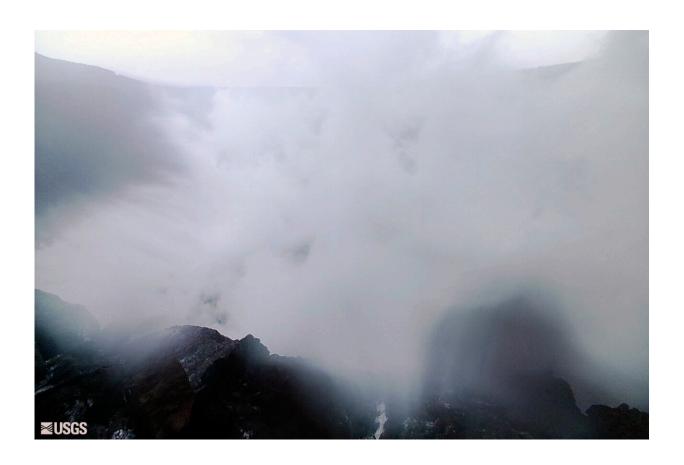


Storm sweeps Hawaii, brings threat of 'catastrophic' floods

December 6 2021, by Caleb Jones



In this webcam image provided by the U.S.Geological Survey, steam rises from the west rim of the summit collapse on Kilauea in Hawaii, Monday, Dec. 6, 2021. A strong storm packing high winds and extremely heavy rain flooded roads and downed power lines and tree branches across Hawaii, with officials warning Monday of potentially worse conditions ahead. Credit: U.S. Geological Survey via AP



A strong storm packing high winds and extremely heavy rain flooded roads and knocked out power across Hawaii, with officials warning Monday of potentially worse conditions ahead.

The National Weather Service said the storm brings the threat of "catastrophic flooding" in the coming days as a low pressure system slowly moves from east to west and lingered on the edge of the archipelago.

"Now is the time to make sure you have an emergency plan in place and supplies ready should you need to move away from rising water," said Gov. David Ige, who issued a state of emergency for all of the state's islands Monday night.

On Oahu, where four shelters had been opened, most of the beaches in Waikiki were empty Monday as only a few people walked with umbrellas during passing heavy showers. Roadways were flooding in the area and cars crept through downtown as water gushed out of manhole covers.

Honolulu Fire Department workers rescued five boys, ages 9-10, from a raging stream, a fire department statement said.

One boy was rescued after he released his grip on a branch and the rushing waters took him to firefighters close by downstream, who grabbed him. Firefighters used a ladder to rescue another boy farther downstream and jumped into the stream go get the other three out of the water, the statement said.





In this webcam image provided by the Canada-France-Hawai'i Telescope, snow is seen atop the summit of Mauna Kea in Hawaii on Monday, Dec. 6, 2021. A strong storm packing high winds and extremely heavy rain flooded roads and downed power lines and tree branches across Hawaii. Credit: Canada-France-Hawai'i Telescope via AP

None of the boys was injured and the fire department said that they had gone into the stream to play after school.

On Maui, power outages and flooding already have been reported, with more than a foot (30 centimeters) of rain falling in some areas.

The relentless rain forced three couples from the U.S. mainland to postpone their Maui elopements, said Nicole Bonanno, owner of Bella



Bloom Floral, a wedding florist and boutique in Wailea.

The weather also led to delayed flower deliveries, a lei company with no power and employees braving flooded roads littered with debris, Bonanno said.

"The roads, everything are a mess," she said. "There are lots of trees down."

Maui resident Jimmy Gomes was waiting for the lights to come back at his home on Monday after losing power at 6 p.m. Sunday. His rain gauge measured 7 inches (17.78 centimeters): "I haven't seen this kind of rain in a long time," he said.





People hold umbrellas as it begins to rain on an otherwise empty beach in Honolulu on Monday, Dec. 6, 2021. A strong storm packing high winds and extremely heavy rain flooded roads and downed power lines and tree branches across Hawaii, with officials warning Monday of potentially worse conditions ahead. Credit: AP Photo/Caleb Jones

"Last night the wind was howling," he said. "But this morning, it came in really foggy and it rained, then it stopped."

Big Island Mayor Mitch Roth declared a state of emergency Sunday for potentially heavy rainfall and strong winds.

Some areas south of Hilo were hit hard with extremely heavy rain over the weekend, weather officials said.

All islands still face the threat of flash flooding, lightning strikes, landslides and strong winds over the next two days, according to the National Weather Service.

Oahu and Kauai could see the brunt of the storm Monday and Tuesday. But for Maui and the Big Island, which have already been soaked, "it's not going to take a lot of additional rain to really lead to big problems," National Oceanic and Atmospheric Administration meteorologist Robert Ballard said.





People scramble to get out of the heavy rain on Waikiki Beach, Monday, Dec. 6, 2021, in Honolulu. Credit: AP Photo/Marco Garcia

The winter weather system known as a "Kona low" prompted emergency alerts throughout the weekend while delivering wind, rain and even blizzard conditions at some of Hawaii's highest elevations.

A weekend blizzard warning was issued for the state's highest peak, on the Big Island.

Snow is not rare at the summit of Mauna Kea, which is nearly 14,000 feet (4,270 meters) high. The last time there was a blizzard warning for the summit was in 2018. No residents live at the summit, but there are telescope observatories and other offices where officials work.



The weather service said there were reports of 8 inches (20 centimeters) of snow on the road below the top of Mauna Kea, and officials were working to get to the summit to get more measurements. The forecast was for a foot of snow at the mountain's peak.



In this webcam image provided by the Canada-France-Hawai'i Telescope, snow is seen atop the summit of Mauna Kea in Hawaii on Monday, Dec. 6, 2021. A strong storm packing high winds and extremely heavy rain flooded roads and downed power lines and tree branches across Hawaii. Credit: Canada-France-Hawai'i Telescope via AP

There were also strong winds, with gusts of nearly 90 mph (138 kph) recorded atop Mauna Kea.



Other areas at lower elevations also saw strong winds, with gusts above 50 mph (80 kph) recorded at several locations across the state, according to weather officials.

Kona low is a type of low pressure system that forms near Hawaii during the winter season, and it has some unique meteorological characteristics, said Ballard, the National Weather Service's science and operation officer in Hawaii.

"What we tend to see are a tremendous amount of tropical moisture gets drawn up from equatorial regions. Kona lows tend to move slowly and so they can keep heavy rain and thunder showers focused over one area for a prolonged amount of time, and they can also cause pretty strong to damaging winds," Ballard said.





With storm clouds in the background, beachgoers are seen on Waikiki Beach, Monday, Dec. 6, 2021, in Honolulu. Credit: AP Photo/Marco Garcia



Ala Moana Beach Park was mostly empty of beachgoers, Monday, Dec. 6, 2021, in Honolulu, due to a strong storm packing high winds and extremely heavy rain. Credit: AP Photo/Marco Garcia





Dark clouds hang over a lifeguard tower on Ala Moana Beach Park, Monday, Dec. 6, 2021, in Honolulu. Credit: AP Photo/Marco Garcia





Diamond Head mountain is shrouded in rain, Monday, Dec. 6, 2021, in Honolulu. Credit: AP Photo/Marco Garcia





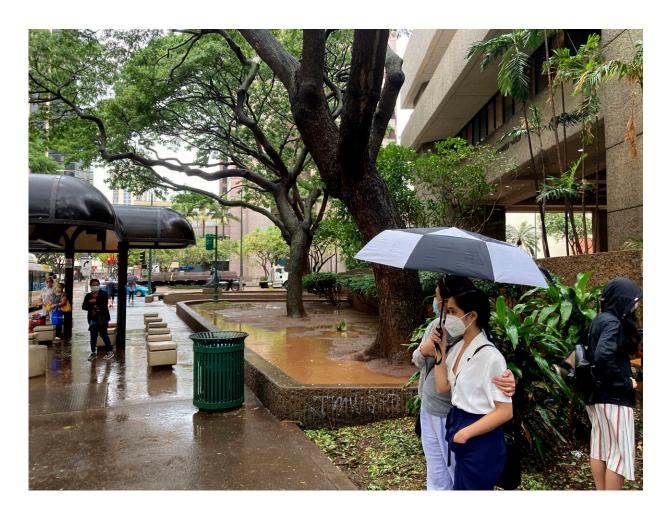
While wearing rain coats, beach goers play in the rain on Waikiki Beach, Monday, Dec. 6, 2021, in Honolulu. A strong storm packing high winds and extremely heavy rain flooded roads and downed power lines and tree branches across Hawaii, with officials warning Monday of potentially worse conditions ahead. Credit: AP Photo/Marco Garcia





Beach goers play in the rain on Waikiki Beach, Monday, Dec. 6, 2021, in Honolulu. A strong storm packing high winds and extremely heavy rain flooded roads and downed power lines and tree branches across Hawaii, with officials warning Monday of potentially worse conditions ahead. Credit: AP Photo/Marco Garcia





People in downtown Honolulu contend with heavy rain and flooding, Monday, Dec. 6, 2021. A strong storm packing high winds and extremely heavy rain has flooded roads and downed power lines and tree branches across Hawaii. Credit: AP Photo/Jennifer Sinco Kelleher

Hawaii has aging dams across the state that have been problematic during previous storms. In 2006, an earthen wall of Kauai's Kaloko Reservoir collapsed during heavy rain and sent a wave of water and mud rushing down a hillside. Seven people, including a pregnant woman, were killed.

Rainfall in March caused fears that a dam had breached on Maui when



floodwaters destroyed homes and inundated roadways. The same storm system brought damaging floods to Oahu and a landslide on Kauai.

Ballard said other state and federal agencies monitor dams, but that these are the conditions that people need to be cautious of.

"It's just a situation that we need to continue to monitor and be aware of and make sure that folks understand that this is the type of situation where we can get flash flooding that happens very, very suddenly," Ballard said.

© 2021 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Storm sweeps Hawaii, brings threat of 'catastrophic' floods (2021, December 6) retrieved 23 June 2024 from https://phys.org/news/2021-12-storm-hawaii-threat-catastrophic.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.