engines and indirect attack ahead of the fire must be used. Spotting should be anticipated. Fires will begin to burn through the night, calming down several hours before sunrise.

**75%-100%** - Fires will exhibit **EXTREME FIRE BEHAVIOR**. Extreme rates of spread and moderate to long range spotting will occur. Engines and dozers may be best used to back up firing operations, and to protect structures. Indirect attack must be used to control these fires. Fires will burn actively through the night. Air turbulence caused by the fire will cause problems for air operations.

**74% & Below** - Fires will have **ADVANCED FIRE BEHAVIOR** with high potential to control their environment. Large acreage will be consumed in a very short time period. Backfiring from indirect line, roads, etc. must be considered. Aircraft will need to be cautious of hazardous turbulence around the fire.