SIGNIFICANT FIRE POTENTIAL

September - December 2023 HIGHLIGHTS

- Drought will continue to intensify during the outlook period.
- Abundant and generally cured herbaceous fuels exist across the leeward sides and will continue to be a factor for large growth.
- Tropical storm activity remains a wildcard and could provide a fire season slowing or growing event.
- Above normal Significant Fire Potential will continue to expand during the coming months with a muted start to the wet season likely.

Discussion: Sea surface temperature (SST) anomalies surrounding the Hawai‘ian Islands average out to near normal (Fig 1). Near average SST anomalies should continue the next 4 months with a warmer signal across the northern tier. Average temperature anomalies (Fig 2) during August were near to above normal with the warmer signature found across the north. Precipitation (Fig 3) was below to well below normal. El Nino will continue to strengthen (Fig 6) and a strong El Nino is likely during the initial stages of the wet season. Precipitation is likely to be below normal during the 4-month outlook period although there remains some uncertainty the next few months due to Tropical cyclone activity. The typical wet season which starts in November should be muted during the outlook period. Average temperatures should be near to above normal with the warmer anomalie favoring the north. Drought (Fig 4) intensified during August and will likely remain a fixture during the next 4 months including impacts to the windward sides. Stressed vegetation due to drought will create a more flammable scenario, continuing across the leeward sides during the near term and eventually migrating to portions of the windward areas. Abundant herbaceous fuels that are cured across the leeward sides will remain a concern and help to fuel additional growth potential. Due to the expansion of drought and flammable fuel areas, wind events from varying directions (both westerly and easterly) could create high growth scenarios thus increasing the threat for large fires. The dry gusty side of an approaching Tropical Cyclone can provide critical fire spread periods and will be monitored the next few months. Significant fire potential is projected to be above normal from September through December with expanding potential each passing month as the dryness takes a toll.
This product made possible by important scientific contributions from personnel from:
NOAA/NWS, Hawai‘i Volcanoes National Park, the University of Hawai‘i, the State of Hawai‘i, and the United States Army

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