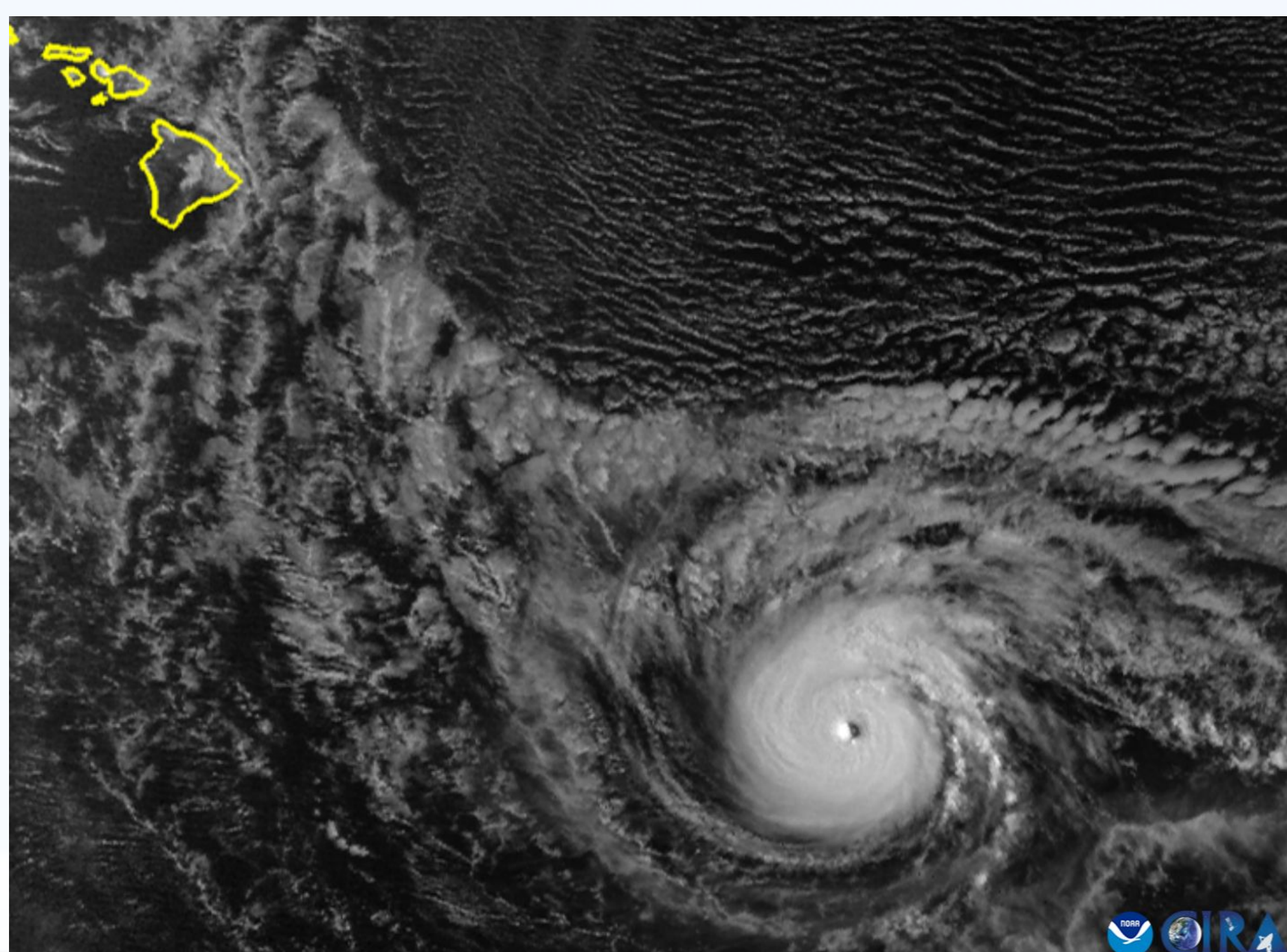


On-Site and Virtual Meteorological Support of Maui Wildfires Incident and Recovery Operations

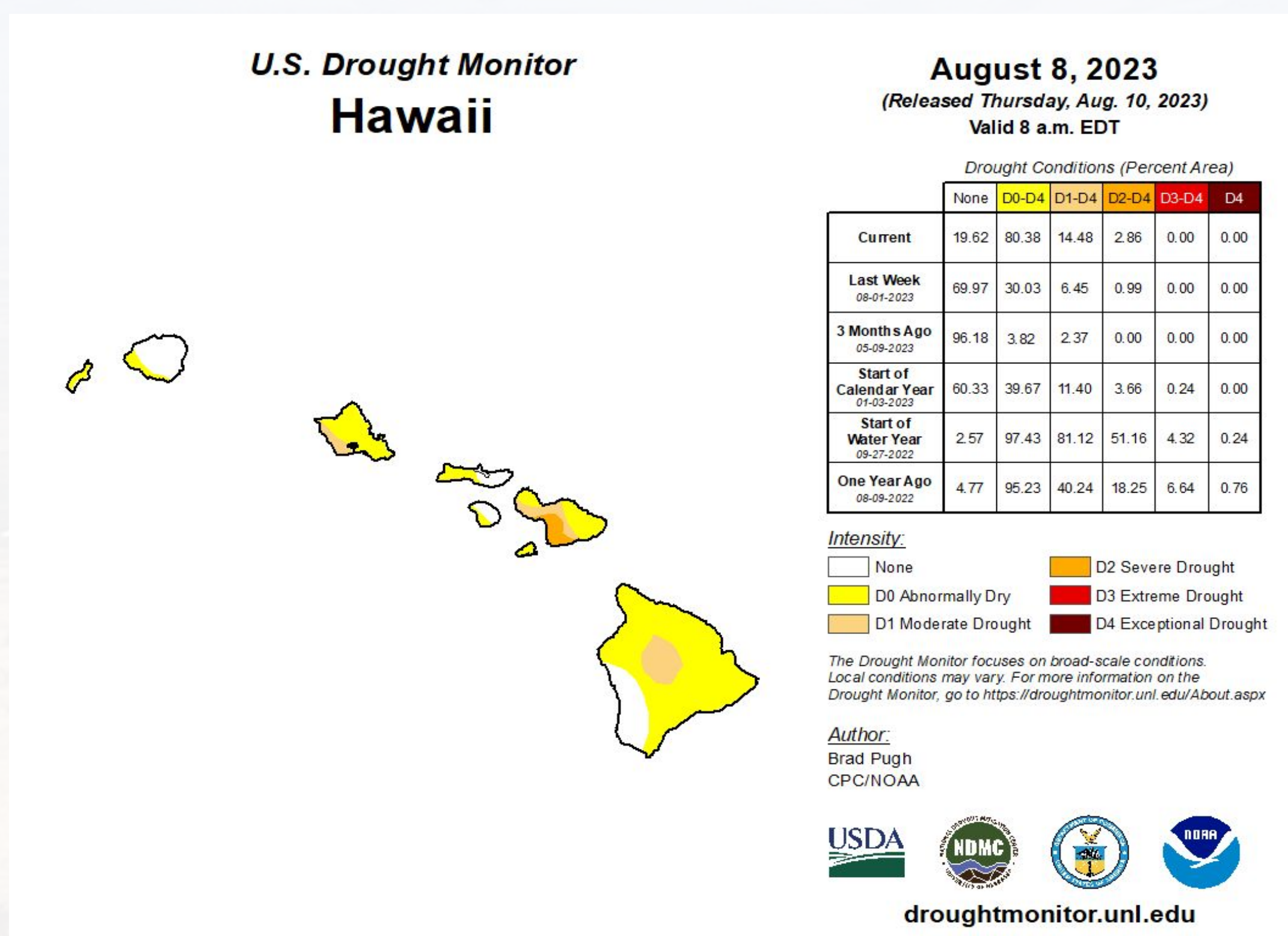
Patrick Cioffi
Emergency Response Specialist
Pacific Region Headquarters
Non-Competitive



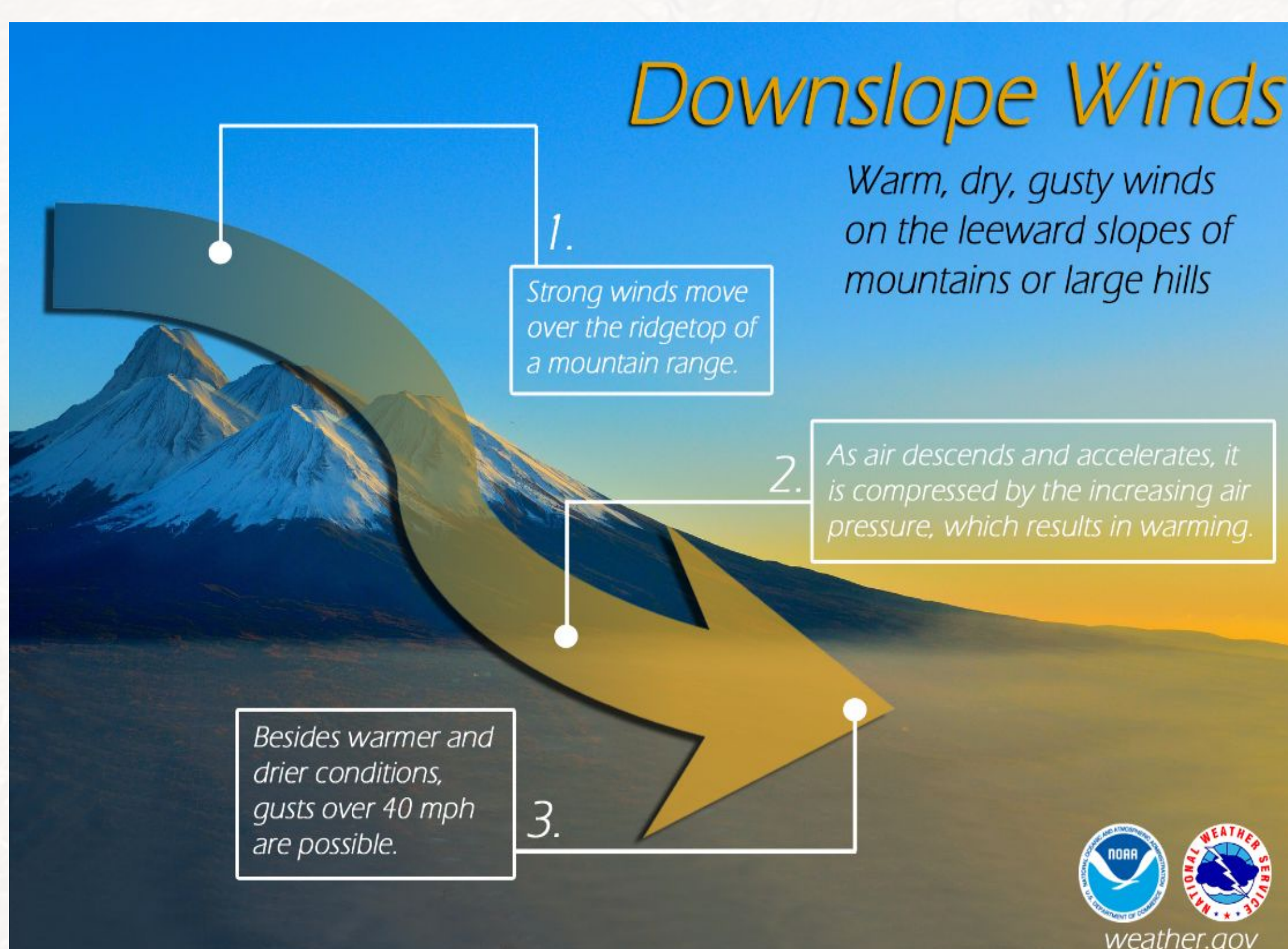
Event Set-Up



Hurricane Dora on August 7, 2023 1103Z approximately 700 miles southeast of Maui. (CSU/CIRA & NOAA/NESDIS)



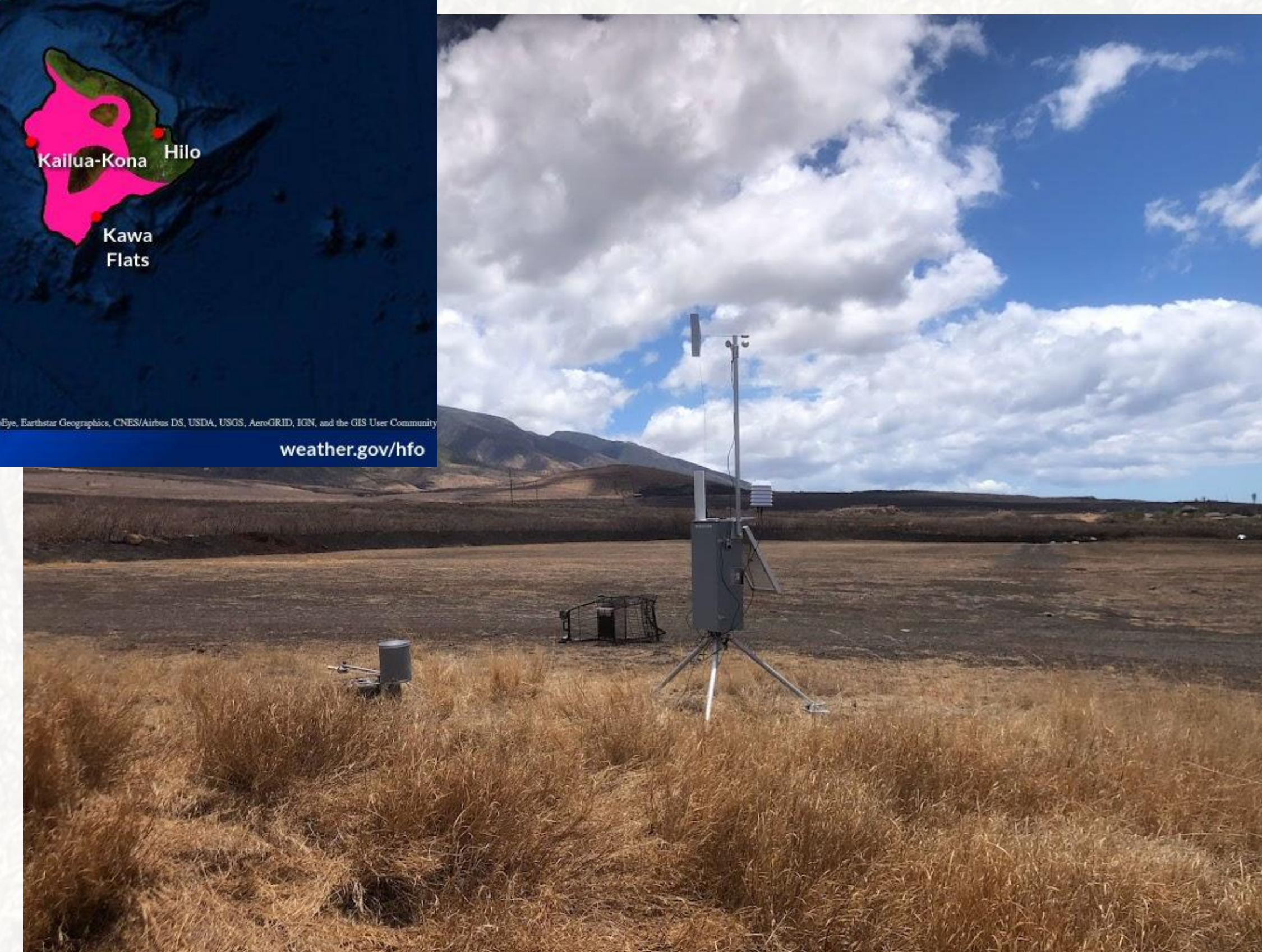
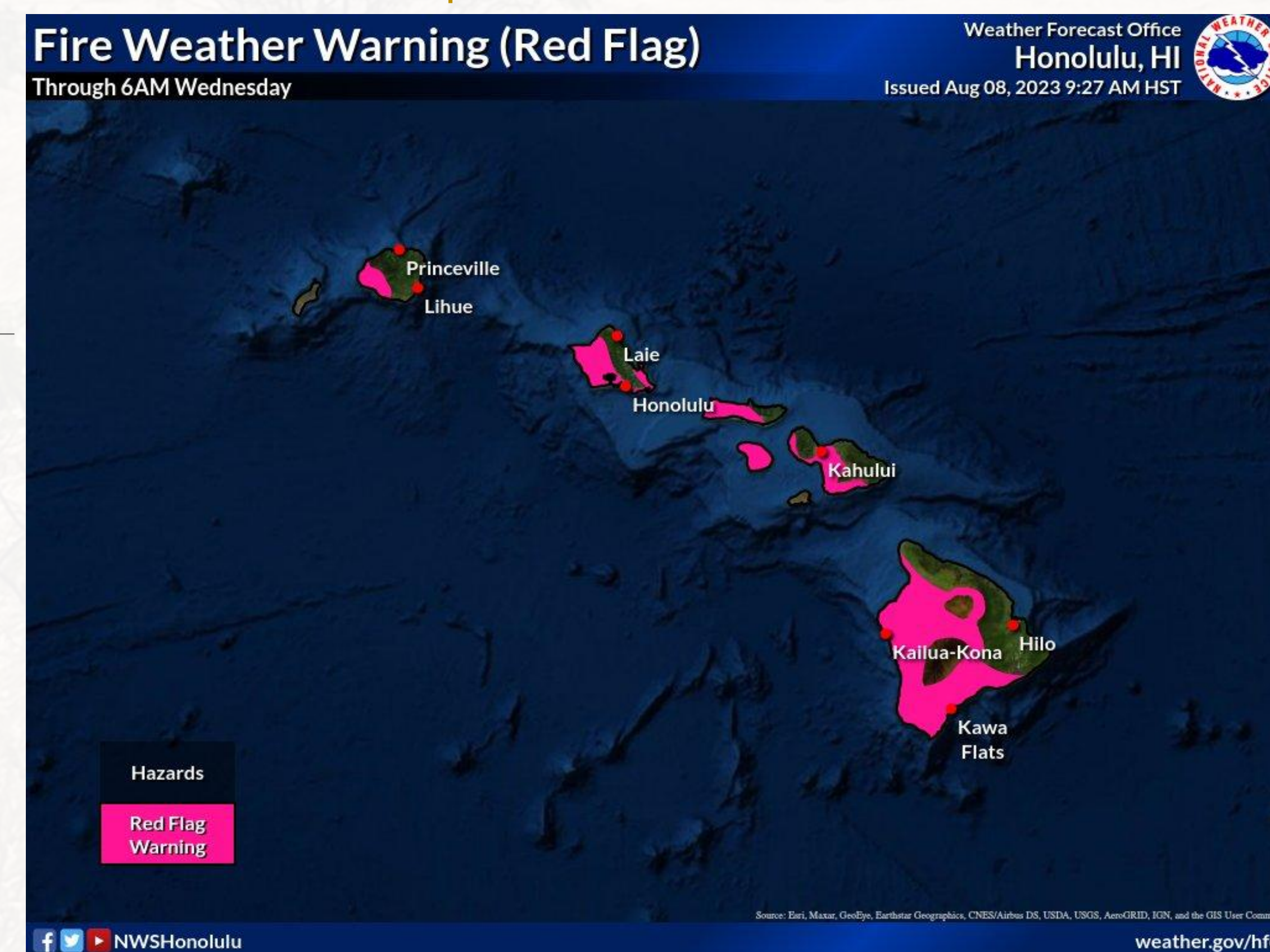
D0 (Abnormally Dry) - D2 (Severe Drought) conditions existed across Maui as of August 8, 2023. (US Drought Monitor, University of Nebraska-Lincoln)



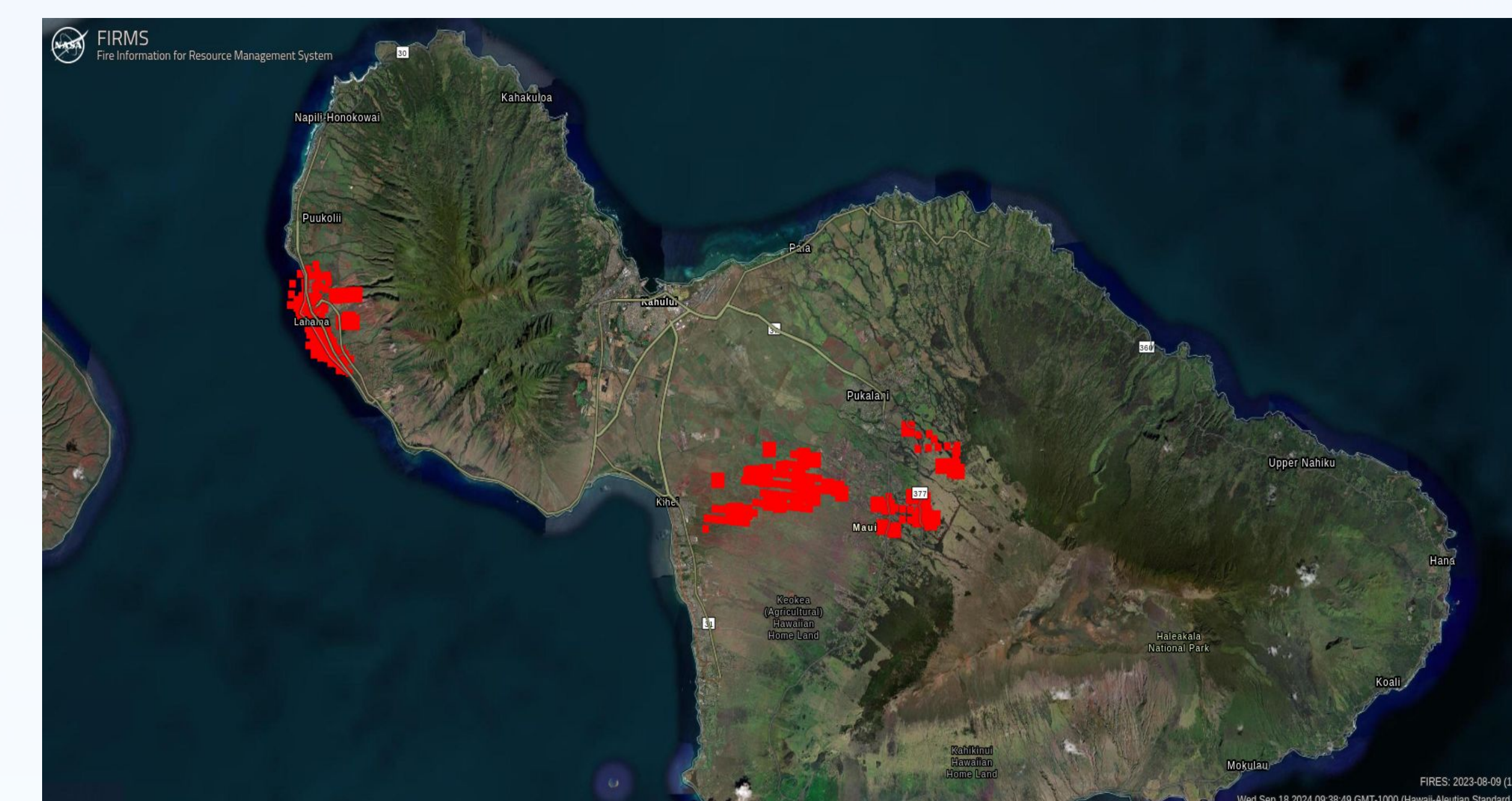
Graphical depiction of a downslope wind event similar to the downsloping winds seen across Maui August 7-8, 2023. (NOAA/NWS)

Timeline of WFO Honolulu (HFO) and PR-ROC Support:

- Aug 3** — First "Fire Weather" Section included in HFO Area Forecast Discussion.
- Aug 4** — HFO sent email briefings to Emergency Management and fire weather contacts.
- Aug 4** — Emergency Managers briefed during TC Dora State-County Coordination Meeting.
- Aug 6** — Fire Weather Watch issued for leeward portions of all Hawaiian Islands Aug 7-8.
- Aug 7** — Red Flag Warning issued for leeward portions of all Hawaiian Islands through August 9th.
- Aug 8** — Lahaina Fire, and Kula and Olinda fires (Later known as Upcountry Fires) ignite and burn through Aug 9.
- Aug 10** — PR ROC Emergency Response Specialist deployed to Maui to provide in person support through August 11.
- Aug 11-23** — HFO and PR-ROC provide virtual support to Unified Command for ongoing fire fighting and recovery efforts.
- Aug 24** — PR ROC and HFO begin on site support of recovery operations for Lahaina and Kula fires.
- Sept 1** — NWS submits RFA for two portable RAWs to be deployed in and around Lahaina.
- Sept 11** — NWS coordinates installation location of 2 RAWs with Hawaii Division of Forestry and Wildlife (DOFAW).
- Sept 28** — End of NWS in person support of the recovery phase, but virtual briefings continued until September 2024.



Fire Coverage and Recovery



NASA Fire Information for Resource Management System (FIRMS) burn area imagery of the Maui Wildfires from August 8-9, 2023 derived from NASA/NOAA satellite imagery. (NASA FIRMS)



Aerial photo of Lahaina after the fire had been extinguished and recovery operations had begun. (CivilBeat.org)

Summary

Low relative humidity, strong winds, and dry fuels lead to rapid fire spread across Lahaina and upcountry Maui August 8-9, 2024. The Lahaina wildfire, fueled by these conditions, caused significant damage and loss of life. PR-ROC and HFO provided support to FEMA Region IX and the Maui Emergency Management Agency (MEMA) to ensure weather support needs were met as first responders arrived on scene.

The NWS provided on-site decision support services to various local, state, and federal agencies August 24th thru September 28th, 2023 to support ground and aviation crews performing complex recovery and cleanup operations. Even after on-site support ended, virtual support continued until September 2024.

The Maui Wildfires led to the formation of new and stronger partnerships between the NWS and various partners. These partnerships have already demonstrated their value in improving collaboration and effectiveness.