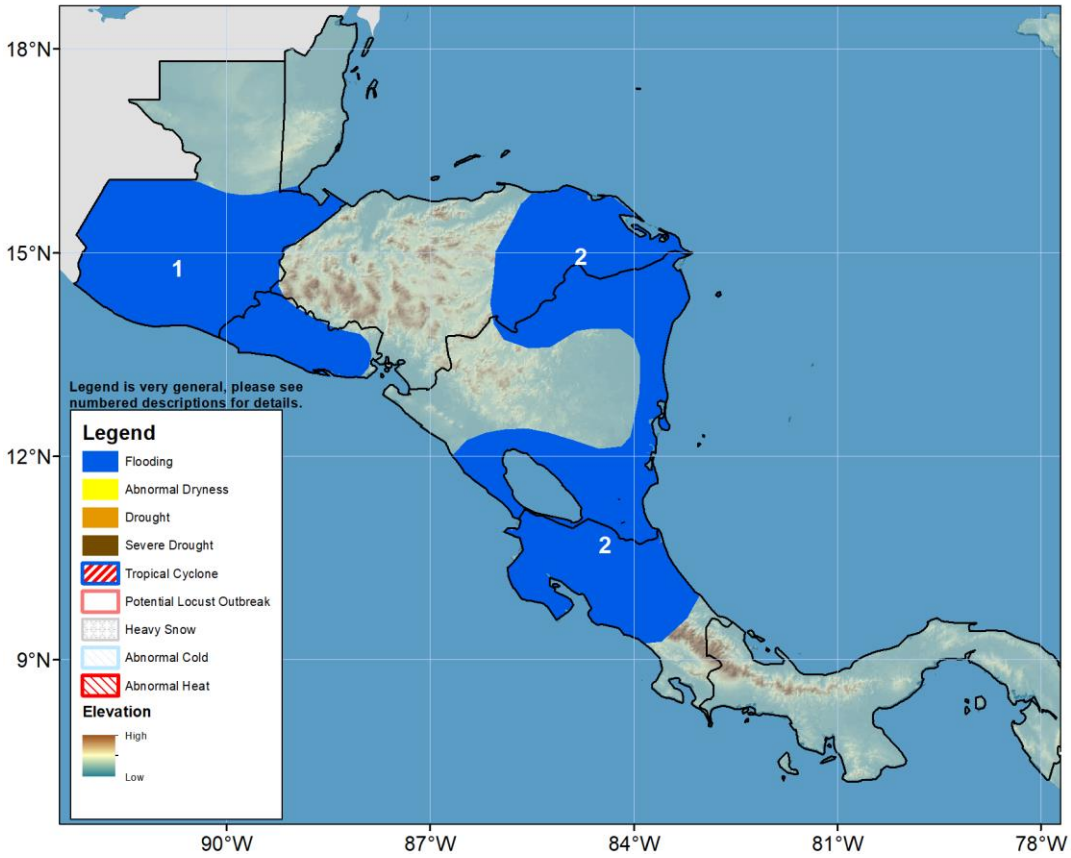
# Climate Prediction Center's Central America Hazards Outlook
# For USAID / FEWS-NET
# 7 – 13 July 2022

**Following this past week's crossing of Tropical Storm Bonnie, flood risks remain high over many areas.**




1) Heavy and above-average rain over the past few weeks has led to ground oversaturation, which has already caused flooding, landslides, and many people affected over many areas of Guatemala and El Salvador. Moderate to heavy rains are forecast during the next week, maintaining high flood risks.

2) This past week's passage of Tropical Storm Bonnie has contributed to remove accumulated moisture deficits and strengthen rainfall surpluses over eastern Honduras, eastern and southwestern Nicaragua, and western Costa Rica. The risks for flooding and landslides remain high 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.**

**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**

**This past week's passage of Tropical Storm Bonnie brought heavy rains, negatively impacting many areas.**

During late June to early July, torrential (> 100 mm) rains fell over southeastern Nicaragua and eastern Costa Rica. The accumulated abundant rains were associated with the landfalling of Tropical storm Bonnie over southeastern Nicaragua near the border with Costa Rica. Tropical storm Bonnie intensified into a Tropical storm over the southern Caribbean Sea, made landfall in southeastern Nicaragua on 1 July, and crossed onto the eastern Pacific by 3 July. Based on media reports, floods have affected 21 municipalities across Nicaragua, leaving 4 casualties, over 400 houses damaged, and more than 3000 people displaced. According to reports, local area in the Guanacaste Province in western Costa Rica recorded a rainfall accumulation of 205.9 mm from 1 – 3 July. Farther north, impacts were also felt over El Salvador, including Ilopango, where damaged homes were reported. While enhanced moderate to heavy rains were received over eastern Honduras, southern and eastern Guatemala, and western Honduras, reduced and limited rains were registered over western and northern Guatemala and northern Belize. An analysis of this past thirty-day rainfall accumulation has indicated that near to above-average rainfall prevailed over much of Central America, in particular central Guatemala, eastern Honduras, the Atlantic and Pacific coastlines of Nicaragua, and Costa Rica. Hence, the latest soil water index product exhibited favorable soil moisture throughout Central America, except northeast Guatemala and northern Belize, where moisture stress was depicted.

For next week, heavy rains are to continue, likely to exacerbate conditions over previously-affected areas in Nicaragua and Costa Rica. Widespread moderate to heavy rains are expected over much of northern Central America, maintaining elevated risks for overflowing of rivers, flooding, and landslides over areas in Guatemala and El Salvador. In southern Guatemala, the forecast heavy rains could not only trigger flooding and landslides but also heighten the risks for lahars as the Fuego volcanic activities have increased recently.

**Week 1 GEFS Rainfall Total Forecast and CMORPH average total rainfall (mm)**
**06 July – 13 July 2022**

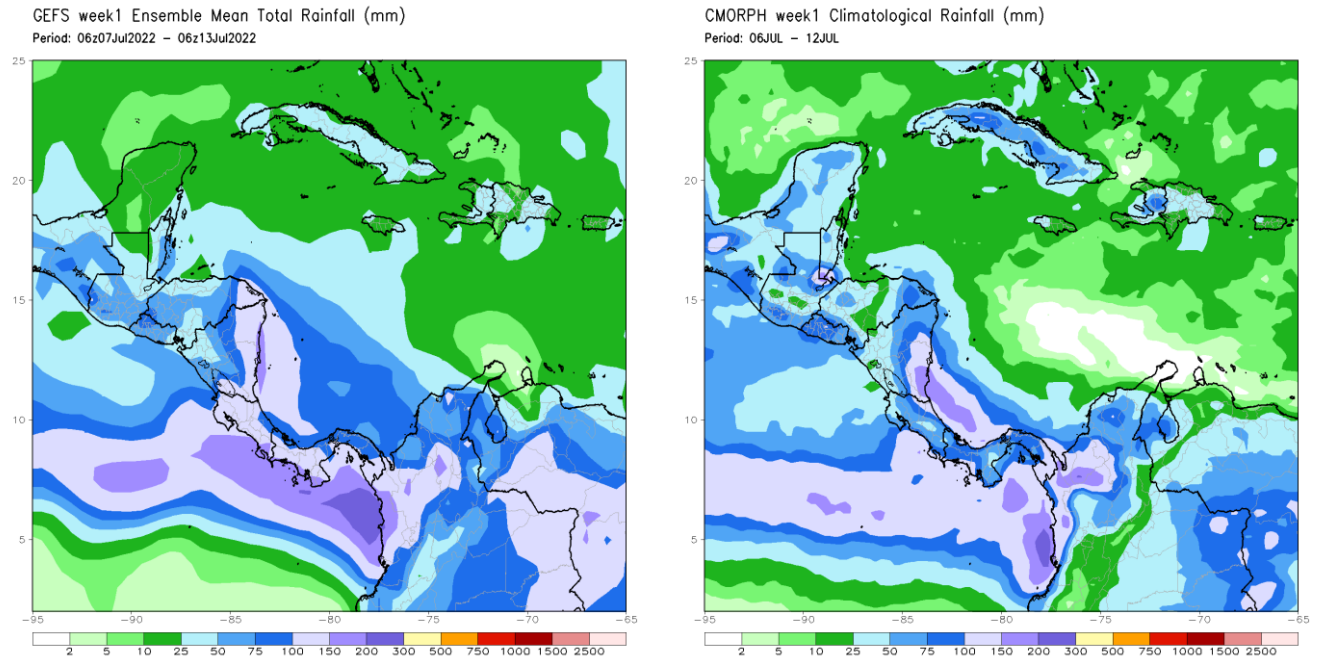



**Figure 1: Source NOAA / CPC**