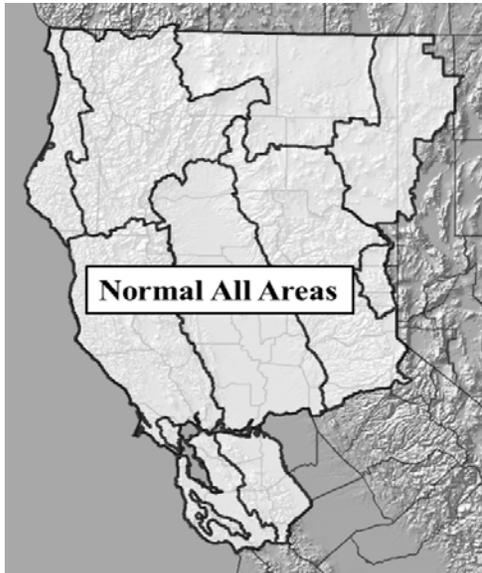


# MONTHLY OUTLOOK

For Northern California and Hawai'i

Issued November 25, 2015

Valid for December 2015



## December Highlights for North Ops:

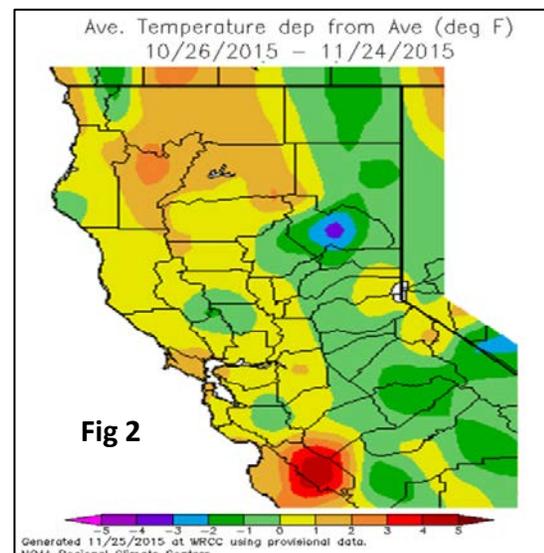
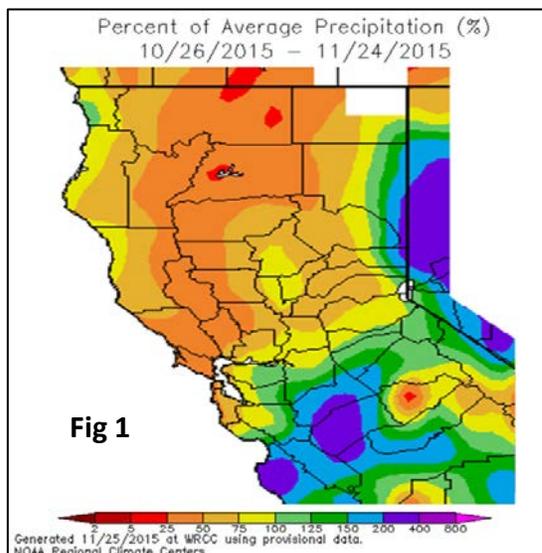
Temperatures to continue 2-4° above normal

Near normal precipitation

Normal Large Fire Potential

## NORTH OPS WEATHER DISCUSSION

**NOVEMBER 2015 SUMMARY:** November was drier than average in much of the North Ops region (Fig1). Exceptions were in the far eastern and southern ends of the region. Temperatures (Fig 2) were near to below normal in eastern areas and near to above normal in much of the rest of the North Ops area. A few colder systems brought an early season snowpack to northern and eastern areas during November, and more winter weather at the end of the month was focused on eastern areas as well. The threat of significant fire activity gradually ended from northern and eastern areas early in the month to southwestern areas by late month.



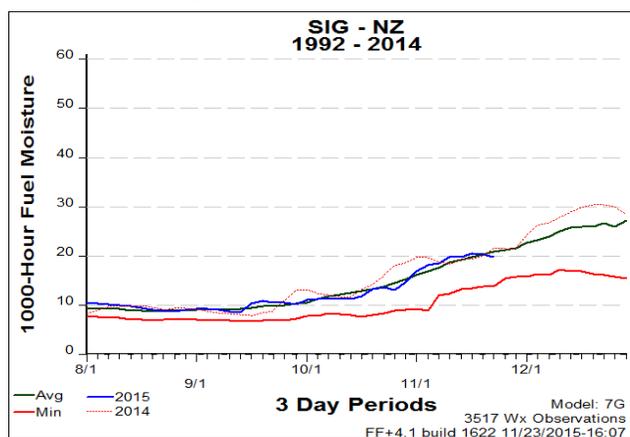
## NORTH OPS DECEMBER 2015 WEATHER OUTLOOK

December is expected to start with wet unsettled weather that may last into the second week of the month. Snow levels during the first third of the month will be quite variable falling in a range of 3000-7000 ft. Most medium and longer-range outlooks have called for normal to slightly below normal precipitation for December, so dry spells can be expected, especially during the middle of the month. Temperatures are expected to be above normal in December. The weather effects from the ongoing El Nino sea surface temperature condition are expected to begin showing up toward the end of December. For the North Ops region this could mean more wet unsettled weather toward the end of December with snow levels rising to 4000-8000 ft.

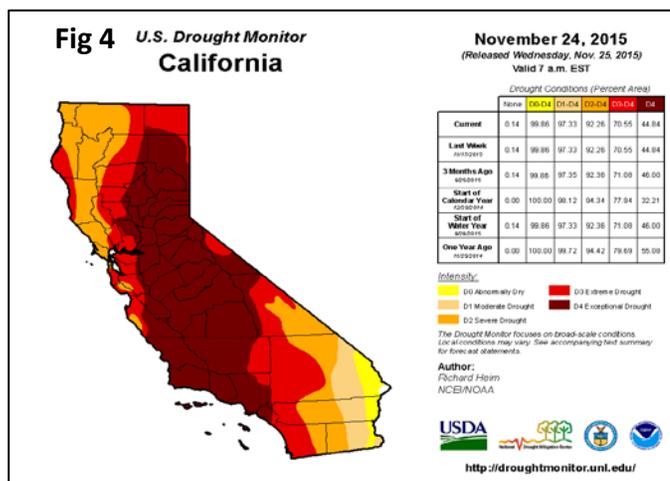
## NORTH OPS FUELS AND FIRE POTENTIAL

Normal Significant Fire Potential is expected overall for December. Fuel moisture zig-zagged around normal for November, and seem likely to continue that trend for December. Fuels will dry quickly in between weather systems to become slightly drier than average. During precipitation events they will bounce back to somewhat above normal fuel moistures. Long-term drought continues across the region, as shown in Fig 4.

**Fig 3** NOPS 1000-hr FM



**Fig 4** U.S. Drought Monitor  
California



## NORTH OPS PRESCRIBED FIRE/FUEL & FIRE DATA

**PRESCRIBED FIRE IMPACTS FOR DECEMBER 2015:** Moisture received in late November and near to slightly below average precipitation expected for December should lead to favorable prescribed burning conditions.

**FUEL MOISTURES AT THE END OF NOVEMBER:** Fuel moistures trended upward during November, close to normal for fall. 100 hr fuels stayed within 4% of average and 1000 hr fuels were very close to average (Fig 3).

**YTD FIRES / ACRES BURNED NOV 25, 2015:**      **Fires:** 4,521      **Acres:** 555,307

# Hawai'i Monthly Outlook for December 2015

**Weather and Climate Outlook:** Although a few portions of Hawai'i were drier than average in November, much of the state received above average rainfall (Fig 5), especially toward the end of the month. The Keetch-Byrum Drought Index (KBDI) (Fig 6) increased into the middle of November, but then fell as more wet weather moved in late in the month, and it remains well below seasonal average. Forecasters are calling for drier than average weather in December, as is typically the case during December in a strong El Nino..

**Fire Potential:** Fire potential remains below average across much of Hawai'i at the end of November, but drier weather in December may allow many areas to return to near normal by the end of the month (Fig 7).

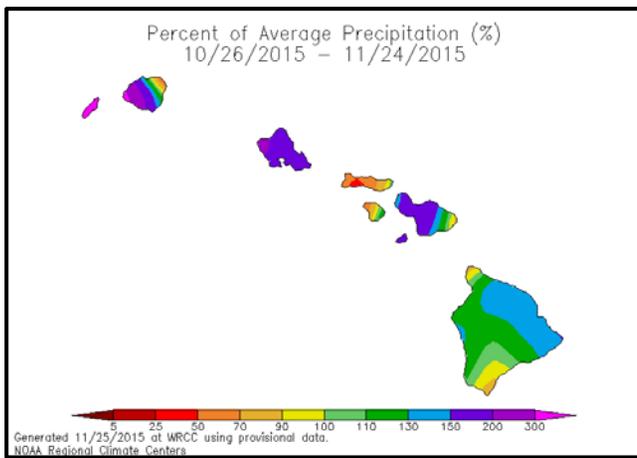


Fig 5 Hawaii rainfall % of average

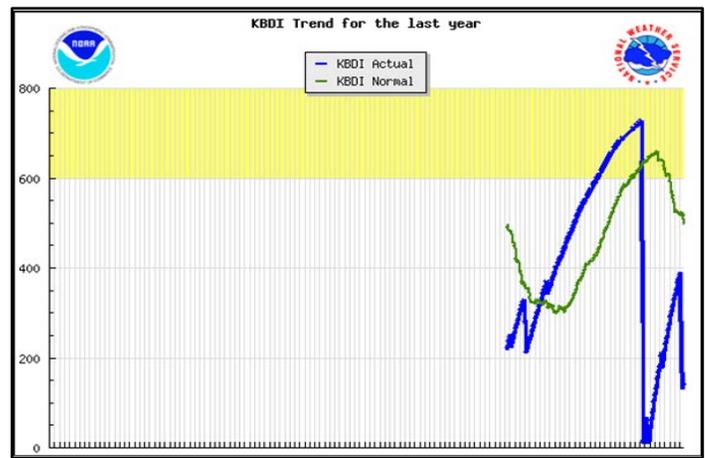


Fig 6 Hawaii KBDI NOV 25, 2015

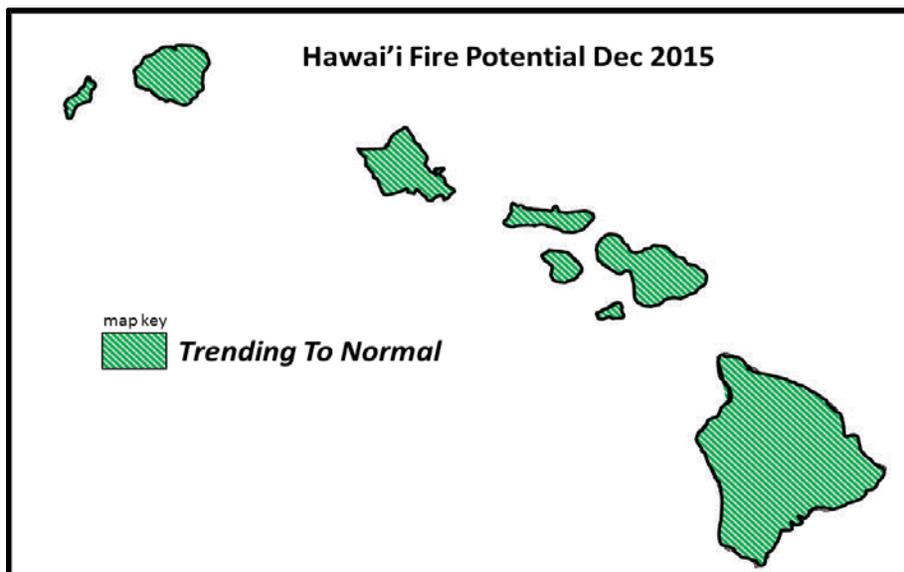


Fig 7 Hawai'i Significant Fire Potential December 2015