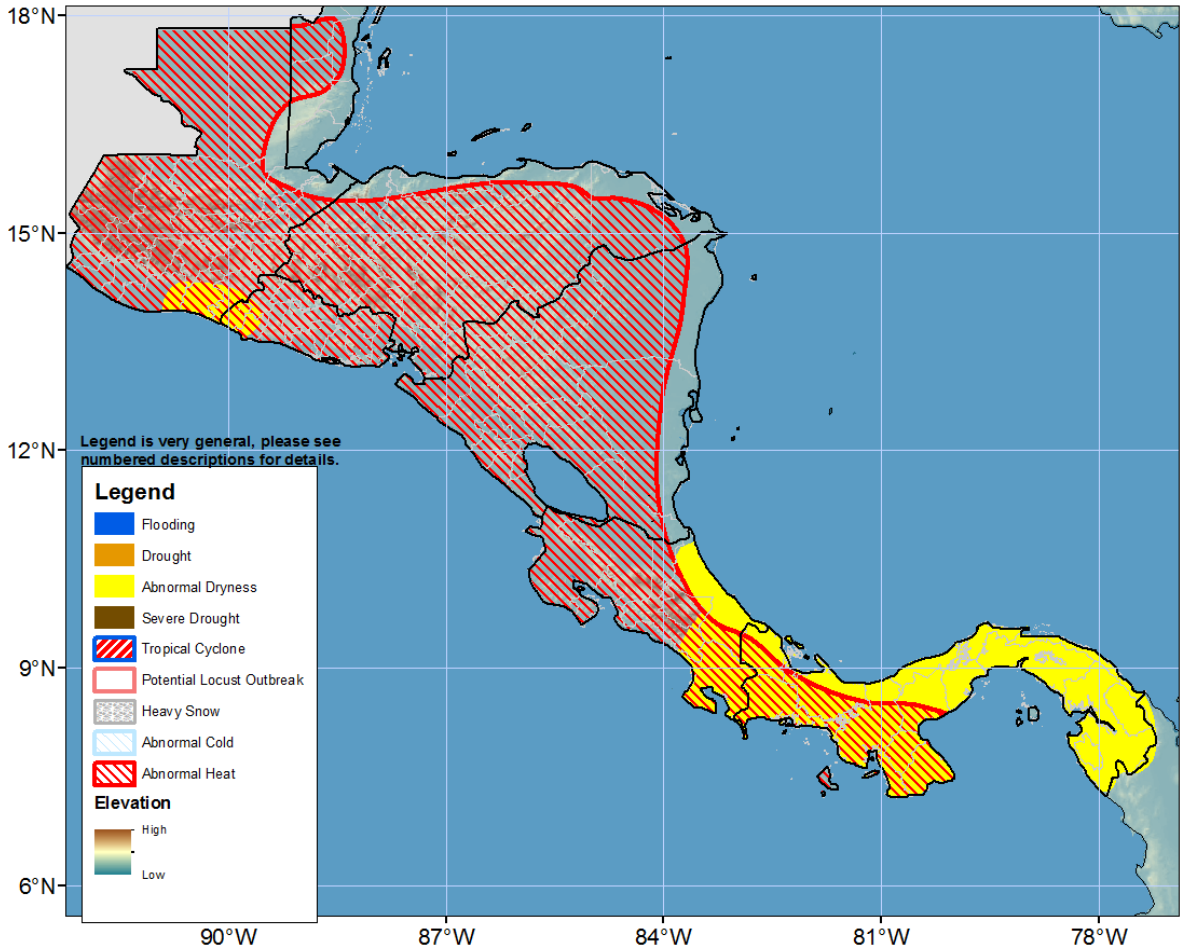
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
18 May – 24 May 2023

An abnormal dryness polygon is placed over southern Costa Rica and all of Panama due to persistent dryness in the past 30 days. In addition, the abnormal dryness polygon has been expanded to include eastern Costa Rica, southeastern Guatemala, and southwestern El Salvador. An abnormal heat polygon has been placed across Guatemala/central Belize and extends to the Azuero Peninsula of Panama.



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

During the last week, above average rainfall was observed over northern and east-central Guatemala, western and central Honduras, and parts of northern Belize. According to CMORPH, western Honduras and east-central/northwestern Guatemala received moderate to heavy rainfall between 75 to 150mm. According to Insivumeh, on 15 May, nearly 60mm of rainfall fell near Guatemala City leading to localized flooding. Except for parts of central Nicaragua and northern Costa Rica, most places in Central America observed precipitation. The 30-day cumulative rainfall analysis shows dry conditions especially in southern and eastern Costa Rica, throughout most of Panama, eastern and western El Salvador, northwestern Nicaragua, and in southern Guatemala, with deficits between 50-100 mm throughout much of the region and larger deficits >100 mm in southern Costa Rica, western and eastern Panama, and in southwestern Guatemala. As a result, an abnormal dryness polygon has been expanded to include all of eastern Costa Rica, southeastern Guatemala, and southwestern El Salvador where SPI values are also well below normal. Although the latest analysis indicates near or above average vegetation conditions over much of Central America, vegetation health is relatively poor in northern and eastern Honduras, eastern Nicaragua, northern and southeastern Guatemala, parts of northern and southern Belize, central and southern El Salvador, and much of central Panama. In addition, minimum temperatures were 4 to 8°C warmer than average over southern Guatemala and central/western El Salvador. The maximum temperature magnitudes were not as high; western and parts of southern Honduras, parts of central Guatemala, western and central Nicaragua, most of inland Costa Rica, and western Panama observed maximum temperatures 2 to 4°C above normal.

During the next week, forecasts suggest moderate rainfall (50mm-75mm) across southwestern Guatemala and moderate to heavy rainfall (50mm-150mm) in eastern Panama. Most of Central America is expected to receive below normal rainfall, especially Costa Rica, much of western and central Panama, Nicaragua, El Salvador, southern Guatemala, and western and eastern Honduras -- which are expected to receive rainfall more than 50mm below normal during the coming week (Fig 1). Maximum temperatures are forecasted to be 2 to 6°C warmer than normal in most areas, especially in Guatemala and northern Belize to the Azuero Peninsula of Panama. These countries have been included within an abnormal heat polygon for this forecast period, although increased cloudiness may suppress maximum temperatures for much of the region. However, higher maximum temperature anomalies are expected on the Pacific-facing side of the region.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm)
18 May – 24 May 2023

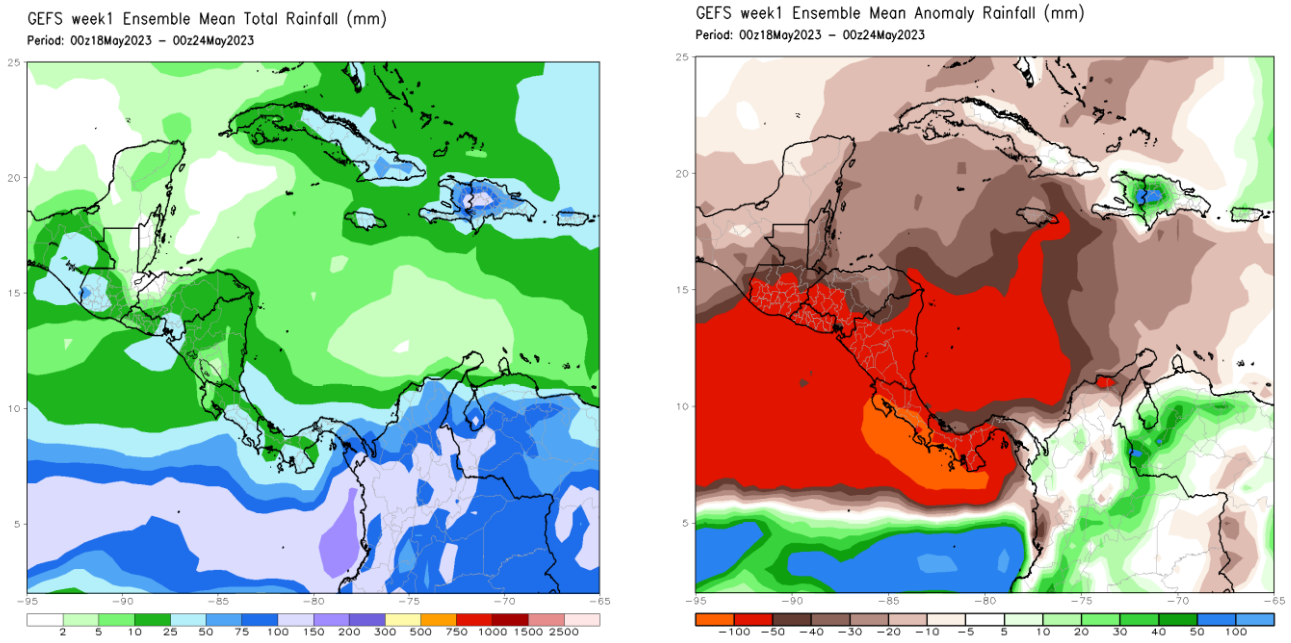


Figure 1: Source NOAA / CPC