

El Nino could bring drought relief to southwestern US

October 24 2018, by Tim Talley



A photograph of a farmer showing his affected plot due to drought in Karnataka, India, 2012. Credit: Pushkarv/Wikipedia

Climatologists said Wednesday that conditions are right for an El Nino weather pattern to develop that could bring wetter-than-normal conditions this winter in drought-stricken areas of the southwestern U.S.

But they also note there is no guarantee that an El Nino event would

bring more rain and snow to the parched Southwest. Weather researchers also say higher-than-average precipitation in the region is not likely to make up for growing rainfall deficits over the past year.

"There's a wide variety of outcomes that can occur," said David Simeral, an associate research scientist at the Western Regional Climate Center in Reno, Nevada. "I would say, flip a coin."

Parts of the Southwest, particularly the Four Corners region of Colorado, Utah, New Mexico and Arizona, are experiencing extreme to exceptional drought, according to the U.S. Drought Monitor.

There is a 70-75 percent chance for development this winter of El Nino, the natural warming of parts of the central Pacific Ocean that influences weather worldwide, said Gerry Bell, research meteorologist with the National Weather Service's Climate Prediction Center. Pacific Ocean temperatures are currently warmer than average as they trend toward El Nino, Bell said.

El Nino-produced rainfall could relieve parched conditions in many parts of the drought-stricken Southwest but how much relief the region experiences depends upon the strength of the tropical ocean phenomenon, he said.

"El Nino is not a guarantee," he said.

Seasonal monsoon rainfall during the summer and autumn months helped relieve drought conditions in parts of the Southwest.

"We're seeing quite a bit of relief in Arizona," Simeral said. "Phoenix has already had the wettest October on record."

Parts of eastern New Mexico also benefited from heavy rainfall in

neighboring Texas. But in Utah, Gov. Gary Herbert last week declared a state of emergency due to drought. And Colorado has reports of wells running dry.

Simeral said the Four Corners region is in the midst of the driest September-October period on record. The region has experienced the warmest 12-month period on record in 123 years of record-keeping. Snowpacks in parts of Arizona and Colorado that could provide much-needed moisture during warm, dry periods are unusually low.

"That Four Corners region has stayed dry," he said.

© 2018 The Associated Press. All rights reserved.

Citation: El Nino could bring drought relief to southwestern US (2018, October 24) retrieved 27 January 2023 from <https://phys.org/news/2018-10-el-nino-drought-relief-southwestern.html>

<p>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.</p>
--