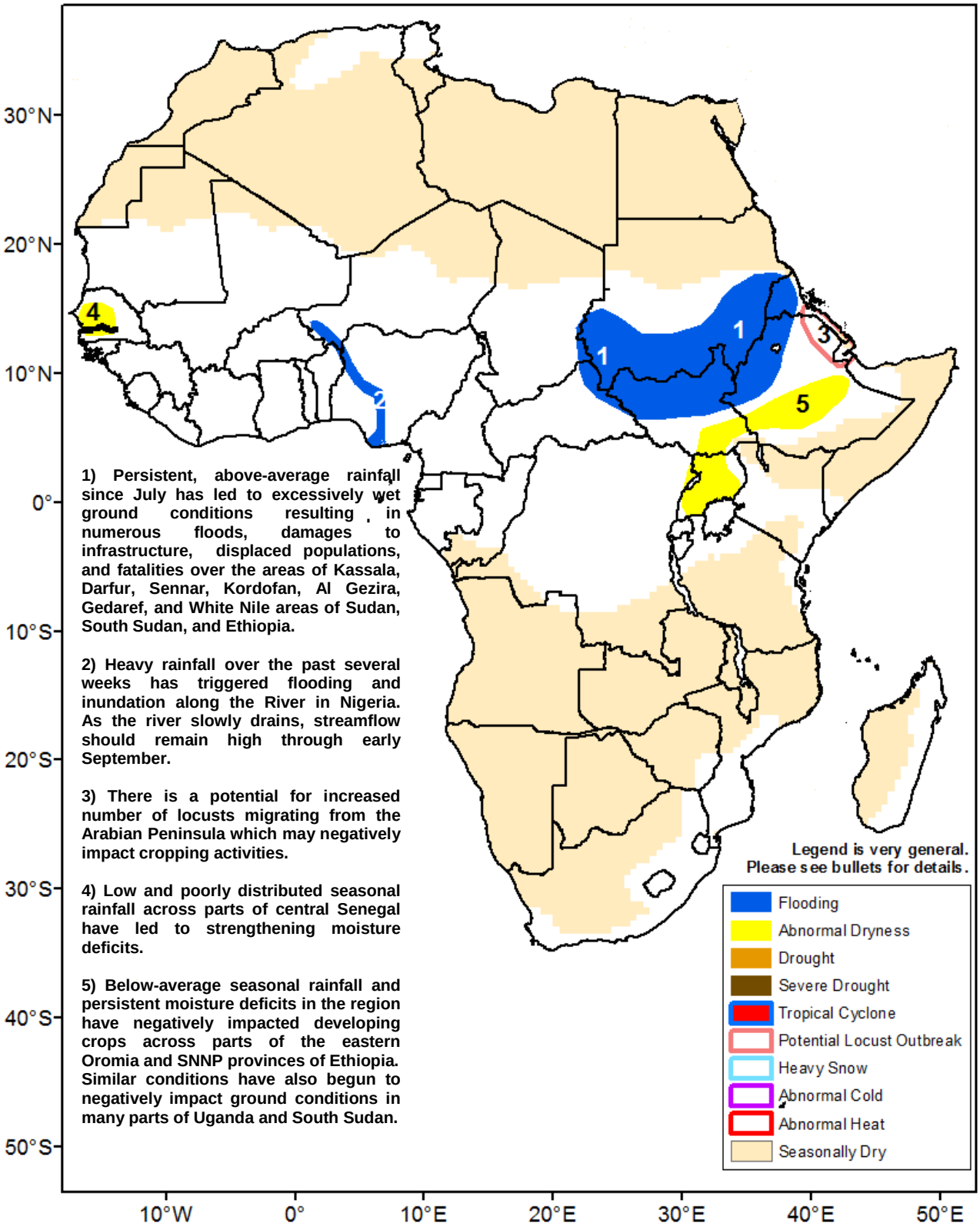
Climate Prediction Center's Africa Hazards Outlook
September 8 – September 14, 2016

- **Despite a continued reduction in rainfall since mid-August, flooding remains a threat for parts of East Africa.**
- **Heavy seasonal rains continue to elevate river levels along the Niger River in Nigeria.**



1) Persistent, above-average rainfall since July has led to excessively wet ground conditions resulting in numerous floods, damages to infrastructure, displaced populations, and fatalities over the areas of Kassala, Darfur, Sennar, Kordofan, Al Gezira, Gedaref, and White Nile areas of Sudan, South Sudan, and Ethiopia.

2) Heavy rainfall over the past several weeks has triggered flooding and inundation along the River in Nigeria. As the river slowly drains, streamflow should remain high through early September.

3) There is a potential for increased number of locusts migrating from the Arabian Peninsula which may negatively impact cropping activities.

4) Low and poorly distributed seasonal rainfall across parts of central Senegal have led to strengthening moisture deficits.

5) Below-average seasonal rainfall and persistent moisture deficits in the region have negatively impacted developing crops across parts of the eastern Oromia and SNNP provinces of Ethiopia. Similar conditions have also begun to negatively impact ground conditions in many parts of Uganda and South Sudan.

Despite some reduction in West Africa rainfall, many areas remain saturated across the region

During the last week, fairly seasonable distribution of precipitation was observed, with increased rains being received further south across many Gulf of Guinea countries. According to satellite rainfall estimates, the highest weekly accumulations (>100mm) were received in pockets across northern Guinea, southwestern Senegal, portions of Nigeria, and across central Africa (**Figure 1**). Light to moderate rainfall accumulations were also received further north into more arid regions of Mauritania and northern Mali.

The heaviest rainfall has been less widespread during the month of August than during previous months. Even so, seasonal totals remain among the wettest in climatology for some areas of West Africa. This is especially true for many parts of Guinea, Sierra Leone, Burkina Faso, Mali, and southern Mauritania where the past 90 days rank in the 97th percentile or higher (**Figure 2**). In some other areas, like Senegal, The Gambia, and parts of Nigeria, a significant decrease in rainfall during the past month has reduced moisture surpluses and brought seasonal totals to levels that are near or below average. The ground remains saturated in many areas which continue to see normal monsoon rains, so flooding risk remains elevated moving through the first half of September. In Nigeria, heavy rainfall since late July continues to cause inundation along the Niger River. The one area of contrast remains central Senegal and The Gambia where insufficient amounts of rain have led to deficits.

For the upcoming outlook period, precipitation models suggest a southward shift in the monsoon circulation, bringing heavy shower activity over many portions of Guinea, Sierra Leone, and Liberia. Elsewhere, Precipitation is expected to be very seasonable during the next 7 days.

Dryness strengthens across parts of Uganda, South Sudan, and southern Ethiopia.

Heavy drenching rainfall largely subsided in areas of Sudan this past week –a positive development for the region. The heaviest weekly totals (>100mm) were measured in Eritrea. In other parts of East Africa, suppressed rainfall in August has continued to slowly strengthen negative rainfall anomalies, affecting portions of southern Ethiopia, southern South Sudan, and Uganda (**Figure 3**). Comparison with remotely sensed vegetation health indices corroborates a shortage of available ground moisture, as conditions have been declining across the region over the past few weeks. Much of the dryness in Uganda and South Sudan has been associated with periods of little to no rainfall (dry spells) during July and August.

For the upcoming outlook period, little change in the distribution of rainfall is forecasted with enhanced precipitation expected over western Ethiopia, and suppressed precipitation expected towards the south over South Sudan, Uganda, and southern Ethiopia.

Satellite-Estimated Total Rainfall (mm)
Valid: August 31 – September 06, 2016

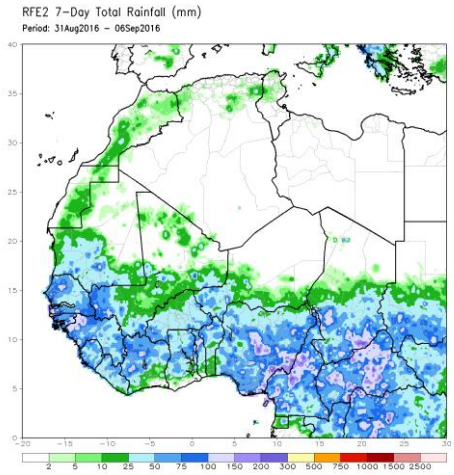


Figure 1: NOAA/CPC

Satellite-Estimated 90-Day Rainfall Percentile
Valid: June 8 – September 5

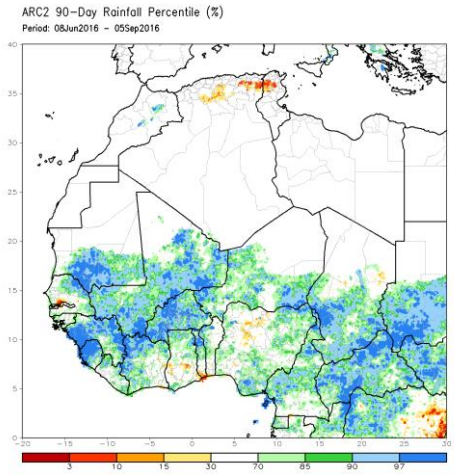


Figure 2: NOAA/CPC

30-Day Satellite Estimated Rainfall Anomaly
Valid: August 7 – September 5, 2016

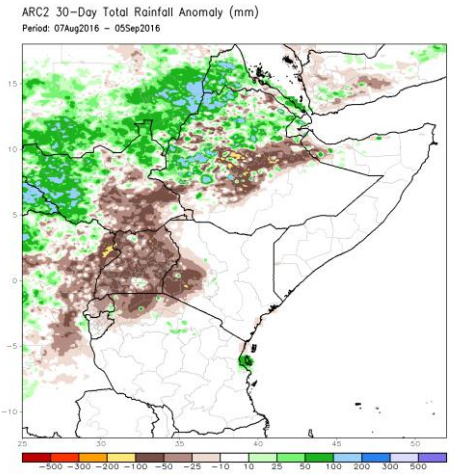


Figure 3: NOAA/CPC

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.

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