

Wildfire: The Big Picture!

**NC Prescribed Fire Council Meeting
August 2018**

Kevin Harvell

Type 2 Incident Commander

Regional Forester - NC Forest Service

By MIREYA VILLARREAL / CBS NEWS / August 1, 2018, 6:38 PM

Devastating wildfires a "new normal" for California

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California firefighters battle an enemy they can't beat: A changing climate

Trevor Hughes, USA TODAY

Published 2:02 p.m. ET Aug. 1, 2018 | Updated 6:27 p.m. ET Aug. 1, 2018



(Photo: Trevor Hughes, USA TODAY)

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LEWISTON, Calif. — As flames from the deadly Carr Fire light the midnight sky around him, firefighter Derek Longoria gratefully lowers himself to the pavement and tears into the first meal he's had in 12 hours.

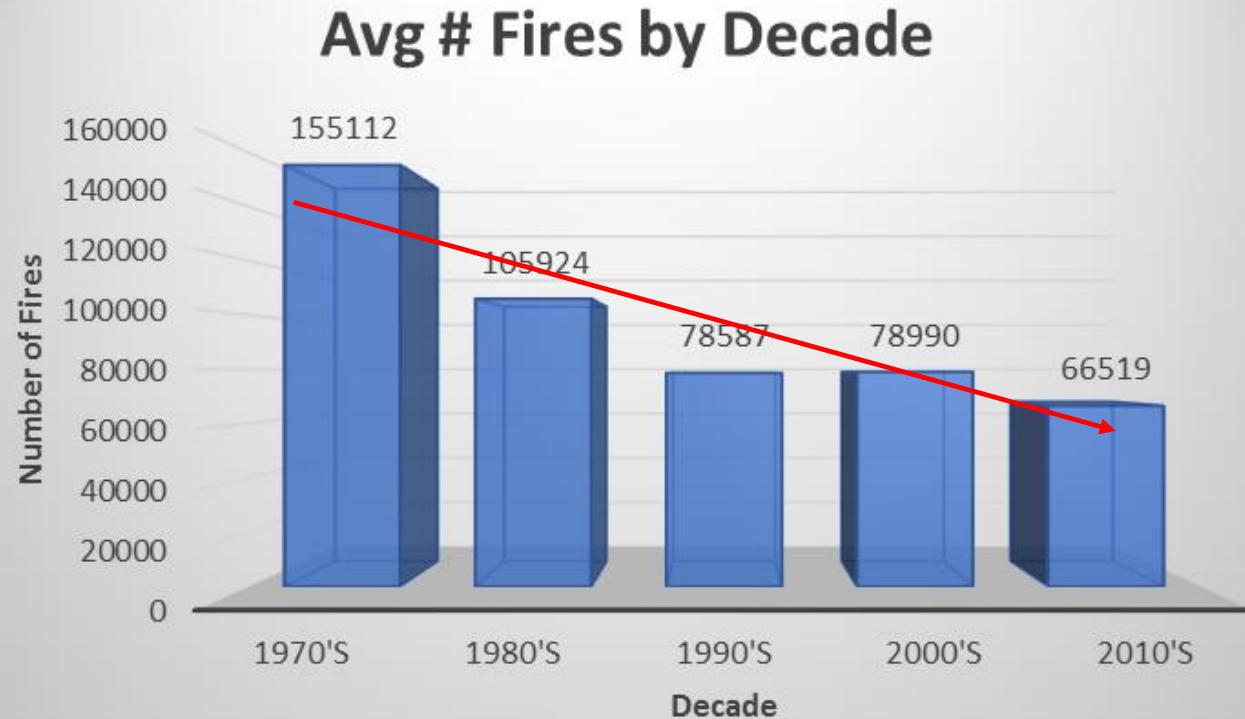
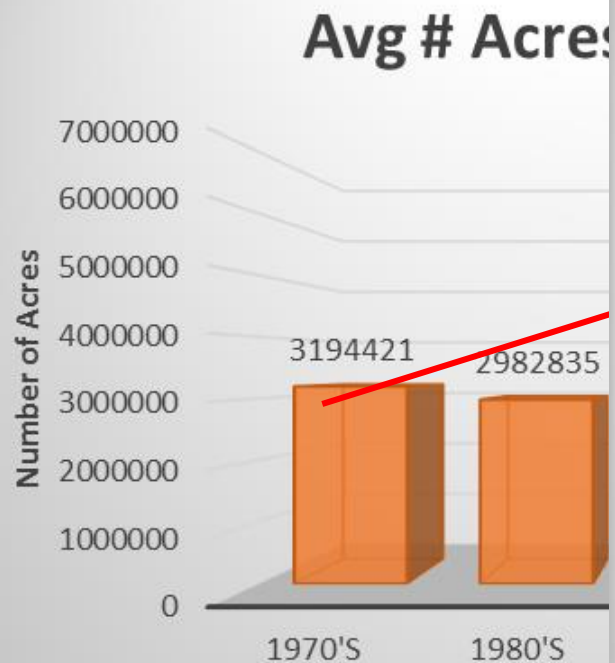


Questions & Thoughts

- Are Fires Harder to Control? Average Fire Size has Increased
- Fire Season is Longer than it Used to be
- Are there Less Wildland Firefighting Resources Available?
- Is Climate Change to Blame?
- The Fire Paradox?

Wildfire Statistics

- Nationwide (Federal and State) including Alaska from NIFC



1970

YEARS

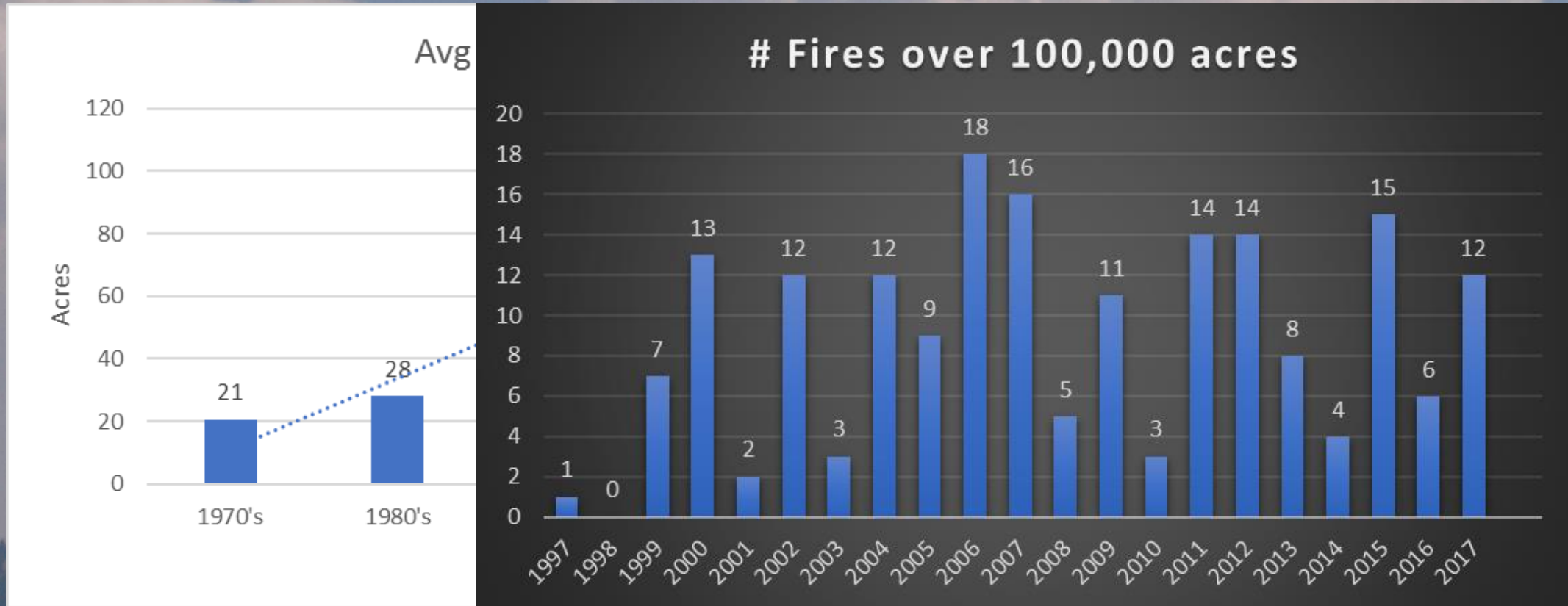
2015

Data: National Interagency Fire Center

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Wildfire Statistics Cont.

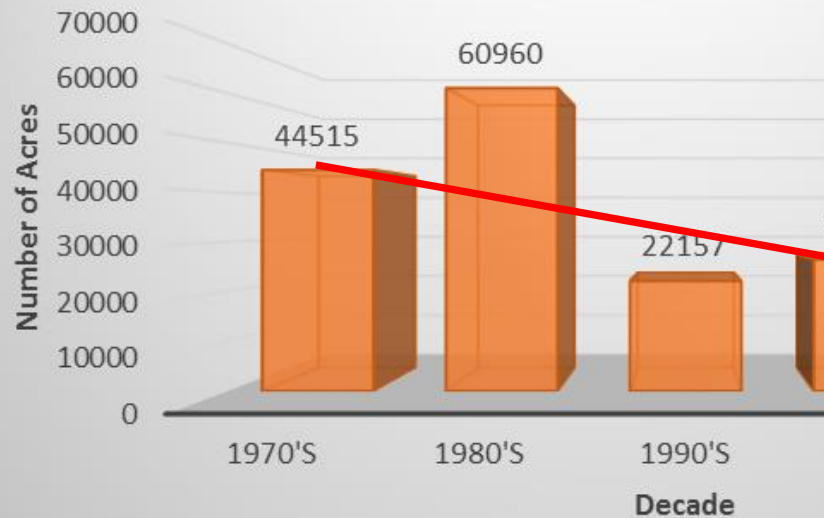
- Average Fire Size Nationwide (Federal and State) including Alaska From NIFC



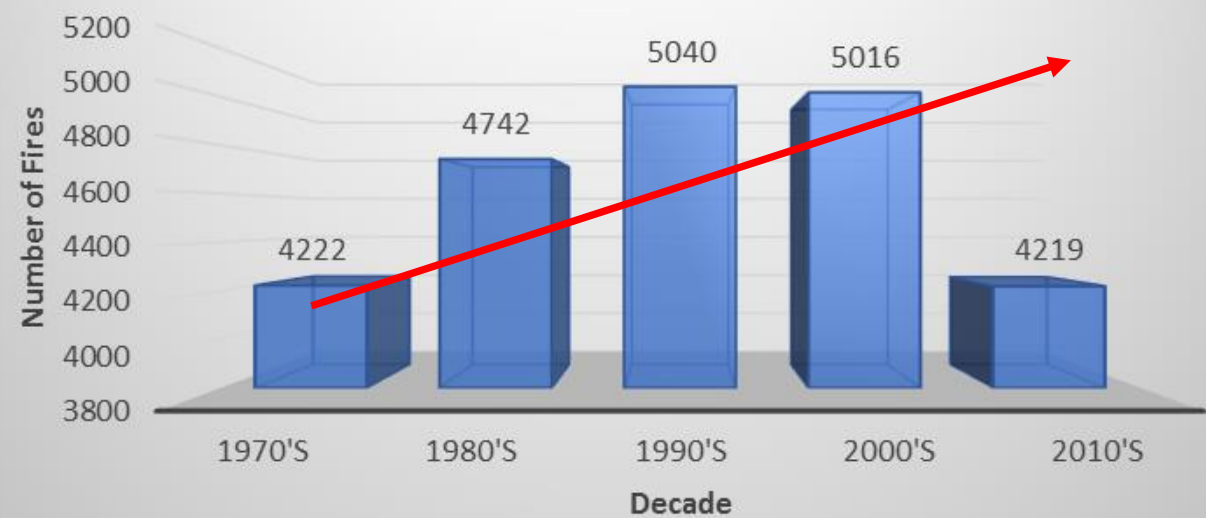
Wildfire Statistics Cont.

- North Carolina (State and Private Land Only)

Avg # Acres by Decade (North Carolina)

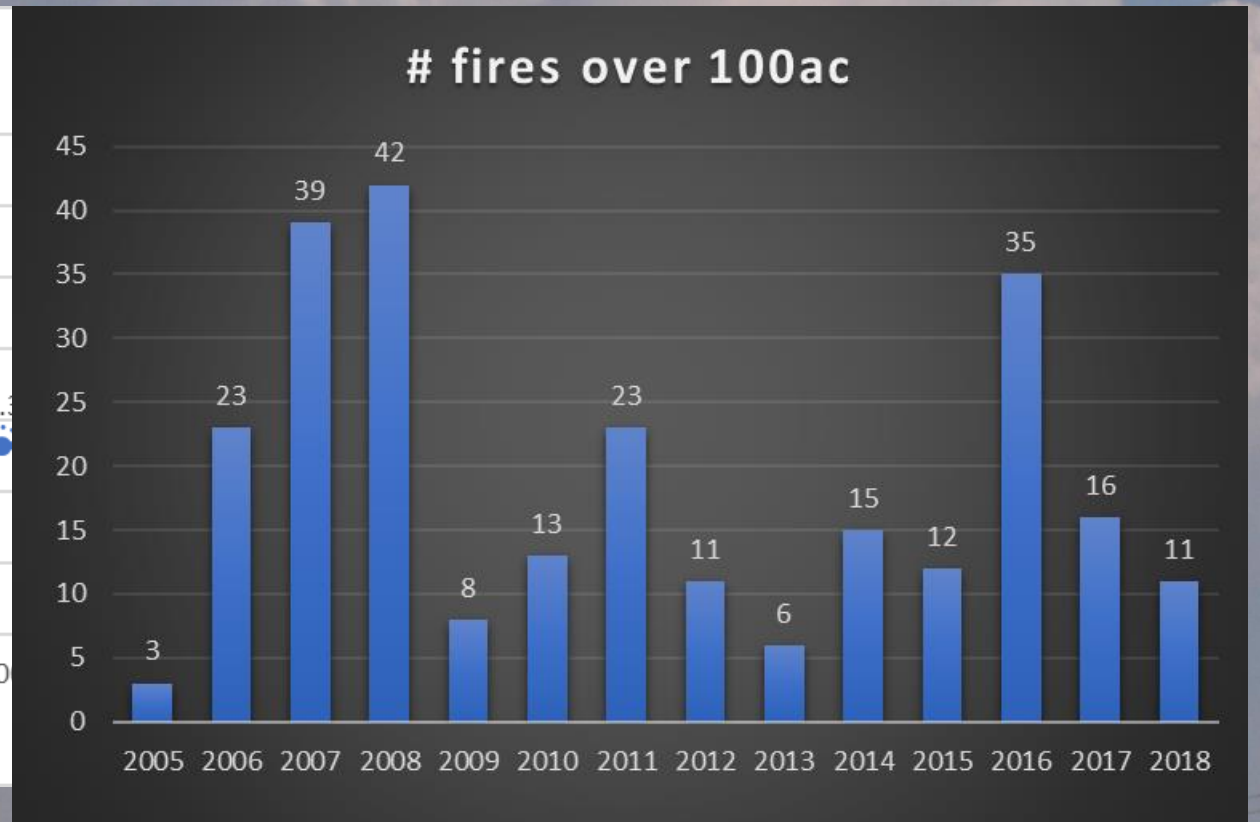
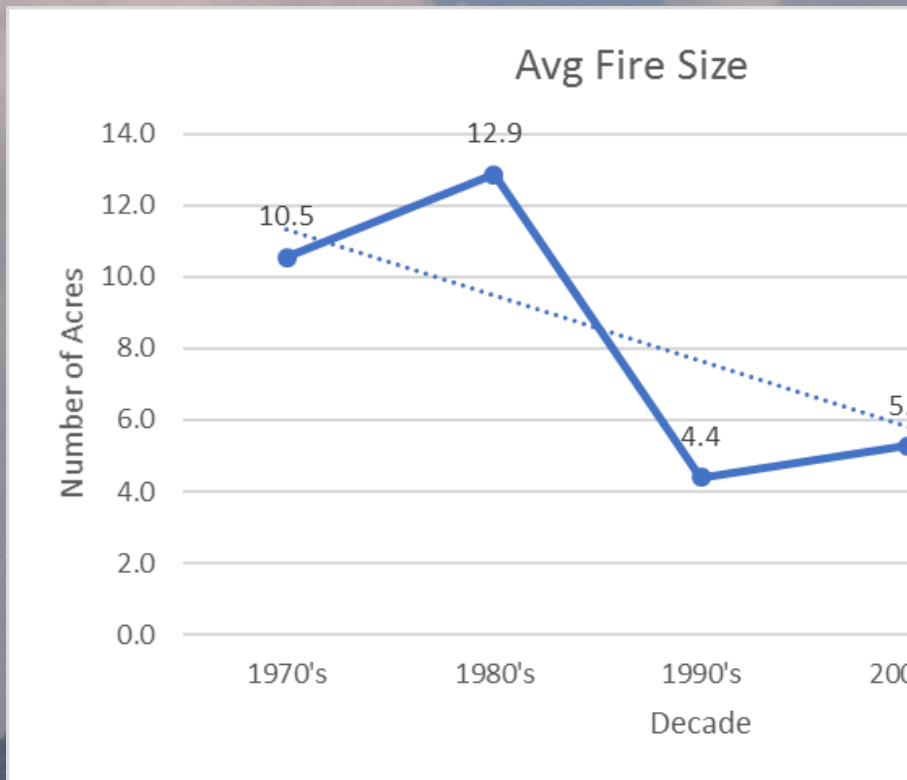


Avg # Fires by Decade (North Carolina)



Wildfire Statistics Cont.

- Average Fire Size - North Carolina (State and Private Land Only)



Length of Fire Season (Western US)

	1973–1982	1983–1992	1993–2002	2003–2012
Julian Date For Large Fires (>400ha)				
First Discovery	154	150	115	120
Last Discovery	284	286	281	282
Last Control	292	316	316	342
Season Length	138	166	202	222
Mean Burn Time	6	23	40	52

Westerling ALR.
2016
Increasing western
US forest wildfire
activity:
sensitivity to
changes in the
timing of spring.
Phil. Trans. R. Soc.
B 371: 20150178

IMT Resources Available

Table 1. Counts of Federal and state-sponsored IMTs by type in 2004 and 2011

IMTs by Type		2004	2011
Type 1 Federally Sponsored IMTs		17	16
Type 2 Federally Sponsored IMTs		35	33
State-sponsored IMTs (Type 1 and Type 2 Qualified)		22	34
Fire US	IMTs by Type	2018	2
NIMO	Type 1 Federally Sponsored IMTs	16	4
Area C	Type 2 Federally Sponsored IMTs	32	4
NIMO		3	
Area Command		3	
State Sponsored Teams (Type 1 & 2)		24* (2-NC)	

Note: The

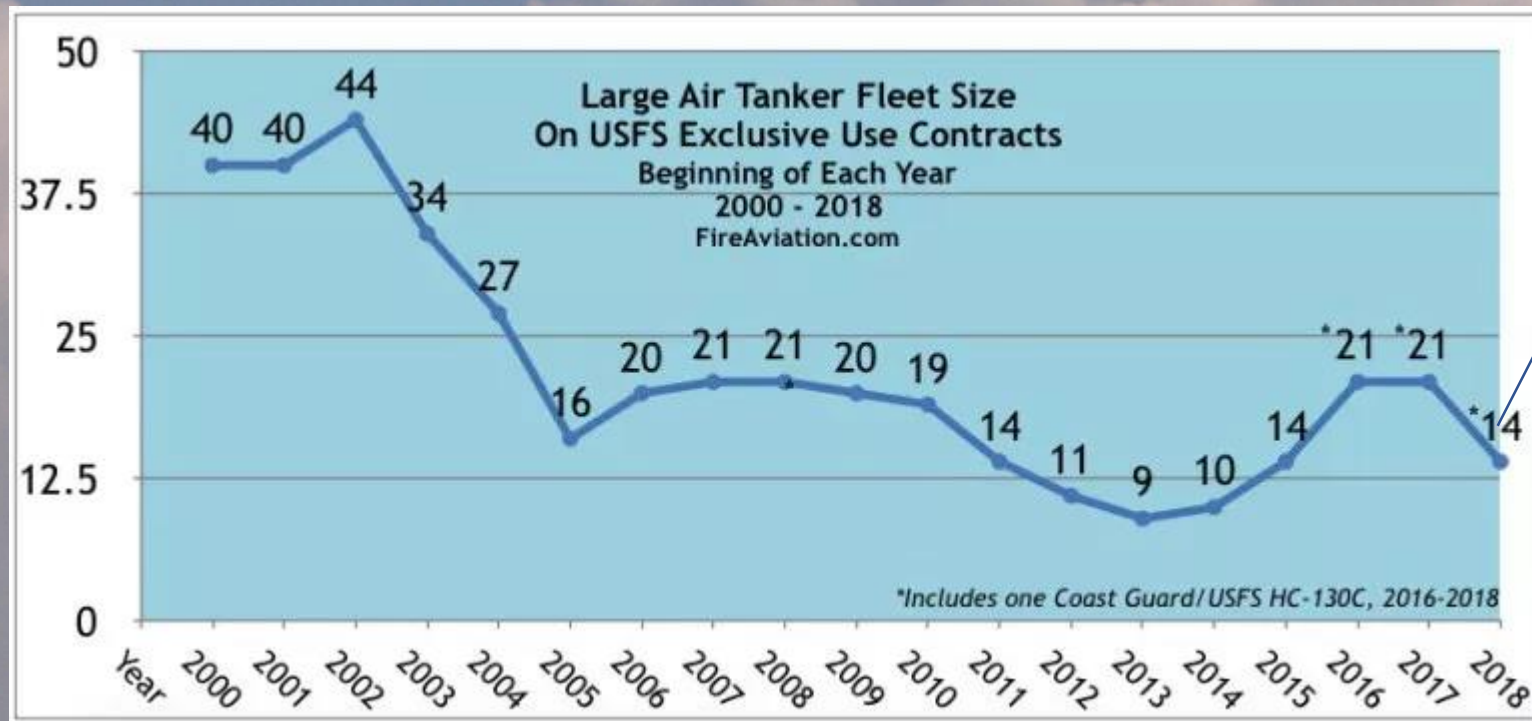
Source –
for the F

Source – Geographic Coordination Centers

Aviation Resources

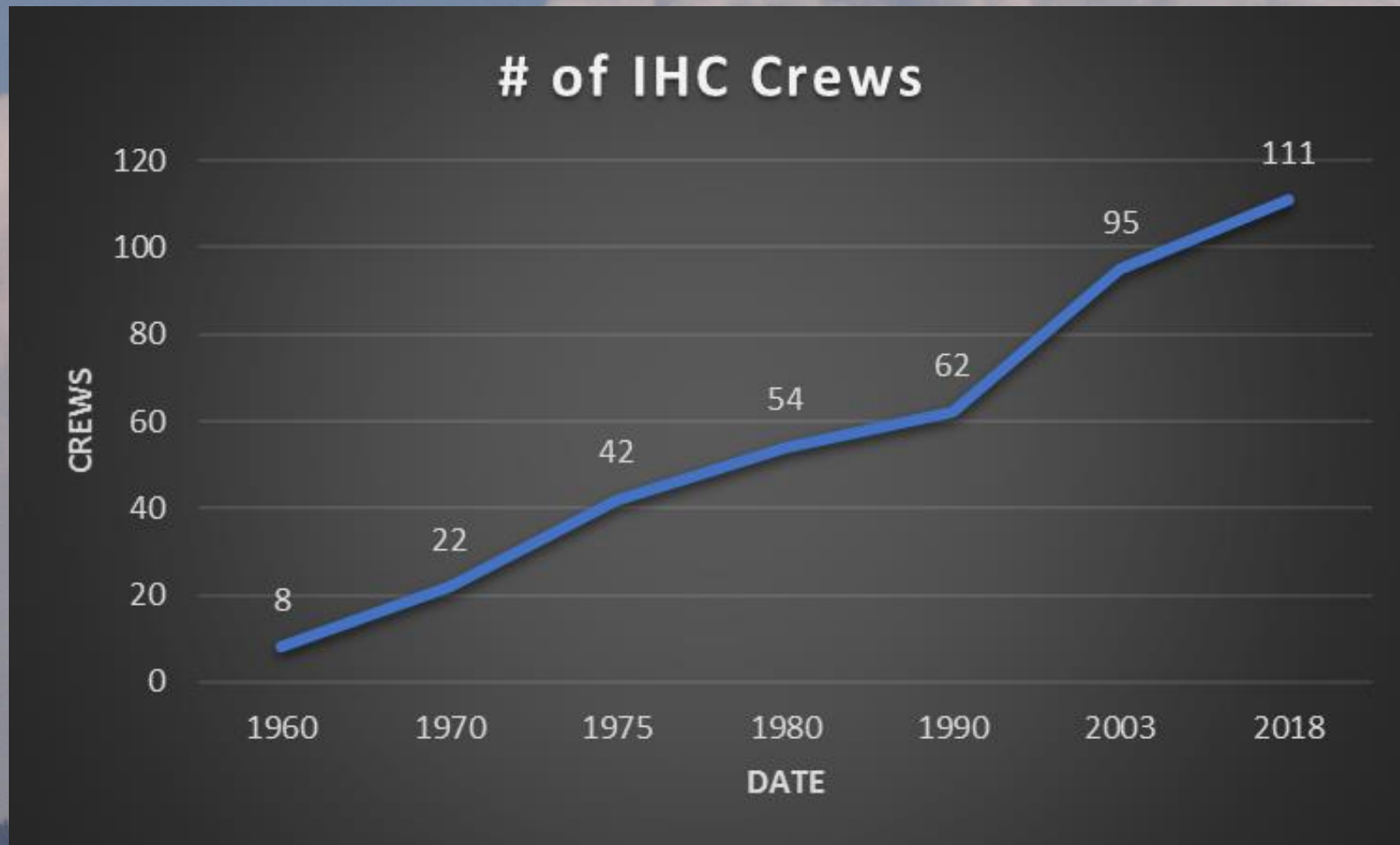


Large Air Tanker Resources Available



Does not include
11 Call When
Needed Air
Tankers

Hot Shot Crew Resources

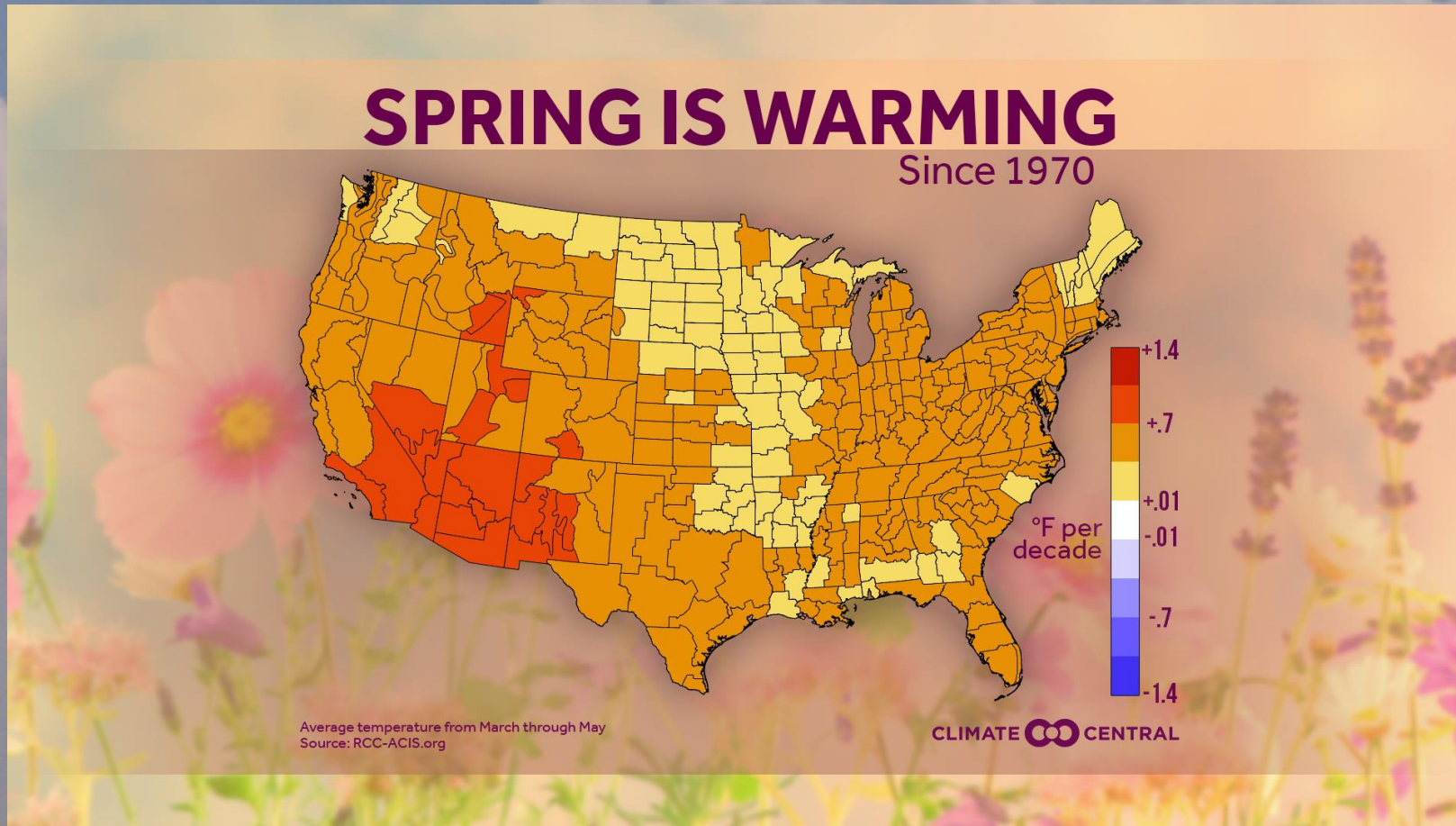


Raw Data from:
Hotshot Crew History
in America – National
Interagency Hotshot
Crew Steering
Committee. 2017

What about Climate Change?

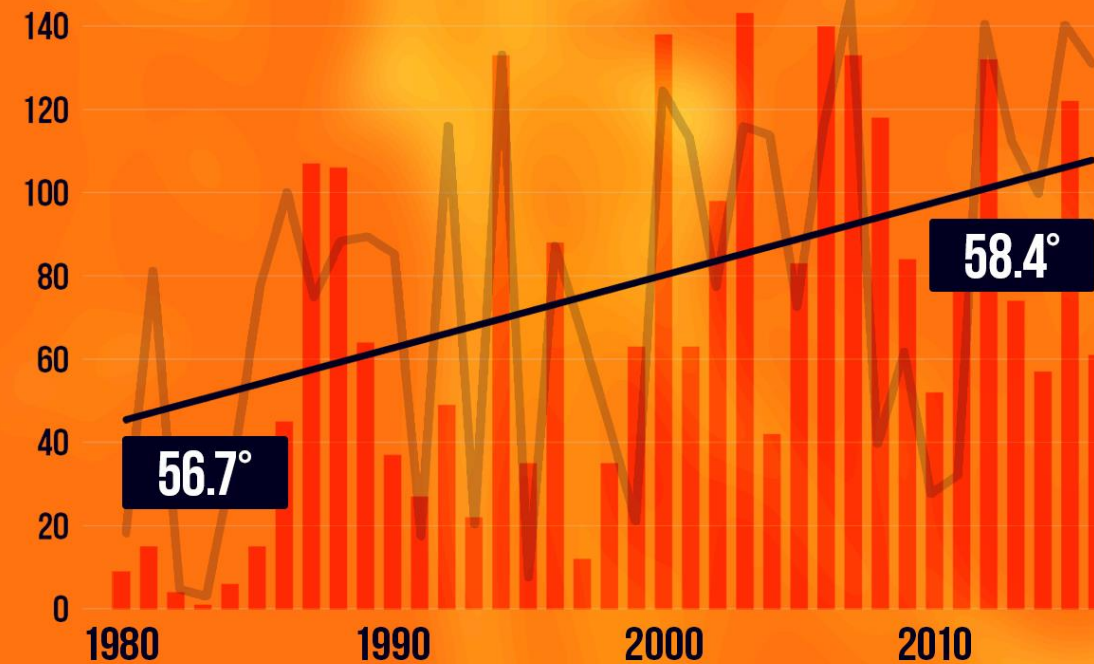
- "...human-caused climate change caused over half of the documented increases in fuel aridity since the 1970s and doubled the cumulative forest fire area since 1984. This analysis suggests that anthropogenic climate change will continue to chronically enhance the potential for western US forest fire activity..." John T. Abatzoglou and A. Park Williams; Impact of anthropogenic climate change on wildfire across western US forests PNAS October 10, 2016. 201607171; published ahead of print October 10, 2016.

What about Climate Change?



What about Climate Change?

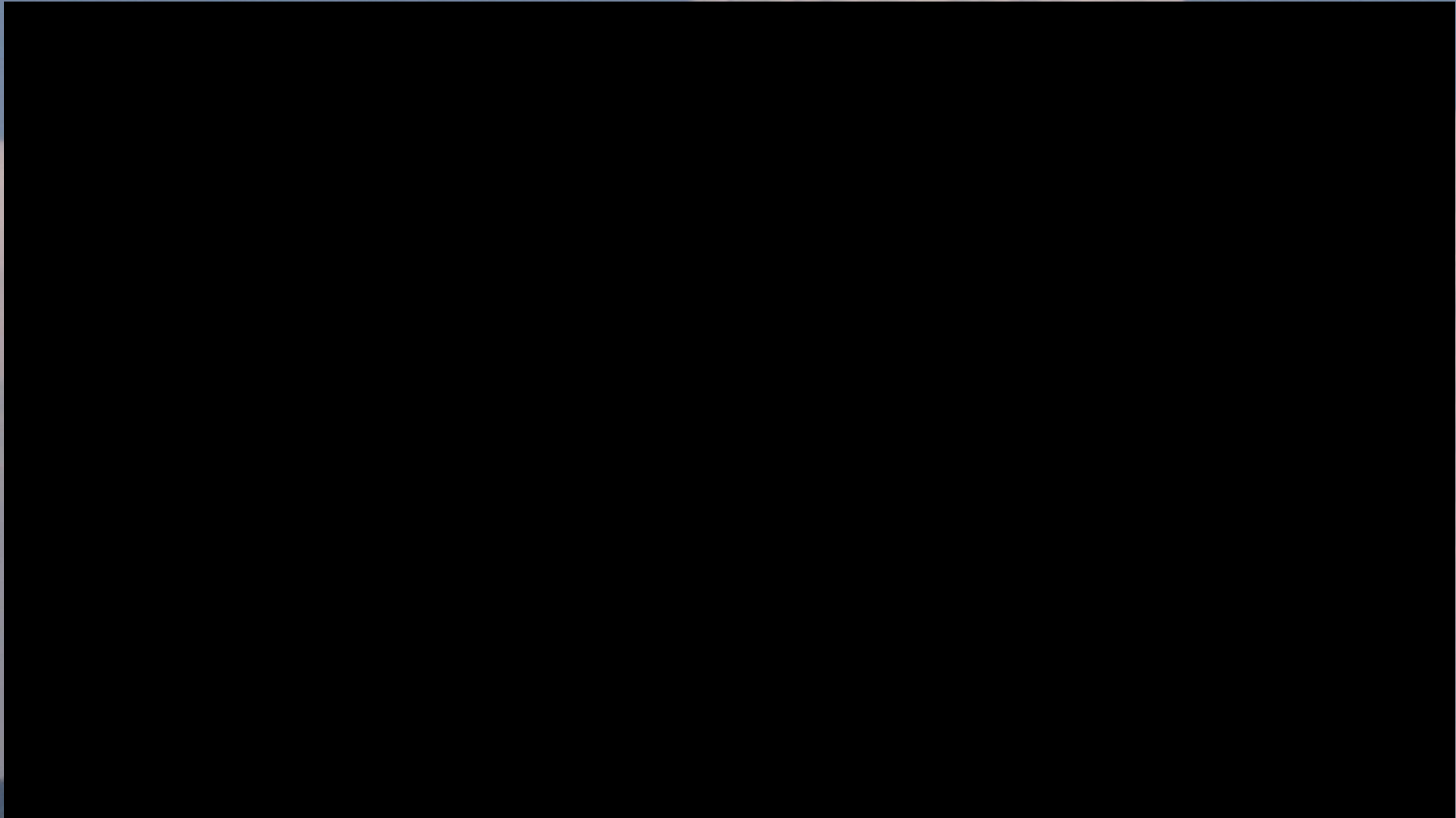
Hotter Years, More Fires Western States



Wildfires greater than 1,000 acres on USFS land. Excludes prescribed burns.
Source: USGS.gov

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The Fire Paradox – Untamed Science



Simplified Model of the Fire Paradox





U.S. Forest Service - National Forests in North Carolina

about 6 months ago



Fire has been a part of forests like the Nantahala for thousands of years. The Forest Service and our partners use a science-based prescribed burn program to promote forest health and help reduce the risk of catastrophic wildfire to local communities. These low to medium intensity fires, like the one occurring today near Whitewater Falls and pictured below, act as a cleaning agent, thinning out leaves and woody debris, to promote native species and improve wildlife habitat. #GoodFire #NutureNature #CareForTheLand



76 6 25

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PROGRAMS



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POSTED ON [JANUARY 29, 2018](#) BY [PILOT MOUNTAIN NEWS](#)

Prescribed burn planned for state park

NEWS, TOP STORIES

By Bill Colvard - bcolvard@MtAiryNews.com



A prescribed burn at Pilot Mountain State Park is shown in 2015.

PILOT MOUNTAIN — Between now and late may, N.C. State Parks and the N.C. Forest Service plan to conduct a 270-acre prescribed burn on the south and west facing slopes of Pilot Mountain, according to a statement by Matt Windsor, park superintendent for Pilot Mountain State Park.

This burn will be followed up by a later 200-acre burn on the upper north and east facing slopes of the mountain so that fuel loads are kept low on the most fire-prone portions of the park. The long-term goal is to use future controlled burns at a 5- to 10-year interval to maintain the mountain's natural communities and ensure safety of visitors and residents.



ning more burns safely could reduce catastrophic risks posed by wildfire. (Cal Fire)

Questions

