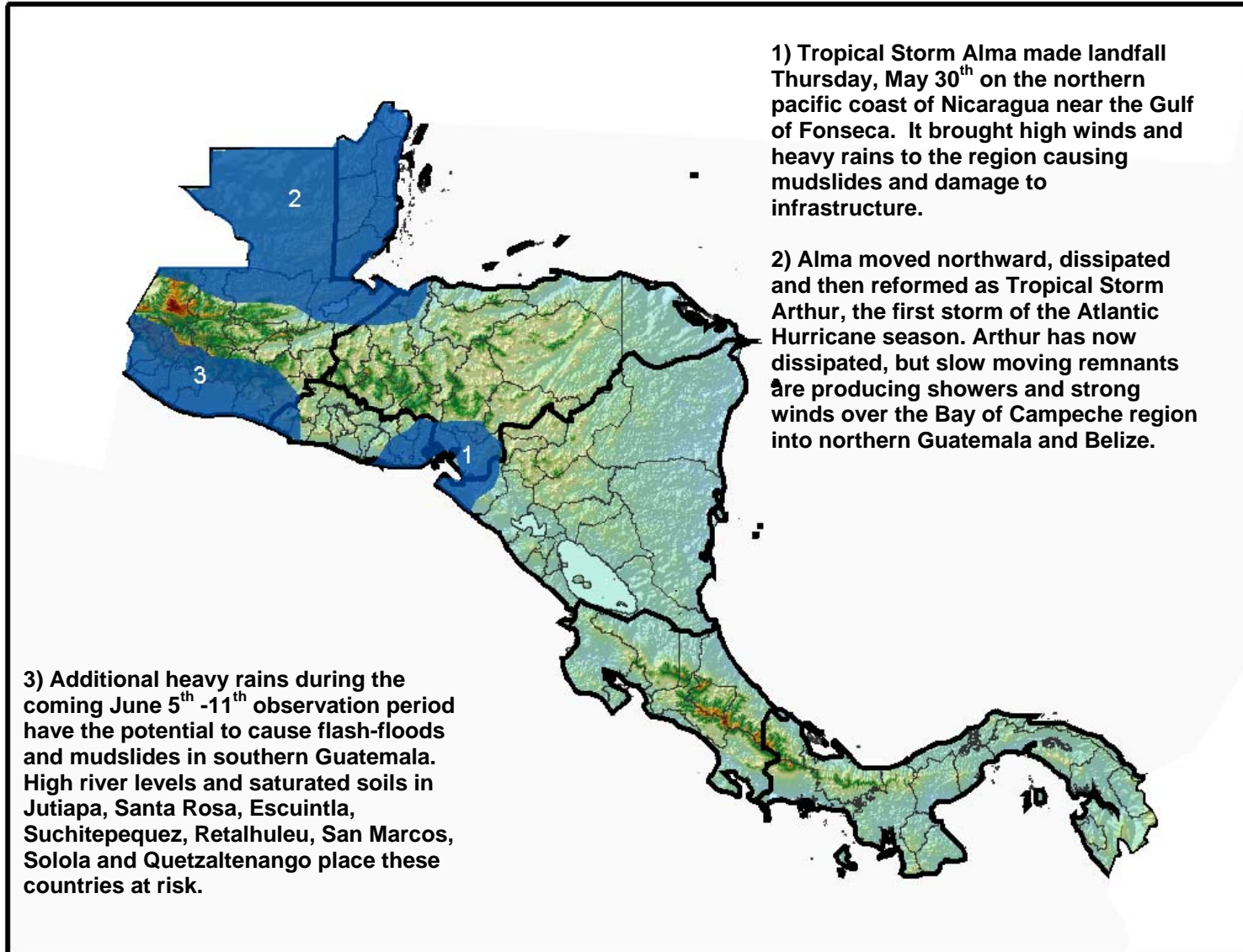


The MFEWS

Central America Weather Hazards and Benefits Assessment

For

June 5 – June 11, 2008



Hazards Assessment Text Explanation:

Two consecutive weeks of excessive rains in Guatemala have led to high river levels and flooding concerns. In Guatemala, heavy rainfall totals exceeding 100mm were observed in the Peten, Quiche, Alta Verapaz and Izabal departments. Excessive rainfall resulted in localized flooding for areas in the Escuintla department in southern Guatemala during the May 22 – 28 observation period and with the occurrence of Tropical Storm Alma/Arthur these conditions have worsened. River levels are very high and heavy rainfall totals (>100mm) are expected within the next seven days in the mountainous areas of southwestern Guatemala.

In Nicaragua and Costa Rica, rainfall totals have improved greatly. Despite these improvements, the prolonged absence of precipitation has adversely impacted water resources for crop and livestock. Many areas within eastern Nicaragua and southeastern Honduras are below-average for the primera season. Further south, soil moisture deficits are being felt in the Chiriqui province in Panama due to the weak primera rains. The recent onset of rains in addition to the tropical activity is expected to help replenish water resources for local areas. The seven day forecast is also favorable for improvement. (Figure 1)

The first tropical depression of the Pacific Hurricane season formed Wednesday evening, May 28th southwest of Nicaragua. The system intensified rapidly due to favorable atmospheric dynamics, warm sea surface temperatures and high ocean heat content. Tropical Storm Alma made landfall May 29th in the Leon and Chinandega departments of Nicaragua. The storm made a northerly track across Honduras and into the Gulf of Honduras. (Figure 2) The heaviest rains associated with Alma fell along the northeastern quadrant of the system, improving rainfall totals in much of Nicaragua. As the system migrated over land it lost intensity and had diminished back to a weak low by Saturday, May 31st. However favorable environmental conditions allotted remnants of Alma to regenerate and in-turn form the first storm of the Atlantic Hurricane season, Arthur. Arthur brought more rains to Honduras, El Salvador, Guatemala and especially Belize as it migrated over the Yucatan. It has now dissipated and a weak low remains over the bay of Campeche. Heavy rains, winds and floods associated with the storms caused damage to houses and infrastructure, flash-floods and mudslides were also reported in Nicaragua and Honduras. Heavy rains are expected to continue in the region for the next seven days due to a weak low pressure area situated south of the Gulf of Tehuantepec.

**7 Day Rainfall Totals
GFS Forecast, Valid June 4 – June 11, 2008**

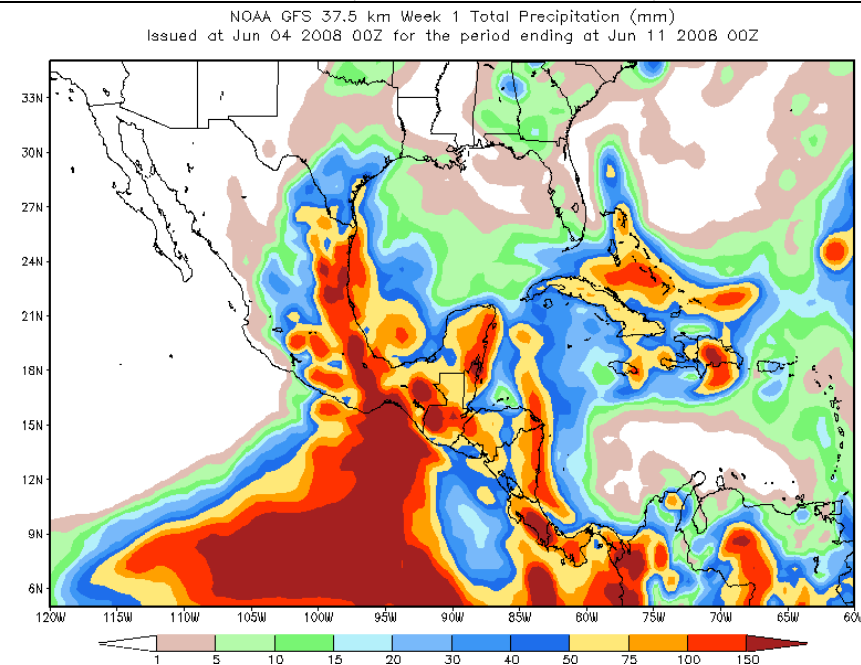


Figure 1
Source: NOAA

**Enhance IR Image of Tropical Storm Alma
May 30, 2008**

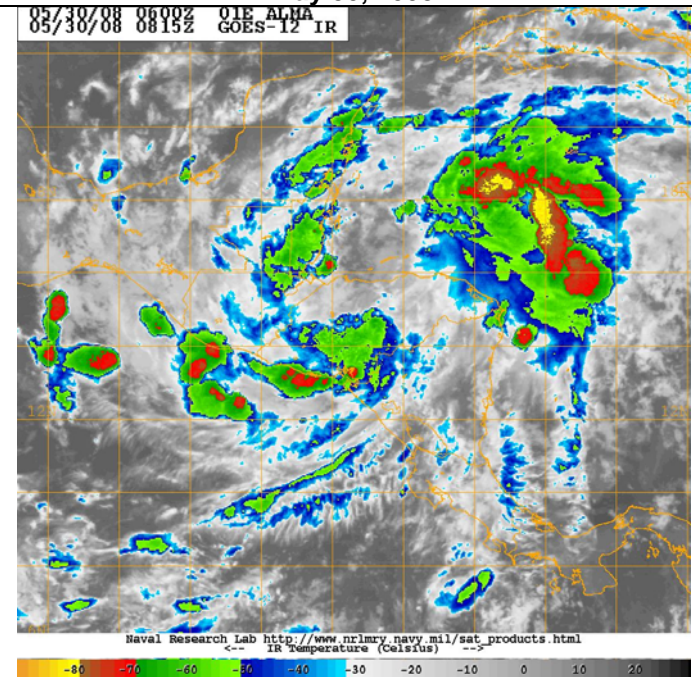


Figure 2
Source: NRL

The evaluation of climatological threats of MFEWS include the participation of the central and local offices of MFEWS, NOAA-CPC, USGS, NASA, INETER of Nicaragua, Meteorological Service of Honduras, IMN of Costa Rica, INSIVUMEH of Guatemala, ETESA of Panama, NMS of Belize and SNET of El Salvador. Any questions or comments on this product can be directed to Wassila.Thiaw@noaa.gov