National Interagency Coordination Center Incident Management Situation Report Friday, October 27, 2017 – 0530 MT National Preparedness Level 2

National Fire Activity

Initial attack activity:	Light (97) new fires
New large incidents:	2
Large fires contained:	4
Uncontained large fires:**	4
Area Command teams committed:	0
NIMOs committed:	0
Type 1 IMTs committed:	1
Type 2 IMTs committed:	1

^{**}Uncontained large fires include only fires being managed under a full suppression strategy. **Link** to Geographic Area daily reports.

	Ac	tive Incide	nt Res	source S	Summary	
GACC	Fires	Cumulative Acres	Crews	Engines	Helicopters	Total Personnel
AICC	0	0	0	0	0	0
NWCC	1	39,715.65	4	3	3	137
ONCC	5	214,899	34	63	3	1,578
oscc	4	19,742	24	60	19	896
NRCC	1	561	0	1	0	3
GBCC	1	303	1	5	1	39
SWCC	2	2,192.78	0	13	0	21
RMCC	0	0	0	0	0	0
EACC	1	1,328	0	1	0	4
SACC	0	0	0	0	0	0
Total	15	278,741.43	63	146	26	2,678

Northern California Area (PL 3)

New fires:	5
New large incidents:	0
Uncontained large fires:	4
Type 1 IMTs Committed:	1

Central LNU Complex, Sonoma Lake Napa Unit, Cal Fire. Cal Fire IMT 1 (Gouvea). One mile north of Santa Rosa, CA. Brush and tall grass. Minimal fire behavior with smoldering. Road closures in effect.

Southern LNU Complex, (3 fires). Sonoma Lake Napa Unit, Cal Fire. One mile east of Napa, CA. Timber, brush and short grass. Minimal fire behavior.

		Siz	ze		Ctn/	F-4	Perso	onnel	R	esource	es	Strc	\$\$	Origin
Incident Name	Unit	Acres	Chge	%	Comp	Est	Total	Chge	Crw	Eng	Heli	Lost	CTD	Own
Central LNU Complex	CA-LNU	110,720	0	94	Ctn	10/27	1,077	-669	24	46	2	7,013	97.3M	ST
Southern LNU Complex	CA-LNU	51,624	0	98	Ctn	10/27	241	-138	4	15	0	783	47.6M	ST
Mendocino Lake Complex	CA-MEU	38,730	0	100	Ctn		52	-20	0	0	0	706	25M	ST
Bear	CA-CZU	391	0	100	Ctn		10	-67	0	0	0	4	7.1M	ST

MEU – Mendocino Unit, Cal Fire CZU – San Mateo-Santa Cruz Unit, Cal Fire

Southern California Area (PL 3)

New fires:14New large incidents:1Uncontained large fires:0

^{*} **Wildomar**, Cleveland National Forest. Five miles south of Lake Elsinore, CA. Chaparral and tall grass. Active fire behavior. Numerous structures threatened. Evacuations, road, area and trail closures in effect.

		S	ize		Ctn/		Pers	onnel	R	esourc	es	Strc	\$\$	Origin
Incident Name	Unit	Acres	Chge	% Comp		l ⊢st l	Total	Chge	Crw	Eng	Heli	Lost	CTD	Own
* Wildomar	CA-CNF	350		0	Ctn	10/30	536		14	46	7	0	500K	FS

Southern Area (PL 3)

New fires:24New large incidents:0Uncontained large fires:0Type 2 IMTs Committed:1

Hurricane Harvey, Texas A&M Forest Service. Texas IMT 2 (Hanneman) has mobilized to College Station, TX to support recovery and mitigation efforts, surveying impacts on local fire departments and distributing donated fire equipment. No new information. Last report unless new information is received.

Incident Name		Siz	ze		Ctn/		Perso	onnel	R	esourc	es	Strc	\$\$	Origin
Incident Name	Unit	Acres	Chge	%	Comp	Est	Total	Chge	Crw	Eng	Heli	Lost	CTD	Own
Hurricane Harvey	TX-TXS	N/A		N/A	N/A		230	0	4	1	0	0	1K	ST

Northern Rockies Area (PL 1)

New fires: 0
New large incidents: 0
Uncontained large fires: 0

Incident Name	Unit	Size Size %		Ctn/		Personnel		Resources			Strc	\$\$	Origin	
Incident Name	Unit	Acres	Chge	%	Comp	Est	Total	Chge	Crw	Eng	Heli	Lost	CTD	Own
Lazy R	MT-LG23	561	0	100	Ctn		3	-50	0	1	0	9	15K	C&L

LG23 - Musselshell County

Rocky Mountain Area (PL 1)
New fires: 1 New large incidents: Uncontained large fires: 1

Ī	Incident Name		S	ize		Ctn/		Pers	onnel	R	esourc	es	Strc	\$\$	Origin
		Unit	Acres	Chge	%	% Comp	Est	Total	Chge	Crw	Eng	Heli	Lost	CTD	Own
	* Tipton	WY-SWX	460		100	Ctn		0	-	0	0	0	0	10K	C&L

SWX – Sweetwater County

Fires and Acres Yesterday (by Protection):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaska Aras	FIRES	0	0	0	0	0	0	0
Alaska Area	ACRES	0	0	0	0	0	0	0
Northwest Area	FIRES	0	0	0	0	5	0	5
Northwest Area	ACRES	0	0	0	0	51	0	51
Northern California Area	FIRES	0	0	0	0	3	2	5
Notthern California Area	ACRES	0	0	0	0	1	0	1
Southern California Area	FIRES	0	1	0	0	12	1	14
Southern California Area	ACRES	0	25	0	0	5	0	30
Northern Rockies Area	FIRES	0	0	0	0	0	0	0
Northern Rockies Area	ACRES	0	0	0	0	0	0	0
Great Basin Area	FIRES	0	6	0	0	9	6	21
Great basiii Area	ACRES	0	563	0	0	1	145	709
Southwest Area	FIRES	5	1	0	0	0	17	23
Southwest Area	ACRES	0	75	0	0	0	85	160
Dealer Mountain Area	FIRES	0	0	0	0	1	0	1
Rocky Mountain Area	ACRES	0	0	0	0	6	0	6
Factors Area	FIRES	0	0	0	0	0	4	4
Eastern Area	ACRES	0	0	0	0	0	2	2
Southern Area	FIRES	0	0	0	0	24	0	24
Southern Area	ACRES	0	0	0	0	129	0	129
TOTAL FIRES:		5	8	0	0	54	30	97
TOTAL ACRES:		0	663	0	0	193	232	1,088

Fires and Acres Year-to-Date (by Protection):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaaka Araa	FIRES	0	171	0	0	176	13	360
Alaska Area	ACRES	0	571,516	0	0	81,348	1	652,865
Northwest Area	FIRES	192	243	38	26	1,471	1,322	3,292
Northwest Area	ACRES	11,934	212,762	20,988	5,359	39,124	510,564	800,731
Northern California	FIRES	84	74	6	16	2,910	940	4,030
Area	ACRES	118	39,891	71	38	303,172	354,941	698,231
Southern California	FIRES	165	76	2	46	3,727	511	4,527
Area	ACRES	641	37,886	0	12,089	216,628	128,724	395,968
Northern Rockies	FIRES	657	97	20	30	1,596	705	3,105
Area	ACRES	58,651	377,312	1,325	22,318	238,834	725,262	1,423,702
Great Basin Area	FIRES	36	1,037	5	39	932	475	2,524
Gleat Basiii Alea	ACRES	56,329	1,261,297	2	38	448,637	214,137	1,980,440
Southwest Area	FIRES	744	236	19	42	718	1,059	2,818
Southwest Area	ACRES	46,671	23,474	1,027	1,389	114,116	365,342	552,019
Booky Mountain Area	FIRES	730	355	9	24	1,080	415	2,613
Rocky Mountain Area	ACRES	9,880	58,816	354	2,474	562,390	13,530	647,444
Footorn Aron	FIRES	364	0	13	15	3,670	332	4,394
Eastern Area	ACRES	2,137	0	19	130	18,283	3,407	23,976
Couthorn Area	FIRES	306	472	50	27	23,655	399	24,909
Southern Area	ACRES	43,518	6,546	165,971	54,654	1,357,081	26,319	1,654,089
TOTAL FIRES:		3,278	2,761	162	265	39,935	6,171	52,572
TOTAL ACRES:		229,879	2,589,500	189,757	98,489	3,379,613	2,342,227	8,829,465

Ten Year Average Fires (2007 – 2016 as of today)	58,700
Ten Year Average Acres (2007 – 2016 as of today)	6,130,319

Prescribed Fires and Acres Yesterday (by Ownership):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaaka Araa	FIRES	0	0	0	0	0	0	0
Alaska Area	ACRES	0	0	0	0	0	0	0
Northwest Area	FIRES	0	1	0	0	0	4	5
Northwest Area	ACRES	100	32	0	0	0	407	539
Northern California Area	FIRES	0	0	0	0	0	0	0
Northern Camornia Area	ACRES	0	0	0	0	0	200	200
Southern California Area	FIRES	0	0	0	0	0	0	0
Southern California Area	ACRES	0	0	0	0	0	0	0
Northern Rockies Area	FIRES	0	0	0	0	0	0	0
Northern Rockies Area	ACRES	8	0	0	0	0	0	8
Great Basin Area	FIRES	1	1	0	0	0	1	3
Great basin Area	ACRES	18	15	0	0	0	387	420
Couthwest Area	FIRES	0	0	0	0	0	2	2
Southwest Area	ACRES	35	22	0	0	0	2,168	2,225
Decky Mountain Area	FIRES	0	0	0	0	0	0	0
Rocky Mountain Area	ACRES	0	0	0	0	0	0	0
Costorn Area	FIRES	0	0	1	0	0	0	1
Eastern Area	ACRES	0	0	7	0	0	0	7
Cautharn Araa	FIRES	0	0	0	0	34	3	37
Southern Area	ACRES	0	0	0	0	1,049	1,636	2,685
TOTAL FIRES:		1	2	1	0	34	10	48
TOTAL ACRES:		161	69	7	0	1,049	4,798	6,084

Prescribed Fires and Acres Year-to-Date (by Ownership):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaska Area	IRES	0	0	0	0	6	2	8
	ACRES	0	0	0	0	64,850	100	64,950
Northwest Area	FIRES	10	18	16	2	3	198	247
	ACRES	2,745	1,909	5,623	39	19	22,708	33,043
Northern California Area	FIRES	1	5	7	14	0	96	123
	ACRES	20	654	389	446	0	10,829	12,338
Southern California Area	FIRES	0	3	9	6	0	154	172
	ACRES	0	62	1,412	954	0	4,676	7,104
Northern Rockies Area	FIRES	6	13	42	6	32	141	240
	ACRES	462	3,820	18,690	752	1,372	7,645	32,741
Great Basin Area	FIRES	6	23	7	9	30	88	163
	ACRES	863	8,074	2,501	4,327	799	19,324	35,888
Southwest Area	FIRES	29	34	4	5	5	150	227
	ACRES	6,377	47,012	4,952	1,639	6,105	94,699	160,784
Rocky Mountain Area	FIRES	26	36	45	11	86	97	301
	ACRES	1,191	3,529	22,427	2,541	3,630	44,067	77,385
Eastern Area	FIRES	51	0	172	23	1,285	228	1,759
	ACRES	26,679	0	26,244	6,162	98,153	66,917	224,155
Southern Area	FIRES	49	0	128	28	68,330	620	69,155
	ACRES	6,912	0	102,565	133,644	1,549,503	536,704	2,329,328
TOTAL FIRES:		178	132	430	104	69,777	1,774	72,395
TOTAL ACRES:		45,249	65,060	184,803	150,504	1,724,431	807,669	2,977,716

^{***} Changes in some agency YTD acres reflect more accurate mapping or reporting adjustments.

<u>Predictive Services Discussion:</u> The cold front and upper level trough will strengthen considerably as it becomes better organized as it moves east in to the Mississippi River Valley. Showers and strong storms are expected with the passage of the front. High pressure along the West coast will promote warmer weather west of the Cascade and Sierra crests while cool conditions will persist under northerly flow from the Intermountain West through the Great Plains. The East coast, however, will continue to experience normal, dry conditions as the upper level ridge of high pressure begins to weaken and move into New England.

^{***}Additional wildfire information is available through the Geographic Areas at http://gacc.nifc.gov/



New Research on Safety Zones

Operational Engagement

[If you have computer or smart phone access, please watch the video for this subject using the link or QR code...Otherwise, read on Old School...]



First, a Fire Behavior 101 refresher: You can warm yourself around the sides of a campfire for quite some time; that's **radiant heat.** If you hold your hands over the top of the fire, you'll get burned relatively quickly; that's **convective heat.**

Basically, wind or slope can tip the flames over, so that the convective heat is no longer going straight up, but is now aimed more along the ground, sending the heat and hot gasses much further ahead. This causes pre heating of the fuels, faster fire spread and greater fire intensities. You'll need a larger Safety Zone if that fire is coming towards you.

The current equation for safety zone size in the IRPG (page 8) is:

4 x Flame Height = Safe Separation Distance

To make estimations of flame height though, you either have to use past fire behavior observations or use your experience to guess what the fire may do in the future. After a decade of research, Bret Butler, at the Missoula Technology and Development Center, suggests removing the uncertainty and guesswork that comes with estimating flame height by taking the general rule of thumb: Flame Height = 2 x Vegetation Height

...and substituting that Flame Height equation into the original IRPG equation, to give:

4 x 2 x Vegetation Height = Safe Separation Distance, which simplified is: 8 x Vegetation Height = Safe Separation Distance

But remember, that's still for **radiant heat** only, on flat ground, with no wind. To take into account the **convective heat** from slope or wind, Butler's research suggests that a "Slope Wind Factor" is needed in the equation:

8 x Vegetation Height x Slope Wind Factor = Safe Separation Distance

But what is the Slope Wind Factor? Current research is indicating that the Slope Wind Factor is between 1 and 10; with Butler arguing it may be closer to between 1 and 5. Butler's ongoing research is focused on answering that question by gathering sensor data on fires, running computer simulations, and refining the models...Stay tuned.

In the meantime, utilize the calculations on page 8 of your IRGP to help you determine a bare minimum size for your safety zone with the understanding that slope and wind need to be considered in your decision making.

But remember, a safety zone is only good if you can get there...join us tomorrow for some thoughts on Escape Routes.

Have an idea? Have feedback? Share it.