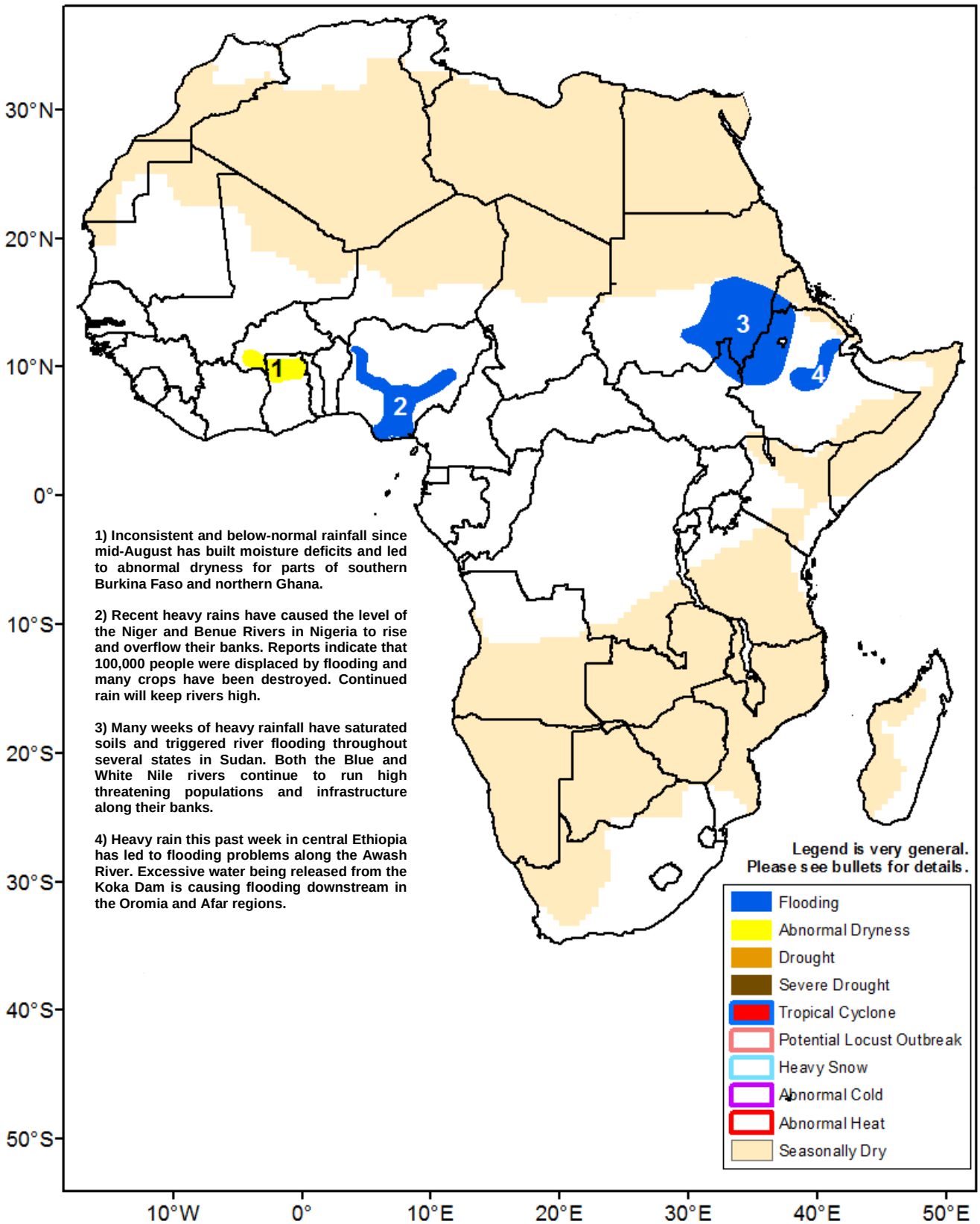
Climate Prediction Center's Africa Hazards Outlook
September 28 – October 4, 2017

- **Rains became more suppressed last week in West Africa, while above-normal rains predominated East Africa**



1) Inconsistent and below-normal rainfall since mid-August has built moisture deficits and led to abnormal dryness for parts of southern Burkina Faso and northern Ghana.

2) Recent heavy rains have caused the level of the Niger and Benue Rivers in Nigeria to rise and overflow their banks. Reports indicate that 100,000 people were displaced by flooding and many crops have been destroyed. Continued rain will keep rivers high.

3) Many weeks of heavy rainfall have saturated soils and triggered river flooding throughout several states in Sudan. Both the Blue and White Nile rivers continue to run high threatening populations and infrastructure along their banks.

4) Heavy rain this past week in central Ethiopia has led to flooding problems along the Awash River. Excessive water being released from the Koka Dam is causing flooding downstream in the Oromia and Afar regions.

Rains are diminishing in many areas as the West African monsoon season winds down.

Rainfall was widely suppressed across the region, especially in far western Gulf of Guinea countries. According to the latest satellite rainfall estimates, northern Cote D'Ivoire and several parts of Nigeria still received heavy rains in excess of 100mm (**Figure 1)**. Some scattered showers spread far northward across dessert areas of Mauritania, Mali, and Algeria. Meanwhile, far western parts of the region and areas along the southern Gulf of Guinea coastline observed light or non-existent rain. Areas such as western Guinea, Guinea-Bissau and southern Nigeria ran deficits of 25-50mm.

The month of September has brought forth a significant pattern change for the West Africa region. While the bulk of the summer monsoon brought soaking rains to the majority of the region, there has been a recent shift towards dryer than normal conditions. Several weeks of suppressed rainfall have led to expanding areas exhibiting 30-day moisture deficits. The biggest changes have taken place in the region stretching south from Senegal through Sierra Leone, where huge 30-day moisture surpluses have now flipped to deficits on the order of 50-100+mm. Southern Burkina Faso and northern Ghana are experiencing the longest lasting and significant deficits. They have received 50 to 200mm less rainfall than normal since mid-August (**Figure 2**). Flood concerns linger along the Niger River in Nigeria as the season's surplus moisture continues to drain through the basin.

During the outlook period, weather models suggest the return of heavier precipitation for western Gulf of Guinea countries. Conversely, rains should be suppressed from Burkina Faso through Nigeria's northern tier.

7-Day Satellite Estimated Rainfall (mm)
Valid: September 20 – September 26, 2017

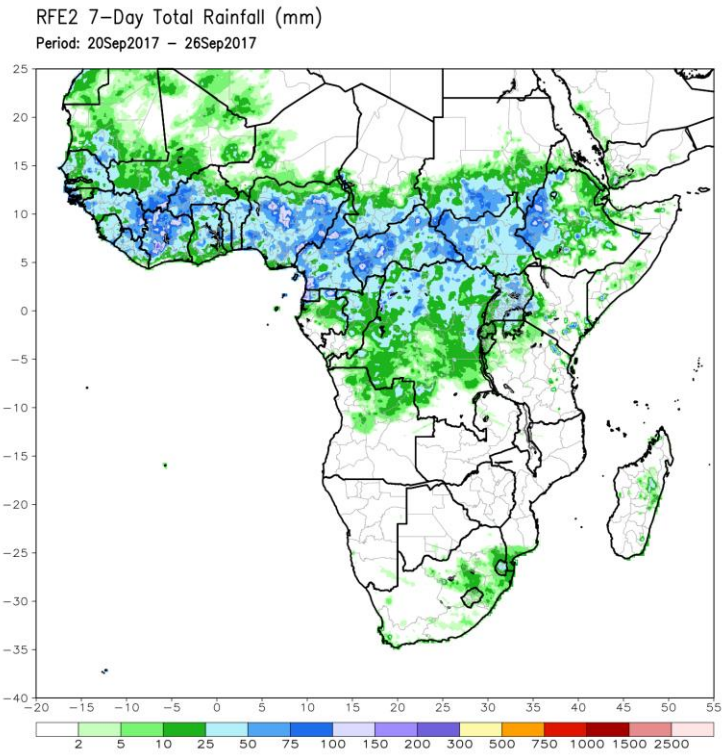


Figure 1: NOAA/CPC

30-Day Satellite-Estimated Rainfall Anomaly
Valid: August 28 – September 26, 2017

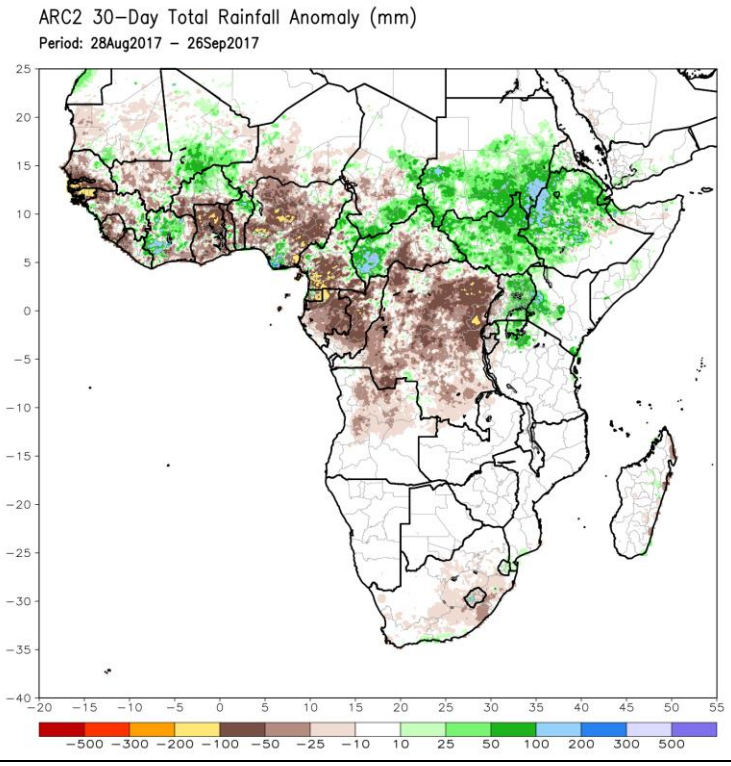


Figure 2: NOAA/CPC

Persistent heavy rains continue to trigger floods in Sudan and Ethiopia.

Copious rainfall fell throughout East Africa for another week, and coverage was well distributed across climatologically active regions. The greatest rainfall totals (>100mm) were received in western Ethiopia and parts of southern Sudan (**Figure 1**). Localized heavy rain in central Ethiopia led to flooding problems along the Awash River near Addis Ababa. Areas of Slightly lower, but still above-average, totals were observed in South Sudan and Uganda as well. Rain showers were observed scattered about Somalia and Southern Kenya. Heavy rains, both recently and over the entire season, have caused the Blue and White Nile Rivers to swell out of their banks resulting in damages to infrastructure. Persistently enhanced rains across many regions in East Africa over the past several weeks have resulted in wide swaths of large positive precipitation anomalies since late August (**Figure 2**).

For the outlook period, near-normal rainfall is forecast for the region, with the exception of parts of south Sudan and Uganda. Those areas are likely to receive only small amounts of rain. Increasing rains are also possible into northern Somalia.

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.