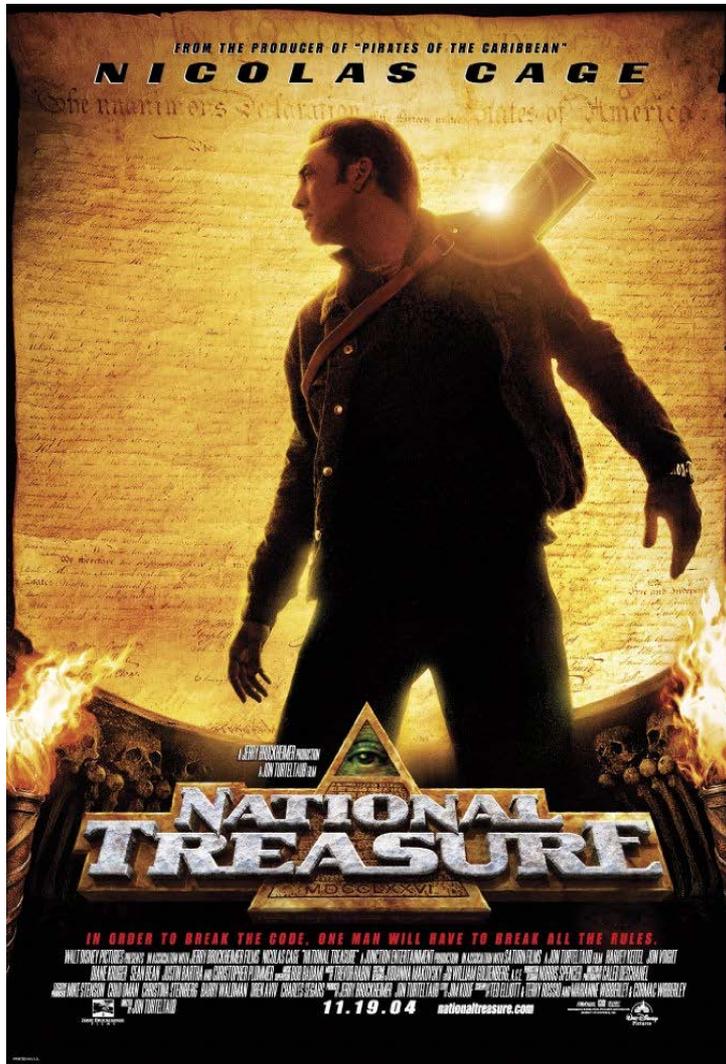


2017 Fire Season Outlook





Staring Nicolas Cage as Don Boland

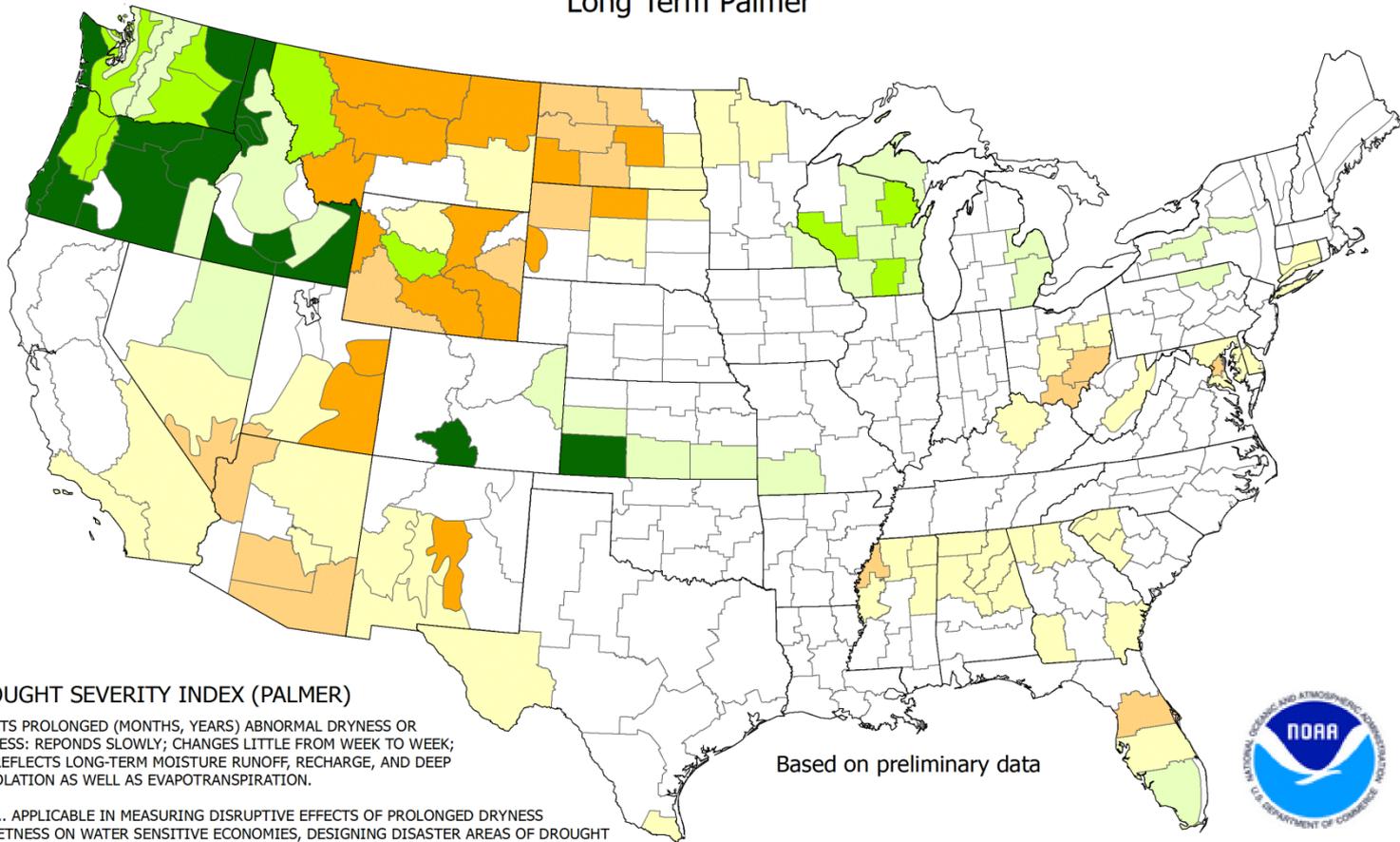
- 6 Fire & Rescue Mutual Aid Regions
- 64 Operational Areas
- FIRESCOPE - SEMS/NIMS
- 154 Engines (114 Type I Engines, 40 Type III Engines)
- 12 Tactical Water Tenders
- 6 Communication Support Units
- 13 Swift/Flood Water Rescue Teams
- 8 State/National Urban Search and Rescue Task Forces
- 12 Regional US&R Task Forces
- 18 Medium Rescue Trailers
- 12 Type II Hazardous Materials Response Units
- 6 Radio Caches

Cal OES Fire & Rescue Snapshot

Drought Severity Index by Division

Weekly Value for Period Ending Jun 10, 2017

Long Term Palmer



DROUGHT SEVERITY INDEX (PALMER)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; REponds SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

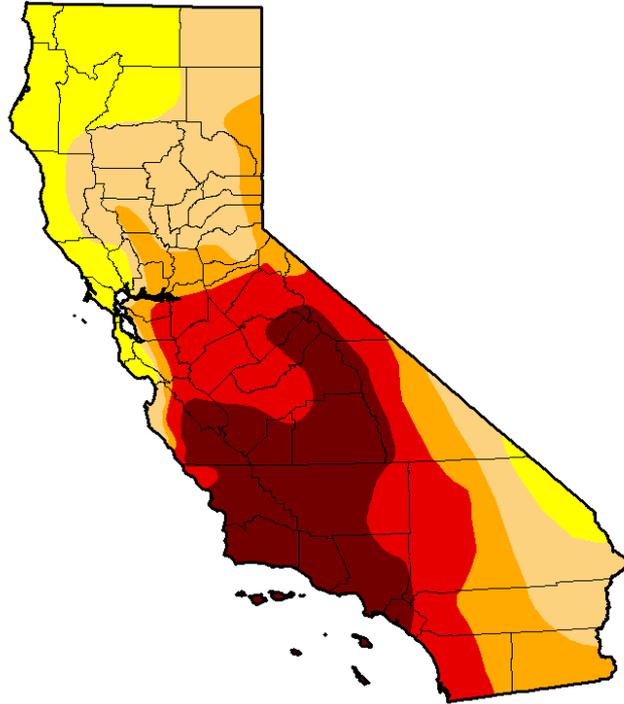
Based on preliminary data



- | | |
|---------------------------------|------------------------------------|
| -4.0 or less (Extreme Drought) | +2.0 to +2.9 (Unusual Moist Spell) |
| -3.0 to -3.9 (Severe Drought) | +3.0 to +3.9 (Very Moist Spell) |
| -2.0 to -2.9 (Moderate Drought) | +4.0 and above (Extremely Moist) |
| -1.9 to +1.9 (Near Normal) | |



Statewide



Intensity:

D0 (Abnormally Dry)

D1 (Moderate Drought)

D2 (Severe Drought)

D3 (Extreme Drought)

D4 (Exceptional Drought)

Drought Monitor

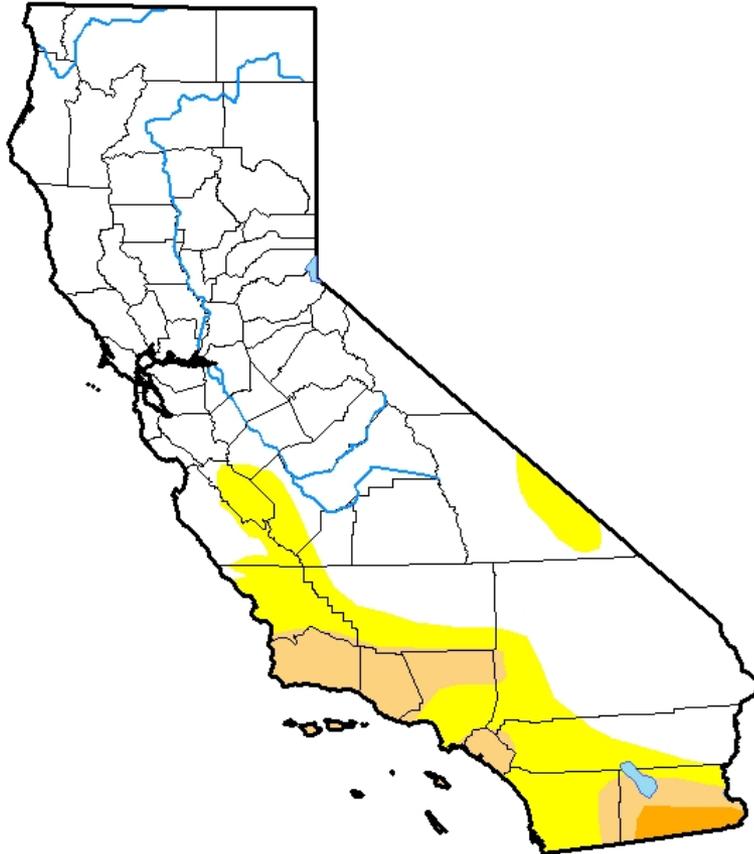


U.S. Drought Monitor California

June 6, 2017

(Released Thursday, Jun. 8, 2017)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	76.47	23.53	8.24	1.06	0.00	0.00
Last Week <i>05-30-2017</i>	76.47	23.53	8.24	1.06	0.00	0.00
3 Months Ago <i>03-07-2017</i>	76.54	23.46	8.24	1.10	0.00	0.00
Start of Calendar Year <i>01-03-2017</i>	18.07	81.93	67.61	54.02	38.17	18.31
Start of Water Year <i>09-27-2016</i>	0.00	100.00	83.59	62.27	42.80	21.04
One Year Ago <i>06-07-2016</i>	4.27	95.73	83.91	59.02	42.99	21.04

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Deborah Bathke
National Drought Mitigation Center

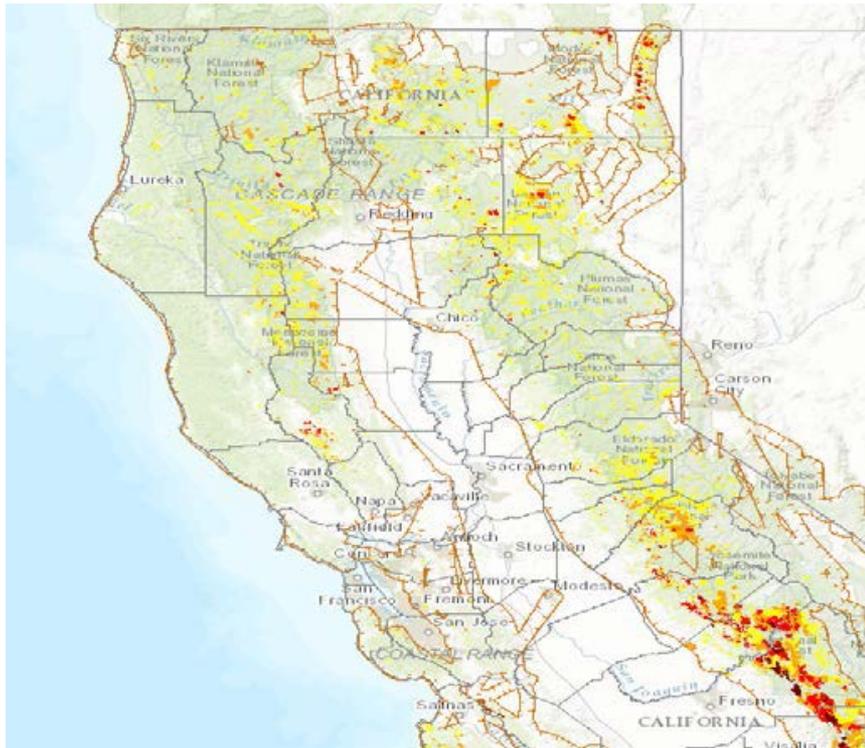


<http://droughtmonitor.unl.edu/>

Statewide



Areas with Tree Mortality



2016 Reported Conditions

- There is also a growing dead fuel component across a wide swath of the region
- Mass die-off of vegetation especially in the Sierras where an estimated 66 million trees are dead or are dying due to the drought and an outbreak of the bark beetle

CURRENT CONDITIONS

- 102,000,000 dead trees since 2010

Fire Fuels

<http://www.fire.ca.gov/treetaskforce/index>

Tree Mortality Task Force

<http://cgs.fire.ca.gov/TreeMortalityViewer/>

Tree Mortality Viewer



REMOVE YOUR DEAD TREES. REDUCE YOUR WILDFIRE RISK.

Tree Mortality—Drought and Bark Beetles
What Property Owners Need to Know—FAQs



Fire Fuels

https://youtu.be/x1s0eIS_XB4?si=13



Past Weather

- **2016-17** rainy season has produced 150-300% of normal precipitation, and the snowpack topped out at 150% of the normal maximum depth/water equivalent

2017 Weather Outlook

- After occasional cool wet late spring weather, warmer and drier than normal conditions are expected for the remainder of the summer
- Desert SW Monsoon expected to be near normal intensity, but still too early to tell how frequently it will reach North Ops region
- Overall lightning activity expected to be below to near normal

Fire Potential at Lower Elevations (≤ 3500 ft)

- Abundant spring grass crop
- Curing is underway, but moist conditions will keep curing process slow into July
- Grass and brush fires to gradually become more frequent, but slow spread rates should allow successful Initial Attack well into July
- Significant Fire Potential to increase to Above Normal by August, possibly late July, and continue into October as fine fuels become fully cured



Northern California



Fire Potential at Middle Elevations (3500 ft –6500 ft)

- Some potential of Above Normal grass and brush fire activity beginning in August, possibly late July, and continuing into Sept/Oct at the lower end, but overall generally quiet to normal fire activity

Fire Potential at Upper Elevations (≥ 6500 ft)

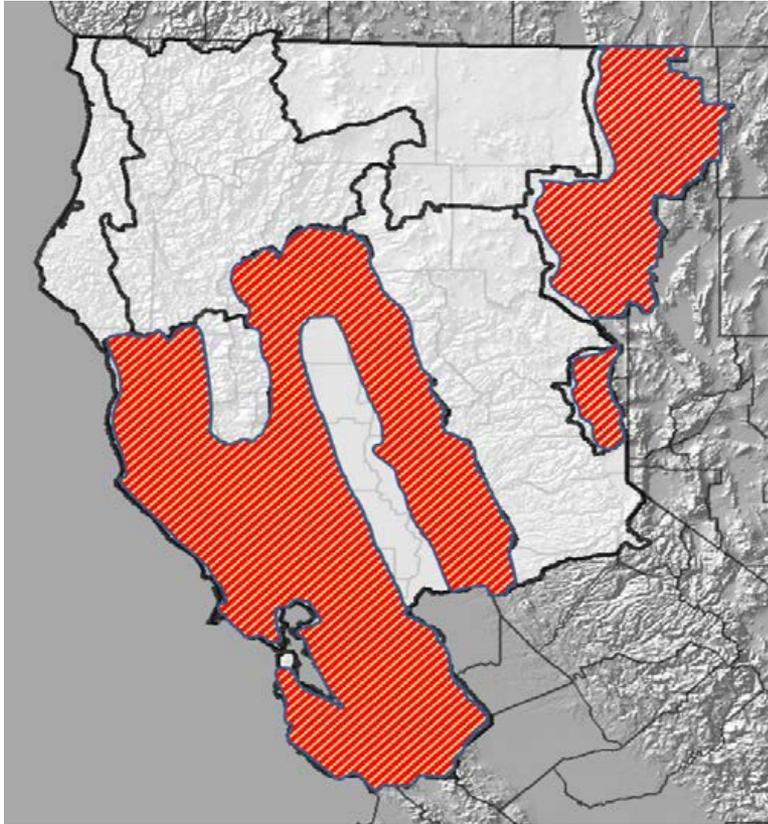
- Very heavy snow melt runoff into July
- High peak live fuel moisture levels, remaining high later than normal, and may not ever decline to critical levels this summer
- Most likely a quiet fire season, but lightning activity is the wildcard, especially if ignitions occur August-September in high-density tree mortality areas



Northern California



Increasing to above normal



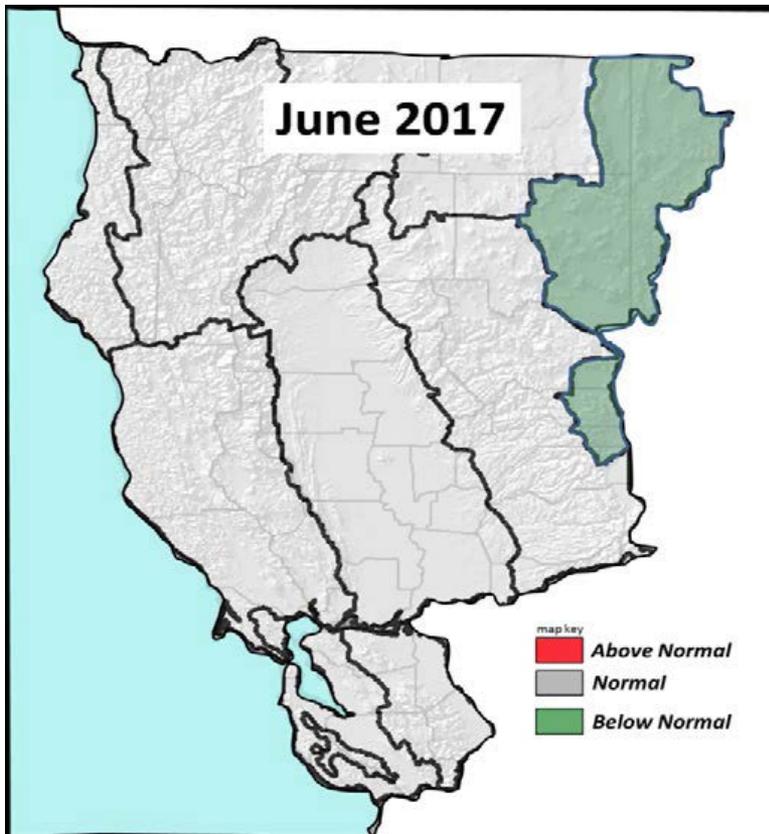
July 2016 Highlights:

- *Significant Fire Potential Increasing to Above Normal in Valleys/Foothills East of the Cascade-Sierra Crest, Sacramento Valley and Foothills, Fine-Fuel-Dominated Areas of Mid Coast and Bay Area PSAs.*
- *Normal Elsewhere*
- Temperatures: 1-3° above normal
- Precipitation: 70-110% of normal
- Pockets of Increasing Tree Mortality

North Ops



Normal to Below Normal



JUNE-SEPT HIGHLIGHTS:

- Abundant snow pack after very wet 2016-17 rainy season, producing heavy runoff.
- Robust fine fuel crop at lower elevations and Far East Side.
- Very moist conditions at mid and upper elevations will delay active fire season.
- Slightly drier and warmer than normal June-September.
- Normal Significant Fire Potential through July, which is typically quiet. Except, Below Normal Far East Side in June
- Above Normal Significant Fire Potential lower elevation areas and Far East Side in August and September. Normal elsewhere.

North Ops



TUESDAY, JULY 26, 2016

NORTHERN CALIFORNIA GEOGRAPHICAL AREA COORDINATION CENTER

***** VERY HOT, near-to-record afternoon high temperatures will continue, hottest day expected to be Thursday. Low afternoon RH and areas of poor overnight recovery will continue. *****

- Strong high pressure has moved into the region and will stay into the weekend before it weakens somewhat.
- Afternoon highs will become a bit warmer over the next few days with the warmest inland valleys mostly 105-110.
- Thursday is expected to be the warmest day with highs around 112 in the very warmest inland valleys.
- The high will lose some strength this weekend with something of a cooling trend likely bringing back seasonably hot temperatures by early next week.
- Widespread afternoon RH values of 7-15% will continue, and many inland and higher elevation areas will also continue seeing overnight RH recovery of only 30-40%.
- The marine layer along the coast will be about 1000 ft. thick the rest of the week with minimal overnight and morning low cloudiness but is likely to deepen somewhat over the weekend.
- Winds will generally be light diurnal wind patterns with light downslope/down-valley winds overnight/early morning and light up slope/up valley in the afternoons.
- Some gusty westerly winds will be possible this weekend over our far eastern areas.

INTERAGENCY FIRE WEATHER CENTER— PREDICTIVE SERVICES UNIT



From: Redding FWX@CALFIRE [mailto:Redding.FWX@fire.ca.gov]
Sent: Thursday, June 01, 2017 6:30 AM
To: North Ops Intel@CALFIRE; CalOES Fire Distribution Group;
SAC ECC@CALFIRE; CALFIRE Northern Region Duty Chief
Notification List; CALFIRE Northern Region Unit Chiefs
Subject: Updated start date of NOPS Predictive Services Weather 7-
Day coverage

Earlier it was announced that the weather unit at NOPS Predictive Services would start 7-Day coverage Sunday June 4.

Our 7-Day coverage will now start **Sunday June 11.**

If you have any questions, please contact us.

NOPS Predictive Services Weather

INTERAGENCY FIRE WEATHER CENTER– PREDICTIVE SERVICES UNIT



SATURDAY, JUNE 10, 2017

The Great Sierra Winter of 2017 just won't quit! A late season (summer?) storm will move into the region over the next couple days. This will bring a dramatic change in the weather Sunday. Here's the key points...

- **Timing** - Low pressure system will move into Northeast CA tonight then spread further south into Tahoe and western Nevada Sunday afternoon through Sunday night. Storm will bring much colder temperatures, gusty winds, rain showers and mountain snow. Red Flag Warning is in effect today for west-central Nevada, due to gusty winds and low humidity.
- **Snow Amounts**- Several inches of snow likely in the Northern Sierra and into the western Nevada mountain ranges, mainly elevations above 6000 feet. (see attached images). Around Tahoe, a dusting of snow may be possible down to lake level Sunday night, with 2-4 inches above 7000 feet, including Donner Pass, Echo Pass, Carson Pass, Brockway Summit, and Mount Rose Summit. In northeast California, storm total snow of 4-8 inches likely in the highest mountains above 6500 feet, with up to a few inches of snow down to around Fredonyer Pass and around Bogard.
- **Impacts** - Light snow will create periods of travel difficulties over the Sierra and Tahoe area passes late Sunday, with impacts in the mountains north and west of Susanville as early as Sunday morning. For western Nevada, snow in the mountains above 6000 feet, impact Mount Rose Highway and Geiger Grade near Virginia City with a couple of inches of snow possible. Early June sun angle will melt off snow on the roads fairly quickly, so impacts on the mountain passes should be short-lived during the daylight hours. Anyone with outdoor activities planned this weekend should be prepared for very cold temperatures and potential for accumulating snow in the mountains. Most valley locations will not freeze, but people outside urban centers in western Nevada with sensitive plants should take precautions especially Sunday night.
- **Context** - While this is not a big winter storm, the timing is very unusual. We only see this every 5 years or so with snow down to Lake Tahoe level in June. Temperatures will be well below normal Sunday, nearly 20-25 degrees below normal for this time of year!
- **Confidence** - Confidence is high that we will see snow in the higher elevations of the Sierra-Tahoe and into Northeast California. Confidence is also high that we will see much below normal temperatures Sunday and Monday with brisk winds. Medium confidence exists for elevations below 6500 feet and down to Lake Tahoe level.



- **Above normal potential is expected for much of Southern California through October**

- Fire activity spiked during the second half of June
- San Gabriel complex, as well as numerous smaller fires, grew rapidly chewing through exceedingly dry vegetation
- Fuel moisture, which was running a bit below average, plummeted in the dead fuels from Kern County southward
- Fuel conditions are expected to continue to support large fires as all fuel types will readily accept flame

Southern California



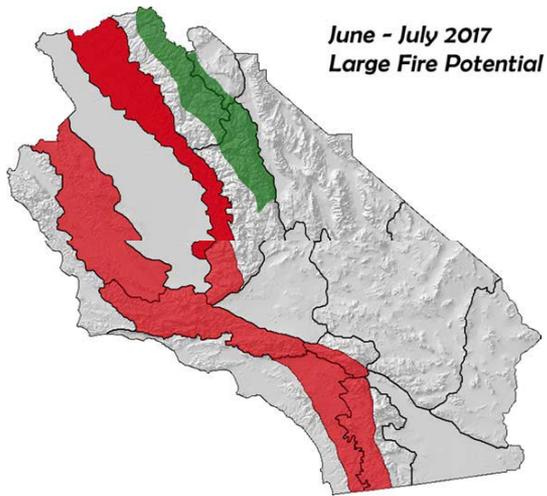


Highlights:

- Slightly below normal “monsoon” thunderstorm activity.
- Fewer number of thunderstorms this summer, but a **greater chance of dry lightning** compared to last year
- Near normal to slightly above normal temperatures.
- Above normal large fire potential over a large area suggesting a very busy season lies ahead.

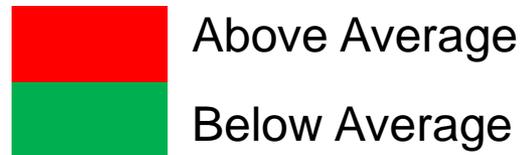
South Ops





Highlights:

- Slightly above normal temperatures this summer.
- Near to slightly below normal summer “monsoonal” thunderstorm activity.
- Large fire potential is expected to be above normal through July across many inland valleys, foothills and valleys due to a heavy grass crop.
- Large fire potential will remain above normal along the Sierra Foothills through the fall.
- Below normal large fire potential in the Sierra high country until melt out occurs above 9,000 feet



South Ops



TUESDAY, JULY 26, 2016

SOUTHERN CALIFORNIA GEOGRAPHICAL AREA COORDINATION CENTER

- Hot and dry conditions will occur away from the coast through Friday.
- Maximum temperatures will be around 10 degrees above normal, with upper 80s and 90s across the mountains and upper 90s to 110 in the valleys.
-
- Minimum humidity will be mainly in the single digits and teens across Central California through Friday.
- Minimum humidity across Southern California will be between 15% and 25% through Wednesday and then drop into the upper single digits and teens Thursday and Friday.
- Temperatures will cool around 5 degrees and humidity will increase a little across the region Saturday through early next week.
- Isolated afternoon showers and thunderstorms will be likely over the mountains and deserts of Southern California east and south of the I-15 Corridor Saturday through early next week.

INTERAGENCY FIRE WEATHER CENTER – PREDICTIVE SERVICES UNIT



MONDAY, JUNE 12, 2017

**SOUTHERN CALIFORNIA GEOGRAPHICAL AREA COORDINATION CENTER
RIVERSIDE, CALIFORNIA**

- Scattered showers will end across the Central and Eastern Sierra this afternoon.
- Westerly winds will be much lighter across the mountains and deserts today, with winds 15 to 25 mph with gusts to 40 mph.
- Temperatures will warm to a little below normal today, with mid 50s to mid 60s across the mountains and 70s to low 80s in the valleys.
- Minimum humidity will remain above 30% away from the deserts today. Temperatures will warm around 10 degrees away from the coastal areas both Tuesday and Wednesday.
- Minimum humidity will drop into the teens and twenties away from the coastal areas Tuesday and Wednesday.
- Slow warming along with minimum humidity in the single digits and teens will occur away from the coast Thursday through early next week.
- Temperatures will reach 100 degrees across the warmer valleys starting Thursday and then be above the century mark Friday through early next week.
- Winds will be light Tuesday through early next week.

INTERAGENCY FIRE WEATHER CENTER – PREDICTIVE SERVICES UNIT



Number of fires and acres:

Interval	Fires	Acres
January 1, 2016 through December 31, 2016	5,762	147,373
January 1, 2015 through December 31, 2015	5,143	307,560
5 year average (same interval)	4,801	165,152
2016 Combined YTD (CALFIRE & US Forest Service)	6,986	564,835

(Statistics include all wildfires responded by CAL FIRE in both the State Responsibility Area, as well as the Local Responsibility Area under contract with the department, plus all large wildfires in State Responsibility Area protected by CAL FIRE's contract counties).

- FMAG Declarations to date: 13
- Soberanes most expensive fire in U.S. history
Estimated Cost to date: \$208,406,000

[CaIOES AGOL 2016 Wildland Fires](#)

2016 Fires to Date



Number of fires and acres:

Interval	Fires	Acres
January 1, 2017 through June 3, 2017	1,339	16,036
January 1, 2016 through June 3, 2016	1,166	6,848
5 year average (same interval)	1,472	11,694
2017 Combined YTD (CALFIRE & US Forest Service)	1,472	18,612

(Statistics include all wildfires responded by CAL FIRE in both the State Responsibility Area, as well as the Local Responsibility Area under contract with the department, plus all large wildfires in State Responsibility Area protected by CAL FIRE's contract counties).

- FMAG Declarations to date: 0

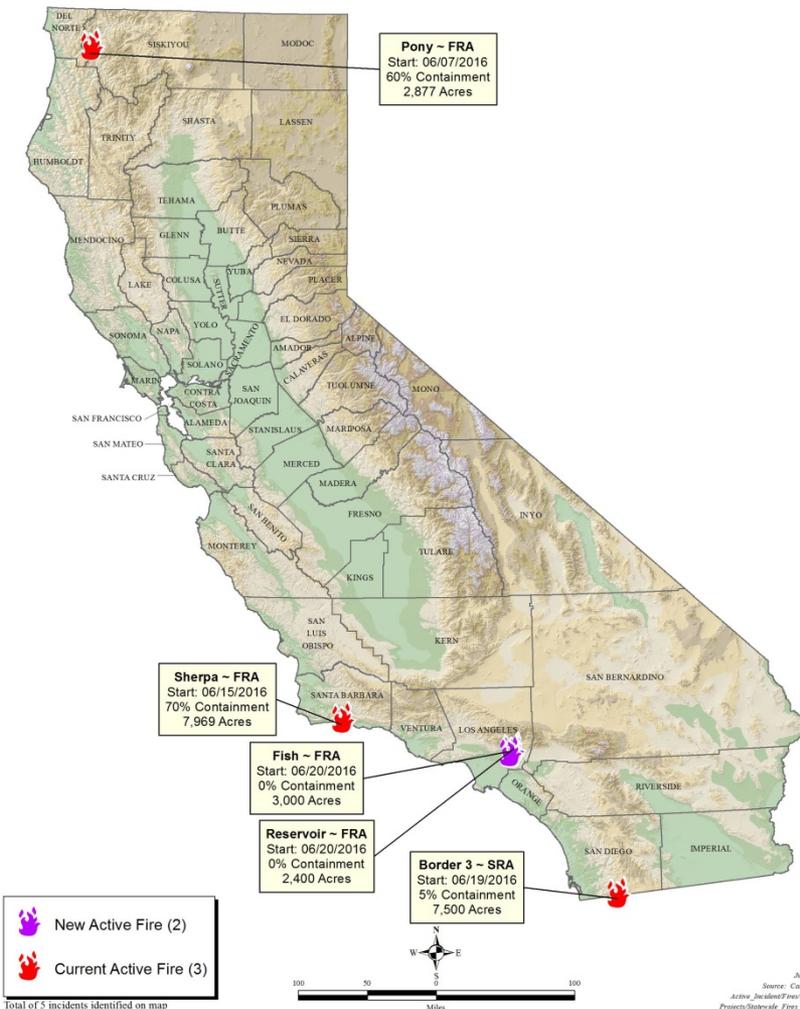
2016 - 2017 Fires to Date Comparison





Current Wildland Fires

as of June 21, 2016 0800 Hours





Current Wildland Fires as of June 22 2017 - 0800 Hours



Active Incident (2)
FRA - Federal Responsibility Area
LRA - Local Responsibility Area
SRA - State Responsibility Area
Total of 2 incidents identified on map

Holcomb - FRA
Start: 06/19/2017
10% Containment
1,540 Acres

120 60 0 120
Miles

June 22, 2017 - 0800 hrs
Produced by: S. Lee
Source: CAL FIRE RAINFIRE 2016, IRRFIR
Active_Incidents/Print/2017/20170622/0800/Projects/Statewide_Fires_0622170622.mxd

Date: June 22, 2017 0800 hrs - Per ICS 209s												
Active Incident	Personnel								Structure			
	Engines	Aircraft	State	Fed	Local	Private	Other	Total	FMAG	Acres	Containment	Threat(s)
Highway	24	3	1	469	83	59	0	612		1,533	90%	0
Holcomb	104	15	476	542	225	0	0	1,243		1,540	10%	7
TOTALS	128	18	477	1,011	308	59	0	1,855		3,073		7

Thank you!

Lorenzo Gigliotti

Deputy Chief

Cal OES Fire/Rescue

lorenzo.gigliotti@caloes.ca.gov

(916) 845-8711

