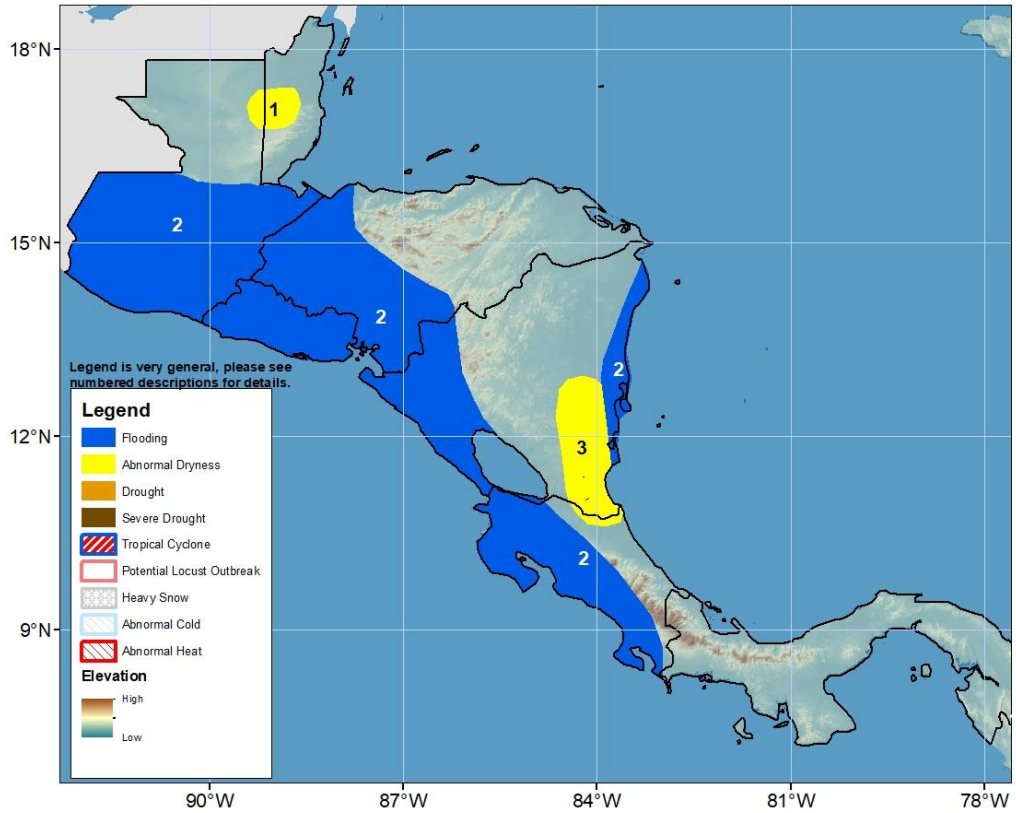
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
23 – 29 June 2022

Flash flooding and landslides threaten many areas of Central America where heavy downpours continue.



1) A delayed onset to the seasonal rain since April and uneven rains since has strengthened rainfall deficits, resulting in abnormal dryness over central Belize and a small portion of neighboring Guatemala.

2) Heavy and above-average rain over the past few weeks has led to ground oversaturation, which has resulted in flooding and landslides with many infrastructure damages, fatalities, and many people affected over many areas of Central America. Heavy rains will continue along the Pacific coast as well as the eastern-facing Nicaraguan coast.

3) Insufficient rains over the past month have rapidly increased moisture deficits in southeastern Nicaragua

Note: The Hazards outlook map is based on current weather/climate information, short and medium-range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed and predicted to continue during the outlook period. The boundaries of these polygons are only approximate at the spatial scale of the map. This product takes into account long-range seasonal climate forecasts but does not reflect current or projected food security conditions. FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards outlook process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and a number of other national and regional organizations in the countries concerned.

Questions or comments about the hazards outlooks may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdin@usaid.gov

Excess rainfall continues to cause flooding in the region with the threat for the heaviest rains shifting south this week.

Some portions of Central America received abundant rainfall totals during the past week. Torrential (> 100 mm) rains fell over parts of central and southern Guatemala, southern and northern Belize, the Gulf of Fonseca region, many parts of Nicaragua, parts of Costa Rica and central Panama. Many reports over this and previous weeks indicate that flooding and landslides have caused fatalities and major infrastructure damage over many areas of Guatemala, Honduras, and El Salvador. Some other parts of the region received well-below average rainfall (25-100mm anomalies). These include northern Guatemala, central Belize, Honduras, central El Salvador, and Panama. An analysis of the past 30-day total rainfall shows that wetter-than-average conditions are present over portions of central Guatemala, southern and northern Belize, much of Honduras, and northern Nicaragua. Rainfall surpluses ranged between 50 – 200mm. The current level of ground oversaturation is such that any additional moisture will likely trigger flash floods over many areas. In contrast, drier-than-average conditions persisted over central Belize and El Salvador due to a continued poor rainfall distribution since April. Better rains in northern Guatemala over the past month has improved the moisture situation there. Also, over southern Nicaragua, significant deficits (> 100mm) are now present.

For next week, heavy and above-average rain is expected to focus over the southern half of Central America according to model forecasts. Widespread, heavy rains (> 100mm) are expected, with the heaviest (>150mm) in eastern Nicaragua and Costa Rica. This forecasted wet weather pattern maintains high risks for flooding and landslides over many areas. More moderate rainfall is forecast across Guatemala. Tropical development is unlikely in the region during the next several days. Meanwhile, below-average maximum temperature is forecast over the region due to the abundant cloud cover.

Week 1 GEFS Rainfall Total Forecast and CMORPH average total rainfall (mm)
23 June – 29 June 2022

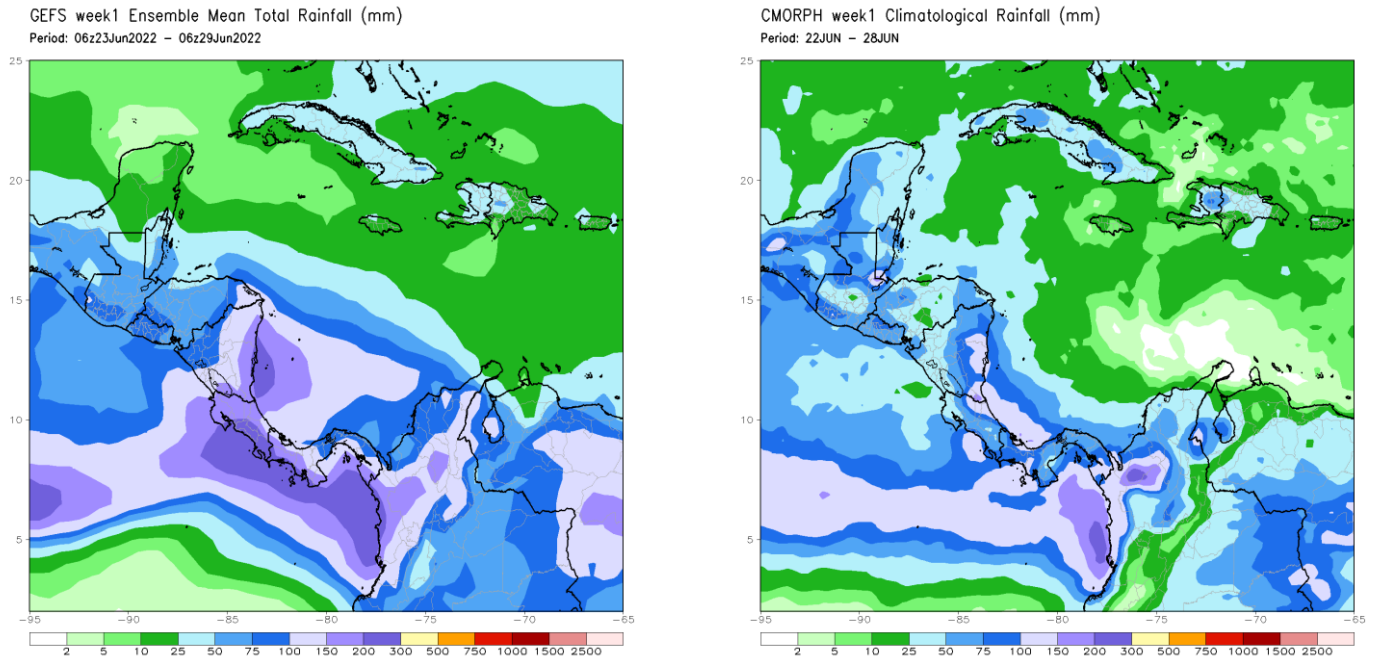


Figure 1: Source NOAA / CPC