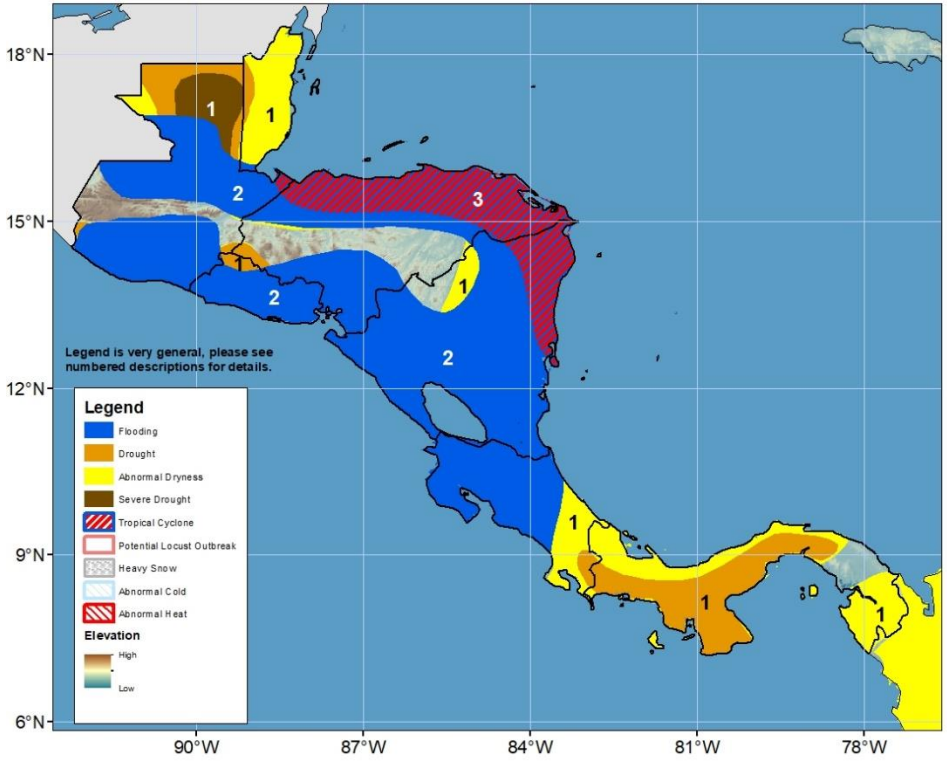
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
2 – 8 November 2023

Weather disturbances over the Pacific and Atlantic Oceans could bring heavy rainfall, leading to flooding 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) The influence of Tropical Storm Pilar, located off of El Salvador could bring heavy rainfall, potentially leading to flash flooding along the coasts of El Salvador and Nicaragua. Flood risks are also high in southern Guatemala and northern Costa Rica as additional moderate to heavy rainfall is forecast during the next week.

3) An area of low-pressure system over the central Caribbean Sea has a moderate chance to develop into a tropical system, which could result in heavy rainfall and flooding along northern Honduras and parts of Guatemala during the next week.

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.

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Tropical weather disturbances heighten flood risks over many areas of Central America.

During late October, heavy rainfall was observed along the Pacific and Atlantic coasts and the southern portions of Central America, while light to locally moderate rainfall was recorded over the northern part of the sub-region. Abundant and above-average rainfall was received over south-central Nicaragua due to the passage of Tropical Depression Twenty-One. According to reports, the recent increase in rainfall has contributed to elevated river levels and flooding over many areas in Central America, including the Huehuetenango, Alta Verapaz, and Baja Verapaz Departments in Guatemala. Over the past 30 days, the Pacific Tier of Central America registered near-average to above-average rainfall, while the Caribbean Littorals continued to receive below-average rainfall. Over the past 90 days, the *Postrera*, August-September rainfall performance has been poor as rainfall totals accounted for only between 25-80% of the average across the sub-region. The lowest (< 25% of the average) accumulation was observed in northeastern Guatemala and northern Belize. The prolonged insufficient rainfall has already led to moderate to large rainfall deficits and degraded vegetation, which resulted in abnormal dryness and droughts over many areas.

During the next week, high risks for flooding exist over many areas in Central America as the influence of Tropical Storm Pilar, located off of El Salvador could bring heavy rainfall, potentially leading to flash flood along the coasts of El Salvador and western Nicaragua. High potentials for flooding are also posted over Nicaragua and along the Caribbean coasts of Honduras and parts of Guatemala as a low-pressure system over the central Caribbean Sea has a moderate chance of becoming a tropical storm, which could impact Central America over the next few days.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm)
02 November – 08 November 2023

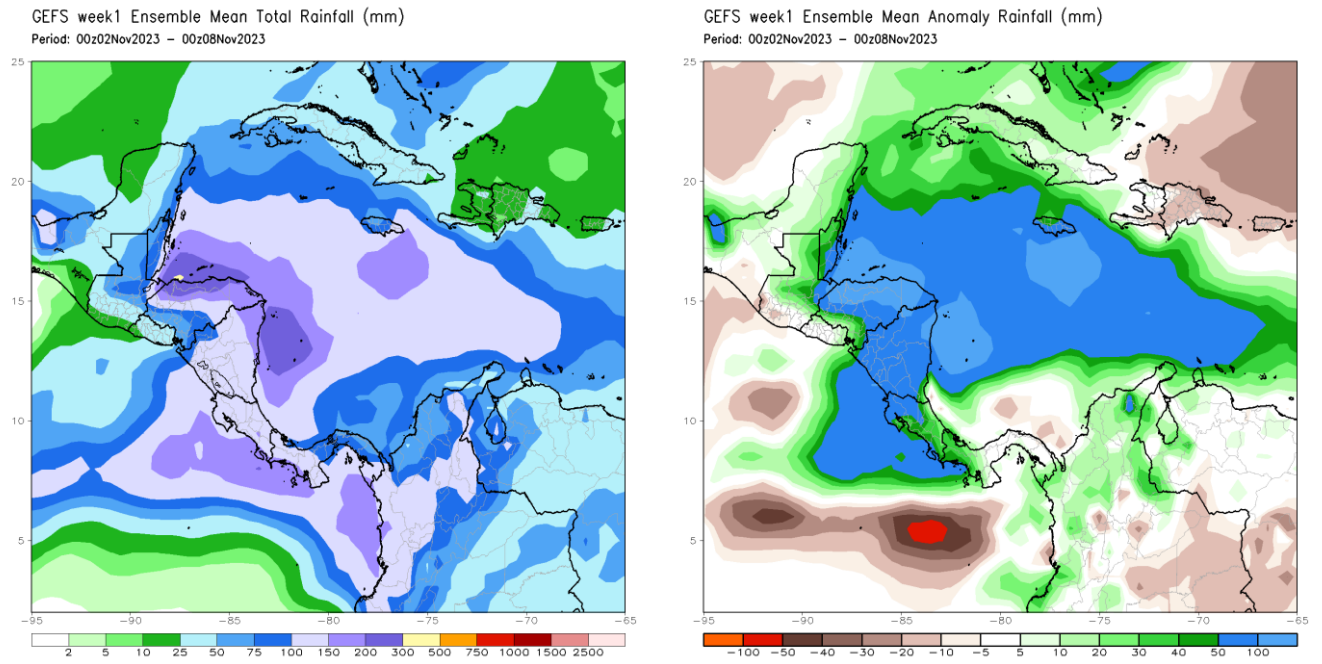

Figure 1: Source NOAA / CPC