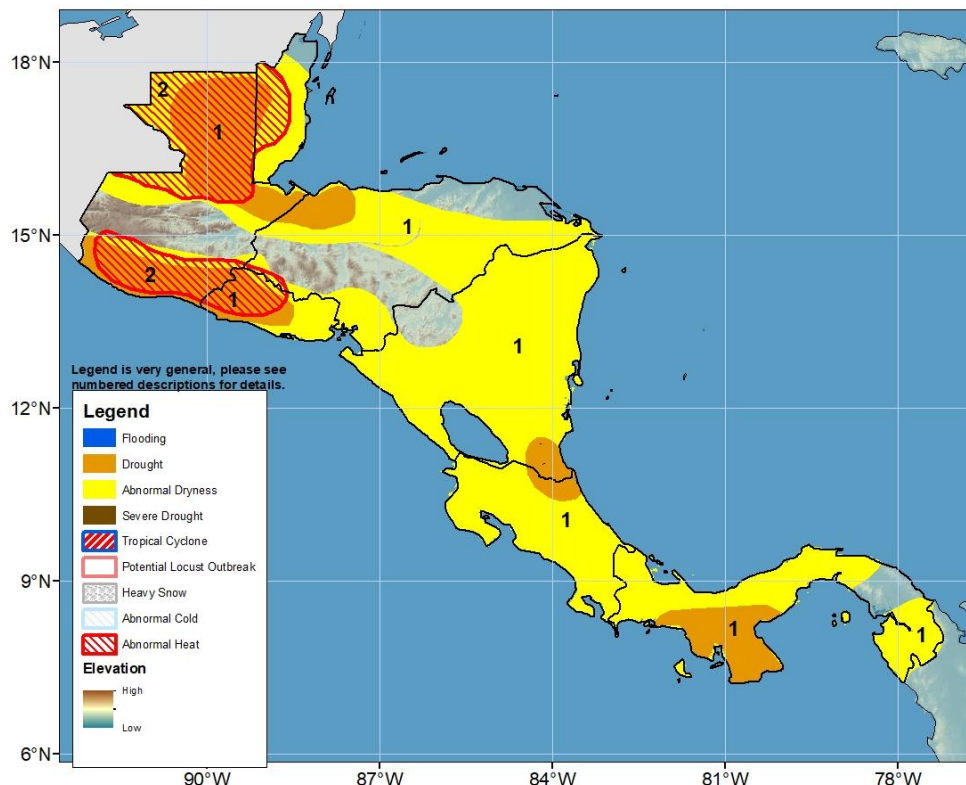


Climate Prediction Center's Central America Hazards Outlook For USAID / FEWS-NET 13 – 19 July 2023

Heavy rainfall continued in central Guatemala. Dry and hot conditions continued in most parts of Central America.



- 1) Inconsistent and insufficient rainfall since the beginning of the “Primera” season starting in April has led to large reductions in total rainfall and expanding abnormal dryness across the region. As the period of below-average rainfall extends to 8 weeks and deficits deepen, drought is placed in northern/southern Guatemala, El Salvador, northeastern Honduras, southern Nicaragua, northeastern Costa Rica, and south-central Panama.
- 2) Weekly mean maximum temperatures are forecast to be above average by 2-4°C across northern and southern Guatemala and El Salvador, with maximum temperatures exceeding 30°C and reaching as high as 40°C in northern Guatemala.

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

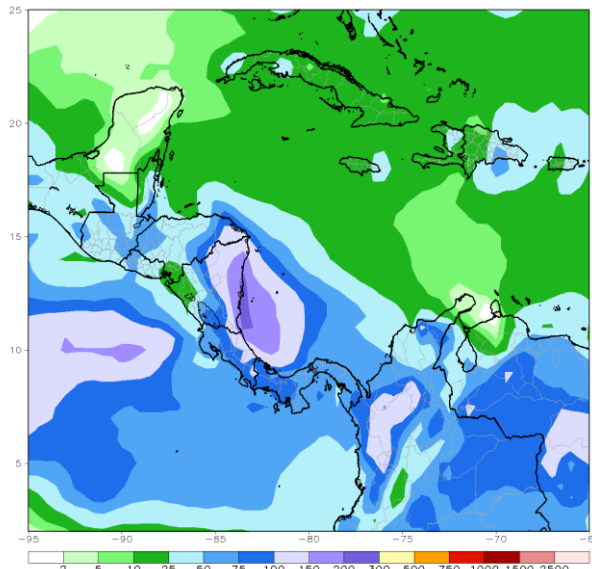
Central Guatemala, western/eastern Honduras, eastern Nicaragua, and western Panama received heavy and beneficial rains last week.

During 04-10 July 2023, heavy rainfall totals between 100-150 mm were observed in central provinces of Guatemala (Quiché, Alta Verapaz, Zacapa departments), southern Belize and adjoining provinces of Guatemala (northern Izabal and southeastern Petén departments), parts of eastern Honduras as well as eastern Nicaragua and western coasts of Panama according to CMORPH satellite estimates. Similarly moderate to heavy rainfall was indicated along the borders of El Salvador and Honduras. Compared to their long term averages, the observed rainfall totals were wetter than average across central Guatemala departments and over the western/southern/eastern regions of Honduras and parts of eastern coasts of Nicaragua. According to ground reports, some of the heaviest rains have caused flooding and landslides especially in parts of Guatemala. Other areas of Central America, however, received insufficient rainfall, which led to substantial 7-day deficits of 25-50mm, even exceeding 100mm in southeastern Nicaragua. Areas of northern/eastern/southern Guatemala, Belize, El Salvador, central and southeastern Nicaragua, northern and eastern Costa Rica, and most parts of Panama all registered negative anomalies greater than 25mm. The 30-day cumulative rainfall analysis shows dry conditions prevailing across the region. Deficits of at least 200mm are present at some localities in northern and eastern Guatemala (Petén and Zacapa departments), and over southeastern Nicaragua and northeastern Costa Rica. Many of these deficits translate to 50% or even 75% reductions in rainfall. The 90-day deficits are similarly expansive. As a result, abnormal dryness is steadily expanding through Central America and patches of drought are now present. Vegetation health is relatively poor through northern Honduras, Nicaragua, northern and southeastern (up to Chiquimula) Guatemala, Belize, El Salvador, and parts of central Panama. Maximum temperature anomalies were at least 2 to 4°C above normal in eastern Guatemala and western Honduras. On top of the erratic rainfall distribution, the high temperatures have quickly evaporated any moisture from the soil making agriculture difficult for local farmers. Some farmers may have elected not to plant yet to this point in the year.

During the outlook period, forecasts indicate that moderate to heavy rains will cover much of Central America. Totals of more than 50mm are widely predicted, with more than 100mm possible in southeastern Honduras, eastern and southern Nicaragua, and northeastern coasts of Costa Rica. However, except over southeastern Honduras and eastern coasts of Nicaragua and Costa Rica, the predicted rainfall amounts will be insufficient and will result in drier than average conditions over much of Central America for the week (Fig 1). Maximum temperatures are forecasted to be 2 to 4°C warmer than average across southern and northern Guatemala and parts of El Salvador. Maximum temperatures will be above the 90th percentile for 3 or more days in parts of Guatemala and El Salvador, leading to the placement of an Abnormal Heat hazard.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm): 13 – 19 July, 2023

GEFS week1 Ensemble Mean Total Rainfall (mm)
Period: 00z13Jul2023 – 00z19Jul2023



GEFS week1 Ensemble Mean Anomaly Rainfall (mm)
Period: 00z13Jul2023 – 00z19Jul2023

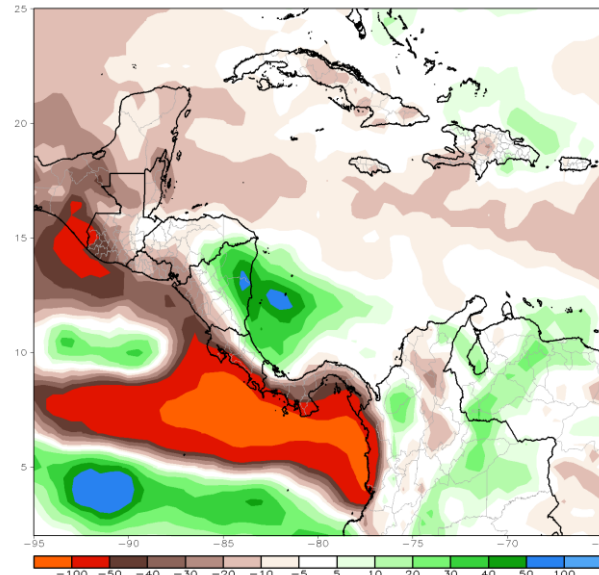


Figure 1: Source NOAA / CPC