

US west coast girds for more damaging storms

January 12 2023, by Huw GRIFFITH



Floods have ravaged parts of California as a parade of storms has tested the state, with more wet weather to come.

Western US states were bracing for yet more torrid weather Friday and into the weekend as so-called atmospheric rivers lined up to dump heavy

rain and snow across the already soaked region.

California has been battered by weeks of downpours that have killed at least 19 people, flooding communities, toppling power lines and threatening deadly mudslides.

Forecasters now say the first of two cyclones churning in the Pacific Ocean and bearing down on the west coast will spread the rain further north, forming a band from northern California to the states of Oregon and Washington.

"The most impactful precipitation will remain focused along the coasts of northern California and the Pacific Northwest through Friday night, then precipitation will expand south on Saturday and east on Sunday," the National Weather Service said in a Thursday statement.

"Northern California has been hammered with heavy precipitation events over the past couple weeks, and any additional rainfall could pose a threat of flash flooding."

Forecasters said they expect up to six inches (15 centimeters) of rain to fall over 48 hours near Seattle.

Avalanche warnings were in effect for a tranche of Washington state, with the storm bringing wetter, heavier snow into the mountains.



At least 19 people are known to have died in the recent series of storms that have lashed the western United States.

"Dangerous, large avalanches are expected to run naturally during this snowy, wet weather event," the Northwest Avalanche Center (NWAC) said.

So-called wet slab avalanches were a particular concern as the wetter snow piles up on top of fluffier, lighter snow, making the snowpack unstable.

"Wet slab avalanches are not something to tiptoe around, and this is a day where it's a good idea to stay off steep slopes and runouts beneath avalanche paths," the NWAC said.

Sewage

In northern California, up to six feet (1.8 meters) of snow was forecast over the mountains between Friday and Tuesday, with winds gusting up to 50 miles (80 kilometers) an hour.

"Mountain travel is highly discouraged this weekend! If you must travel, plan to be at your destination before 4pm Friday," the NWS said.

At lower elevations, a flood watch was in place in a vast area from around San Francisco into Oregon.



Climate change, which is supercharged by humanity's unchecked use of fossil fuels, is making storms bigger, wetter and wilder.

The warnings came as the region picked up the pieces after previous repeated downpours.

San Francisco saw more rain over a two-week period than at any other time in 150 years, straining the city's drains where raw sewage was mixed with storm runoff.

"Don't jump in puddles. Especially in San Francisco... there (could be) sewage in that," said Eileen White of the regional Water Quality Control Board, according to the San Francisco Chronicle.

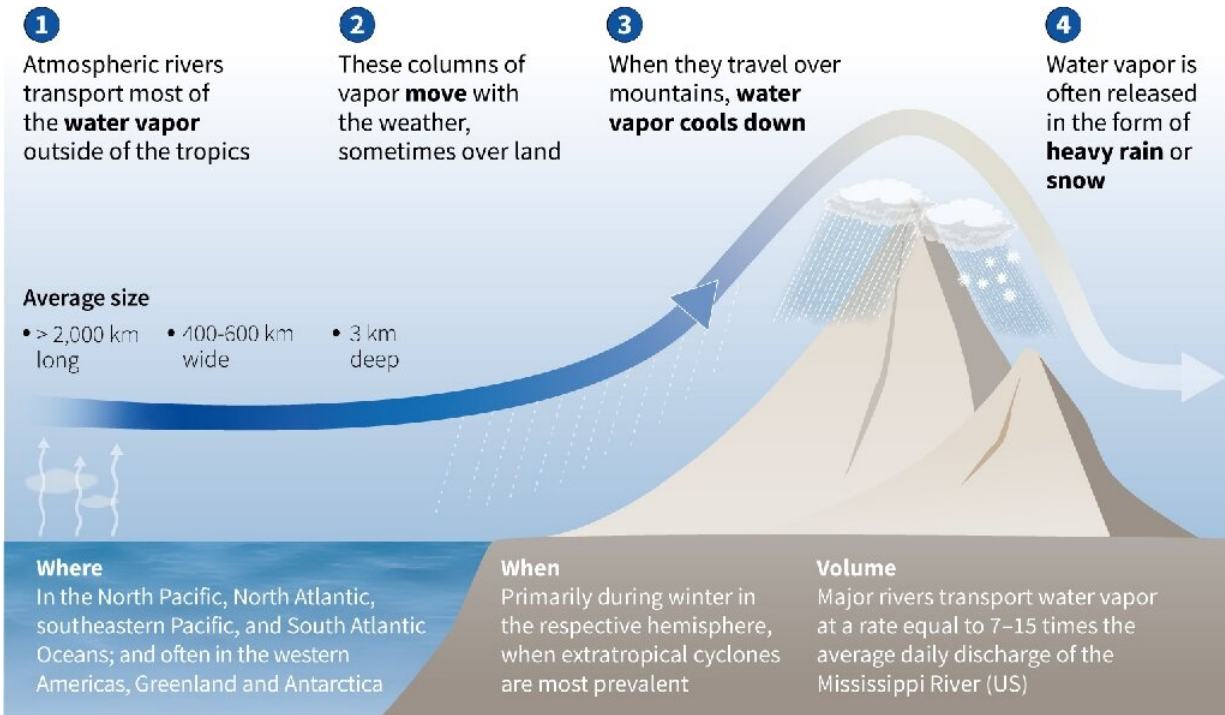
The storms have left at least 19 people dead in California.

They include drivers who have been found in submerged cars, people struck by falling trees, a husband and wife killed in a rockfall, and people whose bodies were discovered in floodwaters.

In San Luis Obispo, members of the National Guard joined the search for five-year-old Kyle Doan, who was swept away in floodwaters as his mother tried to pull him to safety from their car.

Atmospheric rivers

These weather events are the largest transport mechanism of freshwater on Earth. They are closely tied to both water supply and flood risks



Sources: NOAA/USGS/NASA



Explainer of the atmospheric rivers weather phenomenon, which is closely tied to water supply and flood risks, in particular in the western part of the United States.

Climate change

California is no stranger to wild weather, with winter storms commonplace.

But scientists say climate change, supercharged by humanity's burning of fossil fuels, is making such storms more ferocious.

While it is causing short-term misery, the rain is badly needed in the western United States, where more than two decades of drought have forced unprecedented restrictions on water usage.

However, climatologists warn that even the kind of monster downpours that have pummelled the region this month are not going to reverse 20-plus years of below-average rainfall.

Shasta Lake, the state's largest reservoir, was still only at two-thirds of its historical average for early January, water resources department data showed.

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