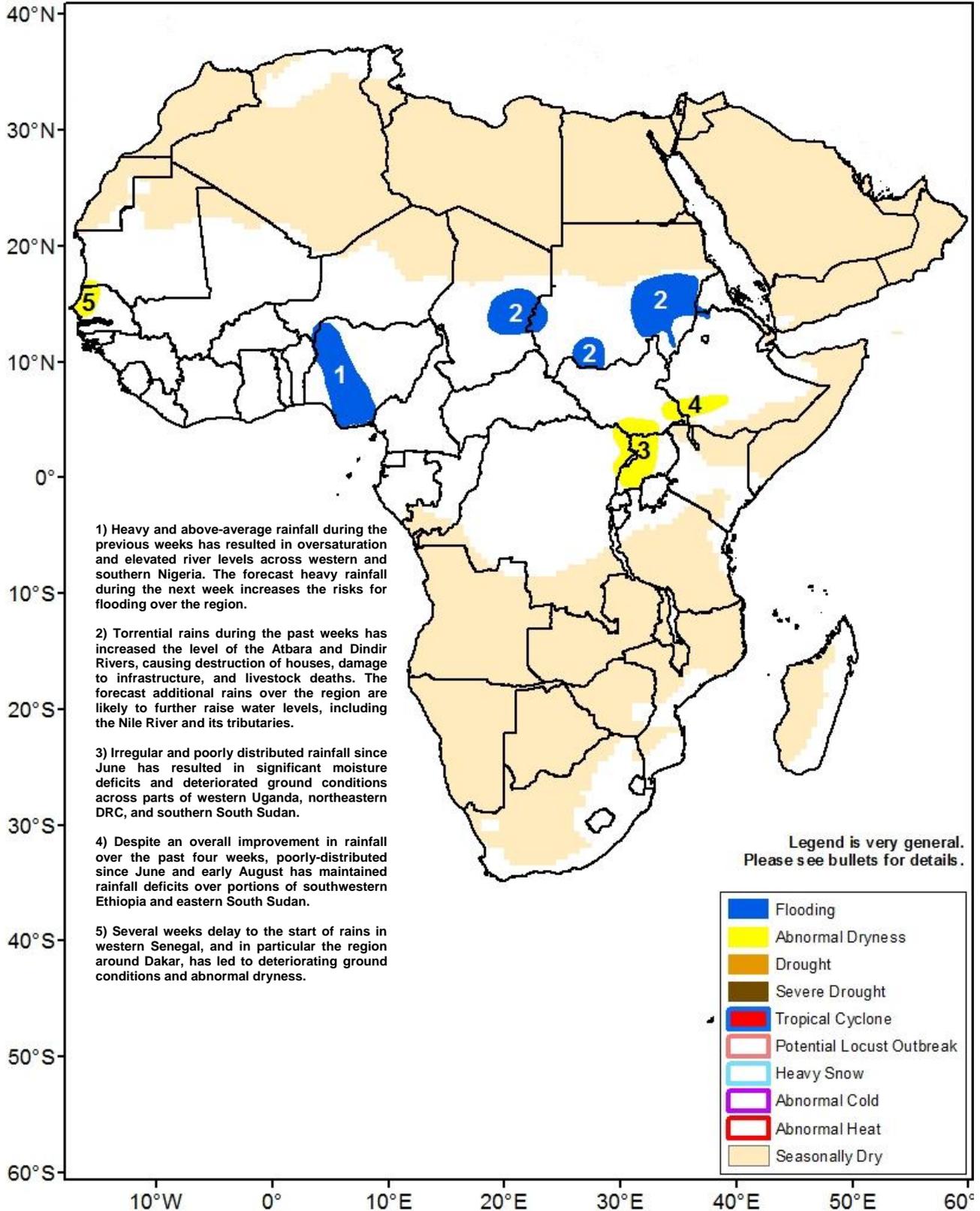




## Climate Prediction Center's Africa Hazards Outlook September 6 – 12, 2018

- High risks for flooding exist over western and southern Nigeria as heavy rains are forecast during the next week.
  - Despite a recent improvement in rainfall, dryness has remained over parts of East Africa.



1) Heavy and above-average rainfall during the previous weeks has resulted in oversaturation and elevated river levels across western and southern Nigeria. The forecast heavy rainfall during the next week increases the risks for flooding over the region.

2) Torrential rains during the past weeks has increased the level of the Atbara and Dindir Rivers, causing destruction of houses, damage to infrastructure, and livestock deaths. The forecast additional rains over the region are likely to further raise water levels, including the Nile River and its tributaries.

3) Irregular and poorly distributed rainfall since June has resulted in significant moisture deficits and deteriorated ground conditions across parts of western Uganda, northeastern DRC, and southern South Sudan.

4) Despite an overall improvement in rainfall over the past four weeks, poorly-distributed since June and early August has maintained rainfall deficits over portions of southwestern Ethiopia and eastern South Sudan.

5) Several weeks delay to the start of rains in western Senegal, and in particular the region around Dakar, has led to deteriorating ground conditions and abnormal dryness.

## A favorable rainfall accumulation observed over West Africa.

A comparison of the accumulated rainfall with the long-term average has shown that much of West Africa has received above-average rainfall over the past two months. Wetter than average conditions, with rainfall surpluses exceeding 200 mm, were observed over the far western portions of the sub-region such as Guinea-Conakry and Sierra Leone and the Sahel, including Mali and Burkina Faso (**Figure 1**). The widespread, positive anomalies were mainly attributable to an anomalous northerly position of the Intertropical Front, an essential rain-bearing system over West Africa, bringing moisture surpluses throughout many areas. Although the favorable rainfall performance helped provide beneficial moisture conditions for agricultural and pastoral activities, excess moisture also led to flooding and oversaturation over some areas. In contrast, a somehow insufficient rainfall over the past several weeks resulted in moisture deficits over portions of central Nigeria and southeastern Chad.

Due to above-average rainfall over the recent months, above-average vegetation conditions were also depicted in the recent analyses of vegetation health indices from remote sensing. As the Intertropical Front continues its southward retreat during this time of the year, areas throughout the Sahelian region would begin to experience gradual decrease in rainfall, while countries along the Gulf of Guinea would see the return of enhanced rainfall.

During the next outlook period, rainfall forecasts indicated continued torrential rainfall across Guinea-Conakry, Sierra Leone, northern Cote d'Ivoire, northern and southeastern Nigeria. In Nigeria, the forecast abundant rain could trigger flooding over the northwestern and southeastern States of the country. Heavy rain is also expected throughout Burkina Faso, Ghana, Togo, and Benin.

## Heavy and above-average rainfall observed over northern Ethiopia.

From late August to early September, heavy and above-average rainfall fell over northern Ethiopia and local areas of eastern Sudan and southwestern Yemen (**Figure 2**). Over Sudan, the return of enhanced rainfall led to rising levels and flooding of the Atbara and Dindir Rivers, resulting in destruction of houses and infrastructures and livestock deaths. Farther south, moderate to locally heavy rainfall was received over southwestern South Sudan, northern Uganda, and southwestern Kenya. In Uganda, this past week's near-average to above-average rainfall was beneficial as it helped to eroding partially thirty-day moisture deficits over the dry portions of the country. Over Ethiopia, however, despite the observed moderate rainfall, weekly anomalies showed below-average rainfall, which contributed to maintaining thirty-day rainfall deficits over the western and southwestern parts of the country. The dryness over parts of eastern Africa was attributable to dry spells and poorly-distributed rainfall during July and the first half of August.

As far as vegetation conditions are concerned, recent analyses of some indices exhibited near-average to below-average conditions across western Ethiopia and northwestern Uganda as a response to an uneven rainfall distribution over the past several weeks. The continuation of favorable rainfall is needed to provide adequate soil moisture for cropping activities and crops development before the end of the current June-September rainfall season.

During the next period, heavy rainfall is forecast over western Ethiopia, southern Sudan, Eritrea, and southwestern Yemen. This maintains high risks for flooding over many local areas. Little to light and likely below-average rainfall is expected over South Sudan and much of Uganda, which could increase rainfall deficits in the region.

**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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