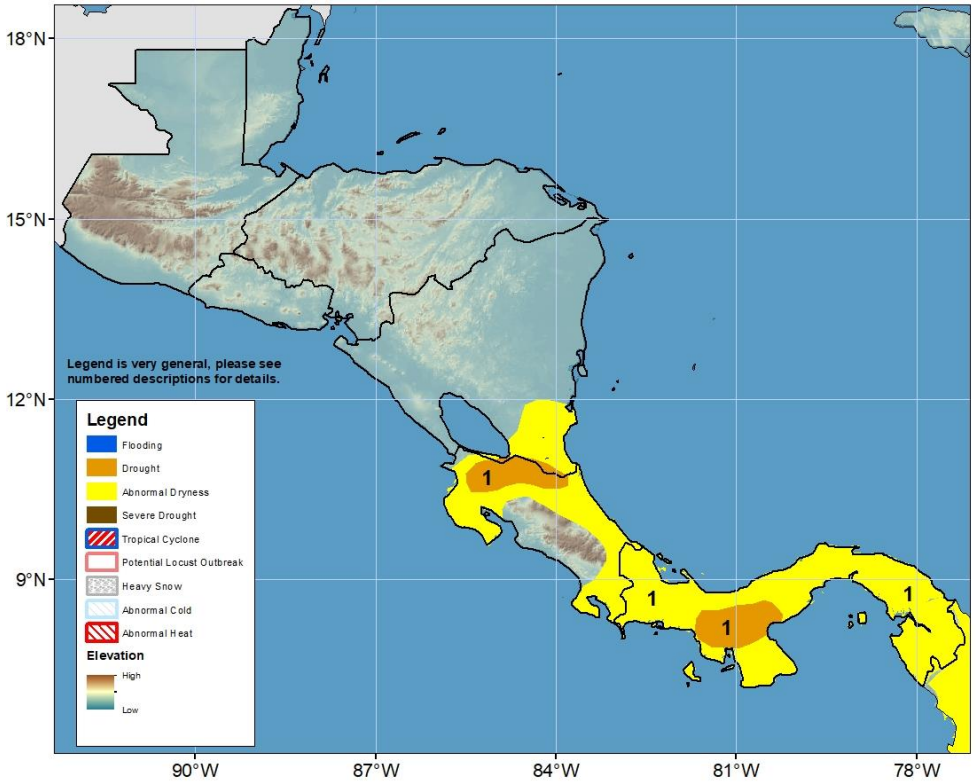
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
28 December, 2023 – 3 January, 2024

Well-below average rain is onging in the South.



1) Reasonable amounts of rainfall during the couple of months have helped improve short-term deficits across much of the region, but irregular and insufficient rainfall in the 90 days (long-term) and 30 days (short-term) is persisting in southern Central America. The rainfall deficits are affecting the shipping industry in Panama Canal, where the water level of Gatun Lake is below average. Hazards are kept in the South where end-of-season occurs later.

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

Rainfall is forecasted to be below average for Caribbean-facing areas in the coming week.

During last week, rainfall was primarily relegated to areas immediately along the region's Caribbean coastlines. Total amounts of 10 mm to locally more than 25 mm likely occurred. Small negative anomalies resulted from this pattern across the region. Central and Pacific-facing portions of the region, including most of Guatemala received little to no rainfall as is typical this time of year. A wet period from 2 weeks ago, means surpluses are present in the last 30 days for Belize, the northern Guatemala coast and northeastern Nicaragua. Conversely, negative anomalies remain for interior regions, as well as in Costa Rica and Panama where anomalies exceed 100- 200 mm. In the long-term (the past 90 days), southern Guatemala, southern Honduras, el Salvador, northern Nicaragua, most of Costa Rica, and Panama registered rainfall less than 80% of their long-term period averages. High temperatures have especially limited any recent improvement in soil moisture. The irregular rainfall and the prolonged insufficient rainfall during the 'Postrera' contributed degraded vegetation in some regions and impacted the agricultural sector in Guatemala. Similar conditions combined with warm temperatures caused irregular sowing by Nicaragua farmers.

For next week, the GEFS forecast suggests eastern Honduras and eastern Nicaragua, as well as northern Belize, should receive below-average rainfall amounts of 10 to 50 mm. Northern Honduras and Costa Rica are forecasted to receive 50-100 mm. Southern Panama is likely to be the wettest part of the region and could receive more than 75 mm. Cold air filtering in from the North this week brought overnight freezing conditions (coldest temperatures of the season) to the highest elevations of western Guatemala. However, conditions should be warmer and close to average for the outlook period, minimizing negative impacts to vegetation. Below average temperatures are still possible in northern Guatemala and Belize.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly Forecast (mm)
28 December 2023 – 3 January 2023

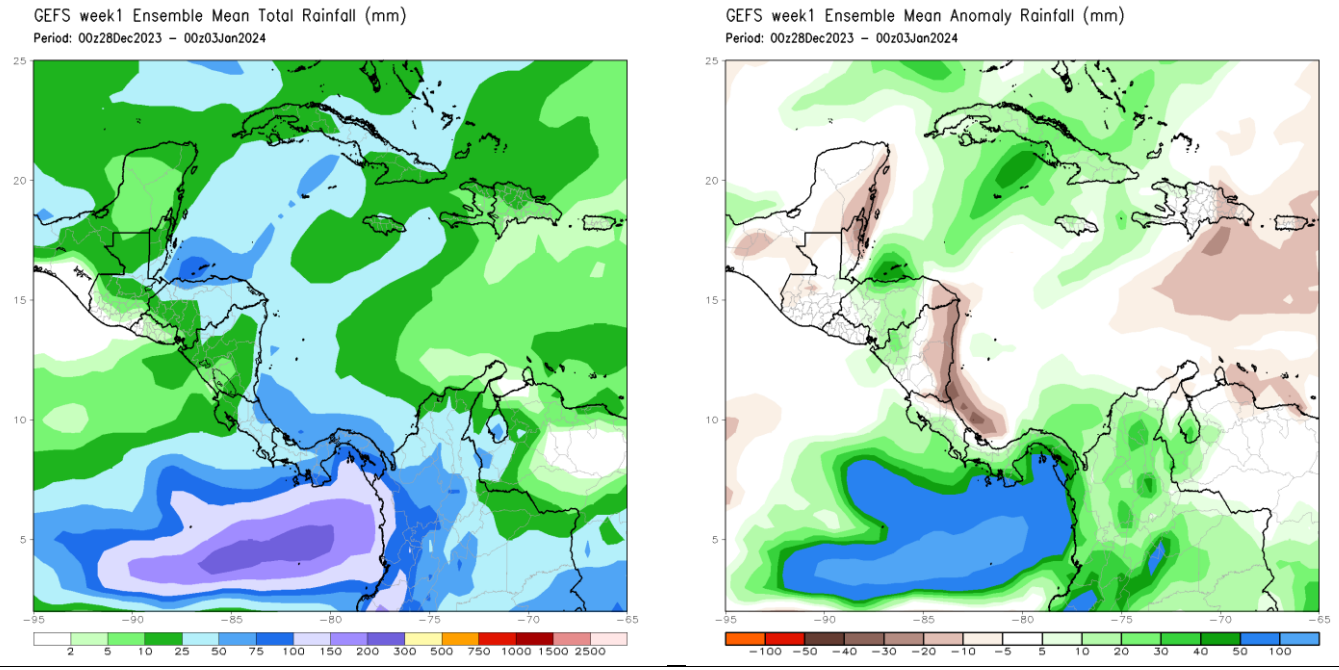


Figure 1: Source NOAA / CPC