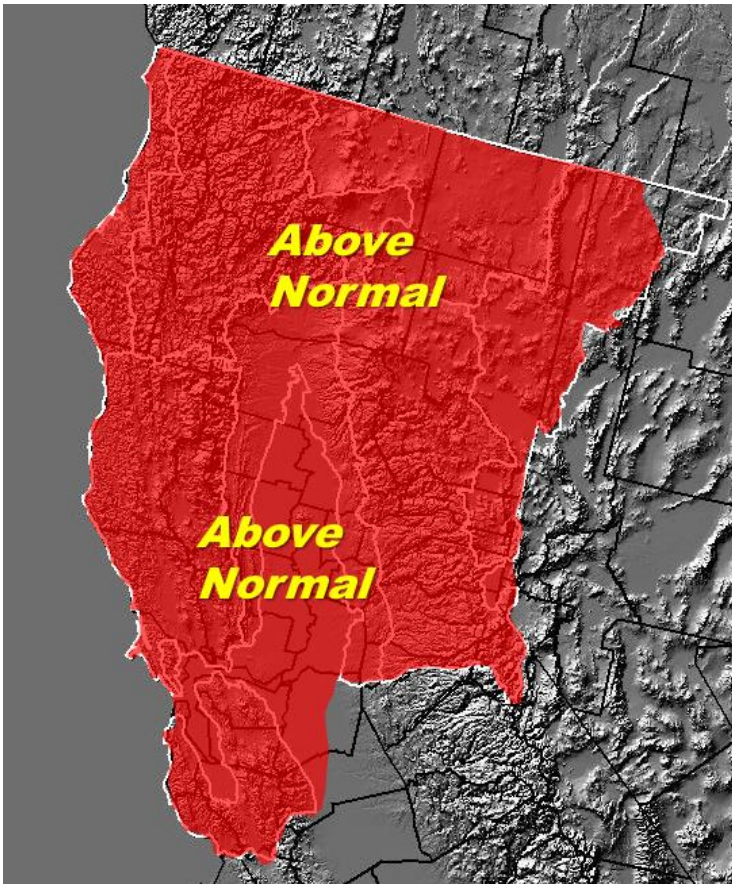


MONTHLY OUTLOOK

For Northern California and Hawaii

Issued: June 30th 2015

Valid for: July 2015



Highlights for July

- **Near to above normal Temperatures** (+0.5 to +4.5° F Above Normal)
- **Near to Slightly Above Normal Precip** (75% - 140% of Normal) [Keep in mind that CA 'normals' are very low in July]
- **Dry to mixed lightning potential for mainly higher terrain in early July**
- **Above Normal Large Fire Potential**

Weather Discussion

REVIEW OF JUNE 2015 NORCAL WEATHER:

June was hotter than average (Fig. 1), with about 75%+ of North Ops area ranging from 4-10° above normal. Precipitation (June 1-27th) was a mixed bag (Fig. 2), but a majority of NOPS ground saw below to much below normal. The wetter anomalies were across the interior of the SF Bay Region, and from near to east of the northern Sierra, the latter of which saw mainly 110-160% of normal. These areas were the ones most-affected by a couple of low pressure systems that tracked across the south half of CA early in the month. June had below-normal occurrence of North to NE foehn wind events from the Sacramento Vly/Foothills southwestward. While initial attack activity was plentiful in/ near the valley, the lack of significant wind helped limit large fire occurrence. A lightning pattern produced approximately 60 small fires (total) in 4 PSAs from June 26-28th. Long-term drought continues in Extreme to Exceptional categories for over half of NOPS, mainly east of Interstate 5.

Fuel/Fire Potential Discussion

Grasses in the lower elevations were mostly cured below 2500 ft at the end of June. Mountain and basin areas that received a boost in live fuel greenness due to plentiful early-June rain were also again drying quickly in the latter third of the month. As of June 28, 1000-hr dead fuels on the national Forests were averaging 10.5% FM, a number about a month ahead of its long-term average date of occurrence. Similarly, Energy Release Components (ERC, Fig. 4) averaged 66 at the USFS year-round stations, which was also about a month ahead of ave..

There was almost no snow left anywhere below NOPS timberline elevations by late June. Long-term drought effects should increasingly have influence on both live and dead fuels thru July. Some drought effects are more indirect, e.g. a reduction in available water sources for filling helicopter buckets. Driven by mainly harsh drought effects, in combination with likelihood of several mixed wet/dry lightning days during the first half of July, will forecast a generally **ABOVE NORMAL** month for large Fire Potential across northern CA.

Weather Discussion (continued)

Ave. Temperature dep from Ave (deg F)
6/1/2015 – 6/27/2015

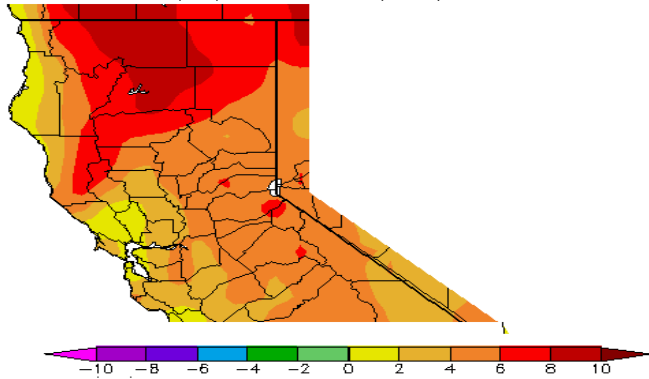


Fig 1: June Temperatures, Dept. from Ave.)

Percent of Average Precipitation (%)
6/1/2015 – 6/27/2015

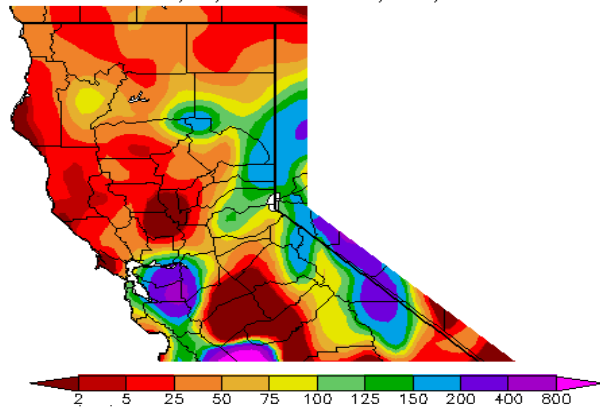


Fig 2: June Precipitation, % of Normal

FORECAST DISCUSSION FOR JULY 2015:

July is set to start out with NorCal being dominated by very hot weather inland, due to a strong High aloft centered over the Great Basin (Fig. 3). The high is expected to pull mid-high-level moisture from Ariz NW toward NOPS. This in turn, should trigger an early-July pattern of mixed dry to medium wet, isolated thunderstorms in primarily p.m. hours. As is common, most of the action is forecast for mid to higher terrain. Onset of the southwest U.S. monsoon is expected to be near average early-July dates. The middle third to half of July might see increased South to SW flow, which can significantly limit t-storms if it is strong. But when lighter, the disturbances in weak offshore troughs can be another source of plentiful NorCal lightning. Look for total July rainfall to range from Near to Slightly above the monthly normals (which are the lowest annually). Temperatures are forecast to start off hot, and to end up ranging from near to above normal. Gradient winds are often a 'non-factor' in July, with breezes ranging from local differential heating-induced types, to short-lived thunderstorm downdrafts which produce locally- strong gusts.

Fuel/Fire Potential (continued)

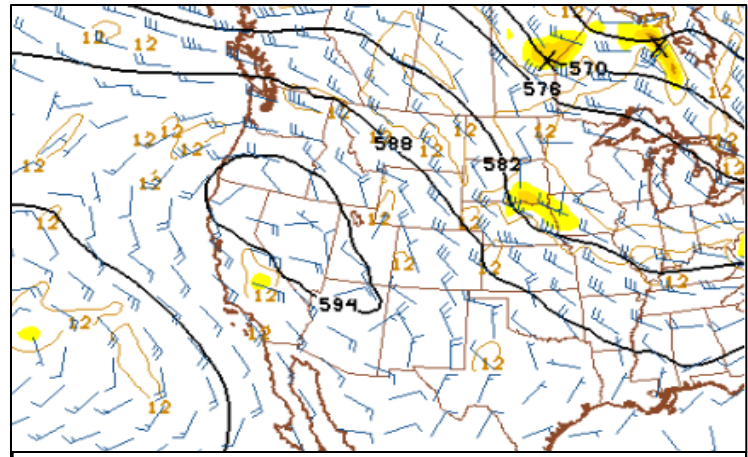


Fig 3: Hot pattern, with forecast NOPS lightning 7/2 to 7/4/15

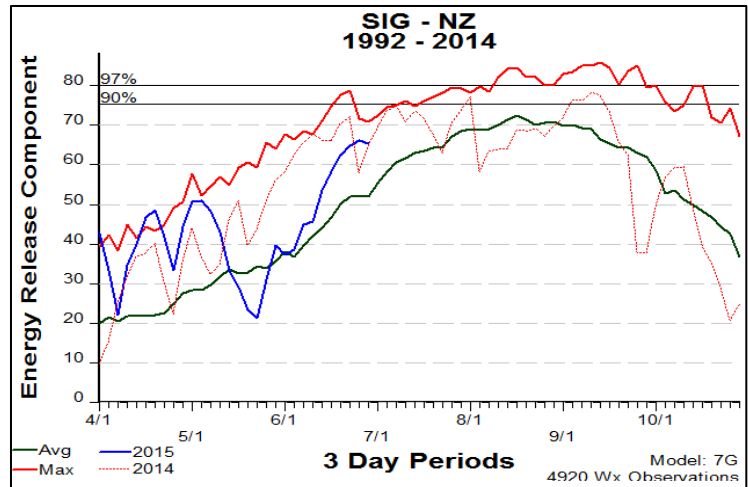


Fig 4: Ave. of NOPS Forests ERCs, June 28, 2015

Prescribed Fire/Fuel & Fire Data

PREScribed FIRE IMPLICATIONS FOR JULY 2015:

Fire season is ongoing, and NOPS is in harsh long-term drought, so Federal agencies in CA are very unlikely to conduct 'fuels treatment' type prescribed burning this July. The more common July scenario is burnout projects to assist in controlling wildland fire. At the same time, as conditions allow, state and/or local government agencies may complete a few vegetation- reduction type burns (of light fuels) during July.

FUELS (End of June)

Live Woody Fuel Moisture: Variable to 4 weeks ahead
100-Hour Dead Fuel Moisture: 5.5 - 13.0%
1000-Hour Dead Fuel Moisture: 7.5 - 15.5%

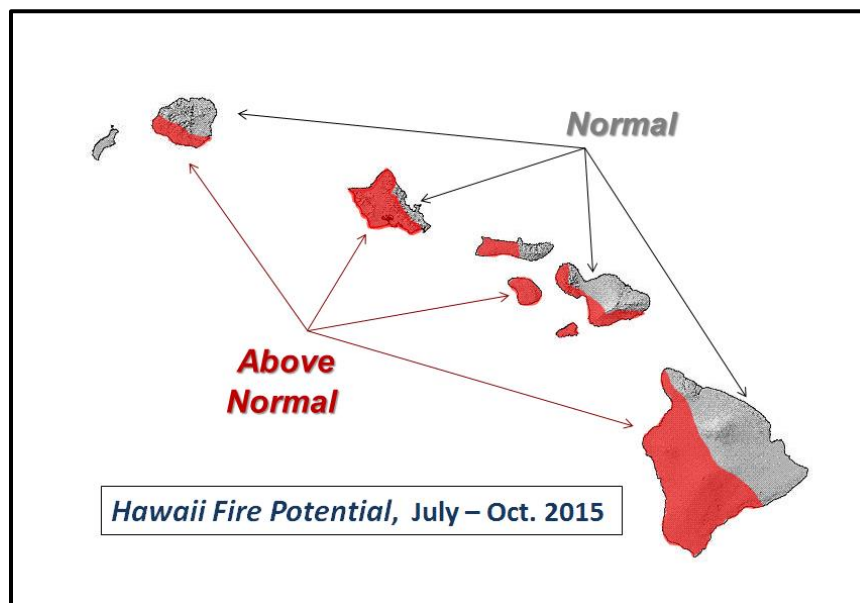
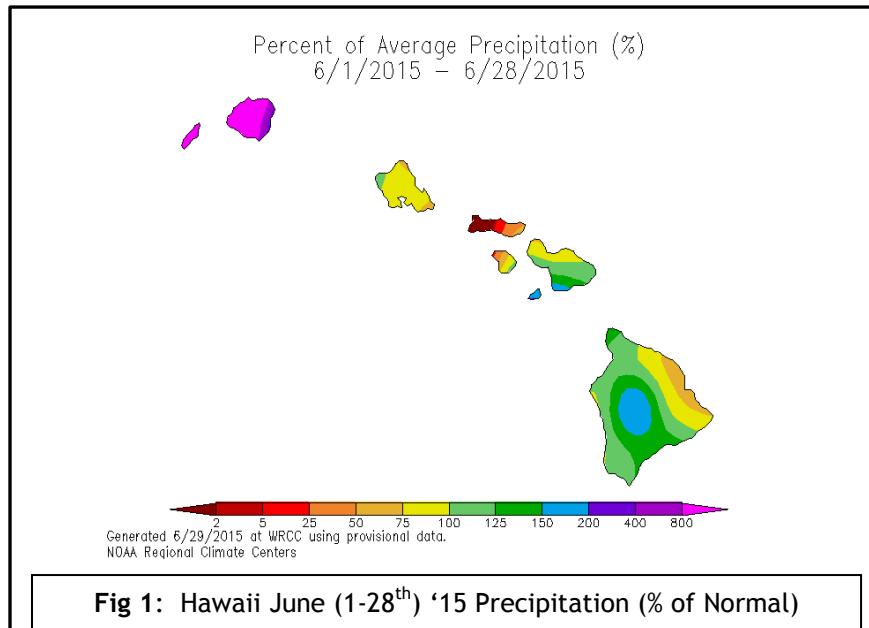
FIRE OCCURRENCE / ACRES BURNED YTD as of 6/30/15:

Fires: 1,692
Acres: 6,048

Hawaii Monthly Outlook

July 2015

July Hawaii Discussion: Precipitation in June was generally Near to Above normal for HA (Fig. 1), though the radically wet look for Kauai may be a data issue. Strengthening El Nino patterns often cause Hawaii July precip that is below normal, due to effect of reducing NE trade wind speeds. It is reported that many of the leeward locations have been in, or are trending into, “**Above Normal**” fire potential. So, with the still-developing and potentially strong El Nino staying in place, will go Above Normal for many lee areas in this month’s Outlook).



This Product was developed by the Predictive Services group, located at the North Zone Coordination Center in Redding, California

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