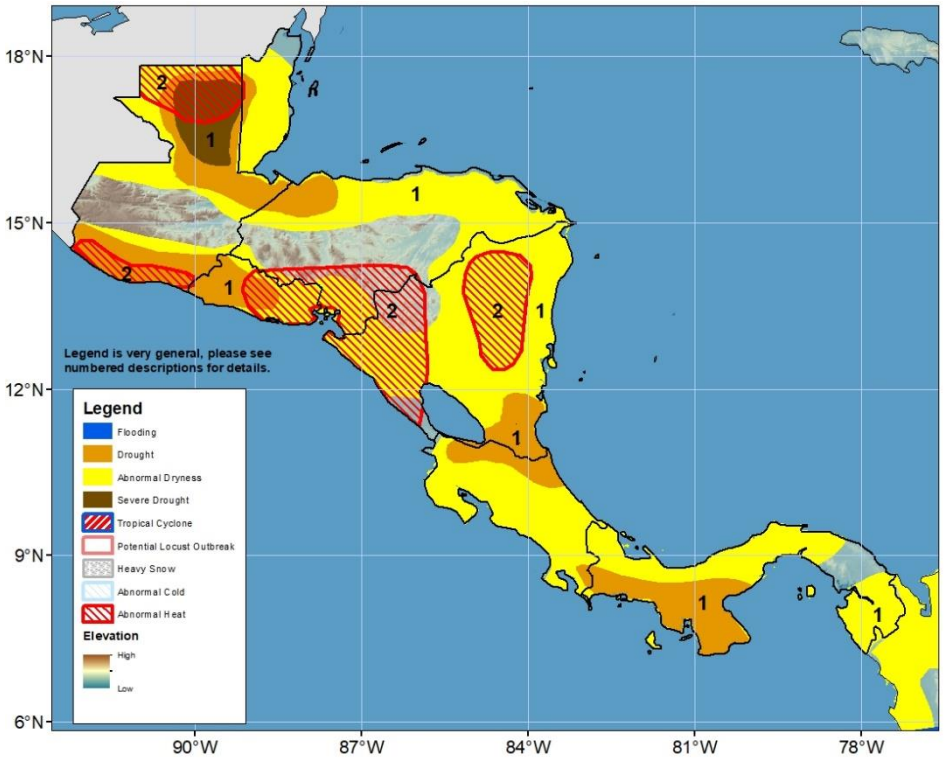
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
14 September – 20 September 2023

Rainfall deficits and abnormally warm temperatures continue 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 the region. 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, the high temperatures and the lack of rain have exacerbated moisture availability in the soil. While on the border between Guatemala and El Salvador and other pacific facing zones of Guateamala, sowing activities are delayed due to the lack of rainfall and high temperatures observed in recent weeks. In addition, 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) Weekly mean maximum temperatures are forecast to be 30-35°C and warmer than average (2-4°C) in southern and northern Guatemala, western and central Nicaragua, southern Hondura and eastern El Salvador. Therefore, an abnormal heat hazard has been added in these regions.

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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Rains will likely continue to be suppressed across the region this week

During the last week, heavy rainfall (75-150mm totals) was observed in west-central Guatemala, western Honduras, El Salvador, and localized parts of Panama. Conversely, areas receiving especially light rainfall, less than 10mm, include central Honduras, central Nicaragua, and northwestern Costa Rica. Moreover, northern Guatemala, the Gulf of Fonseca region, northeastern Nicaragua, Costa Rica, and much of Panama show the largest deficits during the 7 days (>50mm anomalies). The 30-day rainfall period shows that northern and southern Guatemala, northeastern El Salvador, southern Honduras, parts of Nicaragua, and many parts of Costa Rica and Panama received less than 50 percent of normal rainfall. Moreover, in the 90-day seasonal period, the largest rainfall deficits are still observed in northern and southern Guatemala, El Salvador, the border between Nicaragua and Costa Rica, and Panama, where deficits are larger than 500 mm. Meanwhile, warmer than average temperatures (2-4 °C above the mean) were observed in eastern Guatemala, western/eastern Honduras, northeastern Nicaragua, and some areas of Costa Rica and Panama.

During the next week, forecasts suggest the heaviest rainfall (values larger than 50 mm) will occur across southern Guatemala, El Salvador, eastern Nicaragua, western Costa Rica, and southern Panama. However, the forecast suggests below-average rainfall conditions in most of Central America with the largest anomalies in central Guatemala, Costa Rica and Panama (more than 50 mm below the mean). Furthermore, the maximum temperature anomalies forecast suggests hotter than average temperatures during next week in southern and northern Guatemala, El Salvador, southern Honduras, and Nicaragua.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm)
14 September – 20 September 2023

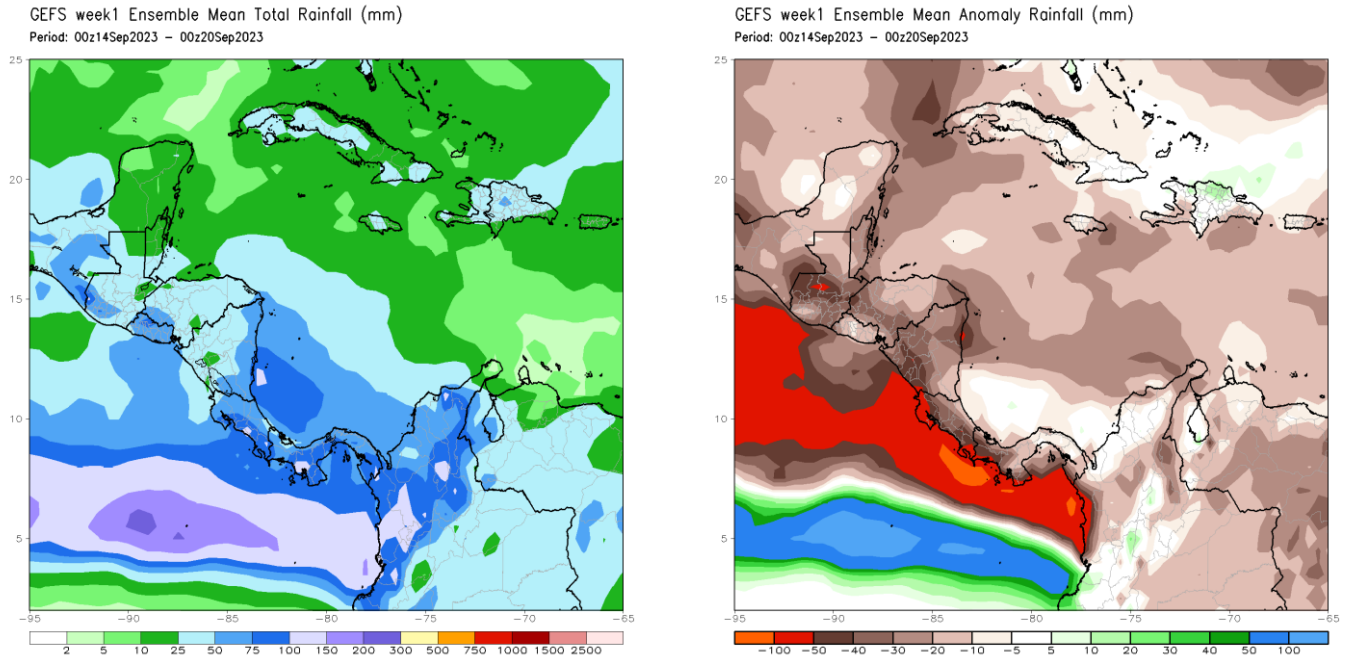

Figure 1: Source NOAA / CPC