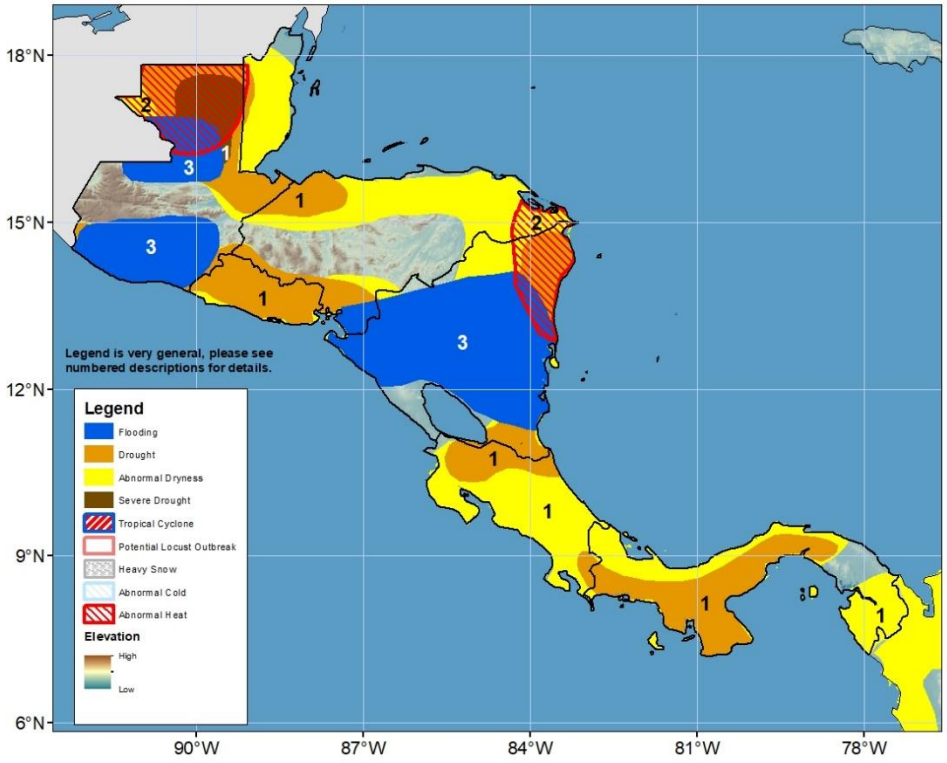
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
26 October – 1 November 2023

Floods and droughts observed and expected to continue over many areas in Central America



1) Inconsistent and insufficient rainfall since the beginning of the *Primera* season, starting in April, has led to abnormal dryness and patches of drought across Central America. Moreover, a severe drought polygon is maintained in northern Guatemala due to the continuing rainfall deficits, significant vegetation stress and dry soil conditions. The irregular rains since the start of the *Primera* season have mainly affected the crops of subsistence farmers, who might experience yield reductions of 25% to 50% of average. In addition, high temperatures and a lack of rain have exacerbated moisture availability in the soil. Sowing delays are still reported in Guatemala. The rainfall deficits in Panama are affecting the shipping industry in the Panama Canal, where the water level of the Gatun Lake is below average.

2) Abnormal heat hazards are posted in northern Guatemala, eastern Honduras, and northeastern Nicaragua, where maximum temperature and heat index are expected to exceed 35°C for three or more consecutive days during the next week.

3) High potential for flooding are issued for northern and southern Guatemala and central Nicaragua as a low pressure system, associated with the remnant of Tropical Depression Twenty-One is likely to re-intensify into a tropical depression, bringing heavy rainfall along the Pacific coastlines of Central America.

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

High risks for flooding threaten many areas in Central America.

During the past week, an uneven distribution in rainfall continued over Central America. While heavy rainfall was observed along the Pacific and Atlantic coasts, northern Guatemala, northern Nicaragua, parts of Costa Rica, and Panama, limited and below-average rainfall was received in northernmost Guatemala, Belize, and northeastern Nicaragua. Over the past 30 days, many areas including southern Guatemala, northern Honduras, and central Nicaragua experienced near-average to above-average rainfall. However, the combined effects of a poor spatial and temporal distribution in rainfall and above-average temperatures hampered adequate crop growth and limited vegetation stress recovery over many areas, based on reports. Over the past 90 days, a low (< 50% of the average) seasonal rainfall accumulation persisted in northern Guatemala, southern Honduras, northern Nicaragua, and parts of the southern Caribbean. The insufficient rainfall has already negatively impacted crops and led to droughts over many places.

During the next week, rainfall forecasts suggest a return of widespread and heavy rainfall across Central America, in particular the Pacific Littorals. The forecast above-average moisture, therefore, increases the risks for flash floods and landslides over many areas, including the northern and southern parts of Guatemala and Nicaragua. Meanwhile, abnormal heat hazards are posted for northern Guatemala and northeastern Nicaragua, where maximum temperatures and heat index are expected to exceed 35°C for at least three consecutive days, posing a threat to vulnerable people.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm)
26 October – 01 November 2023

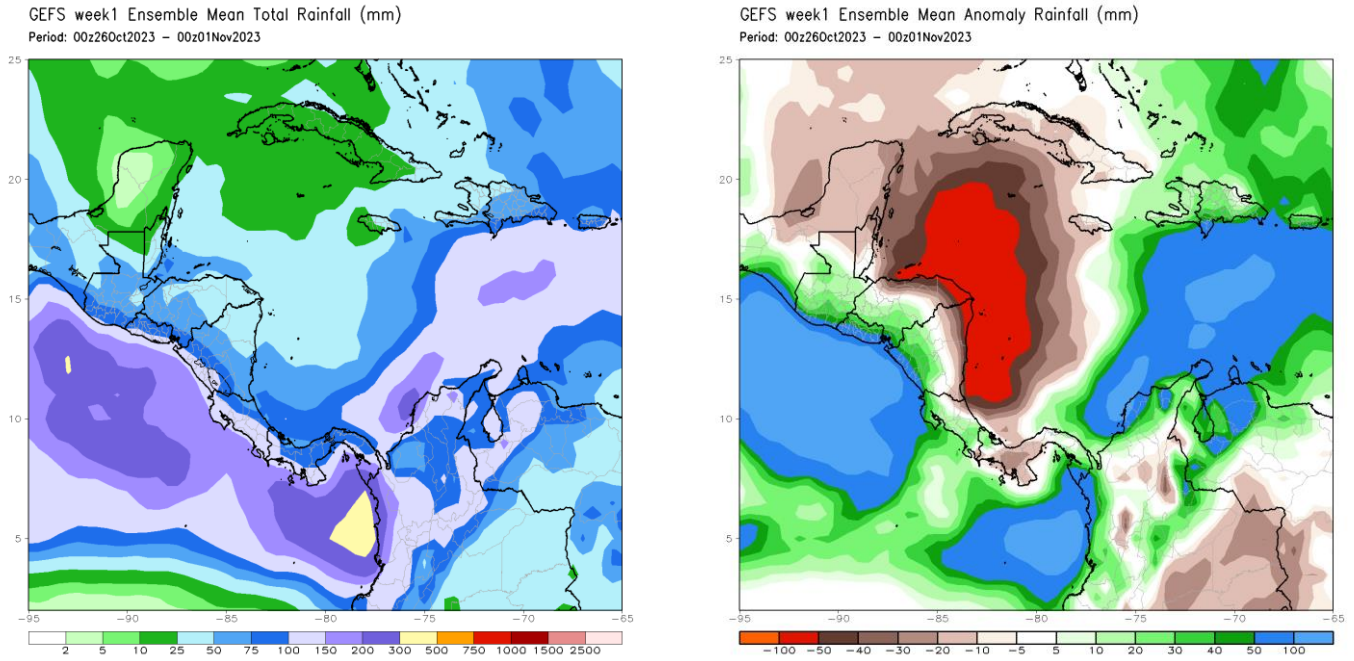


Figure 1: Source NOAA / CPC