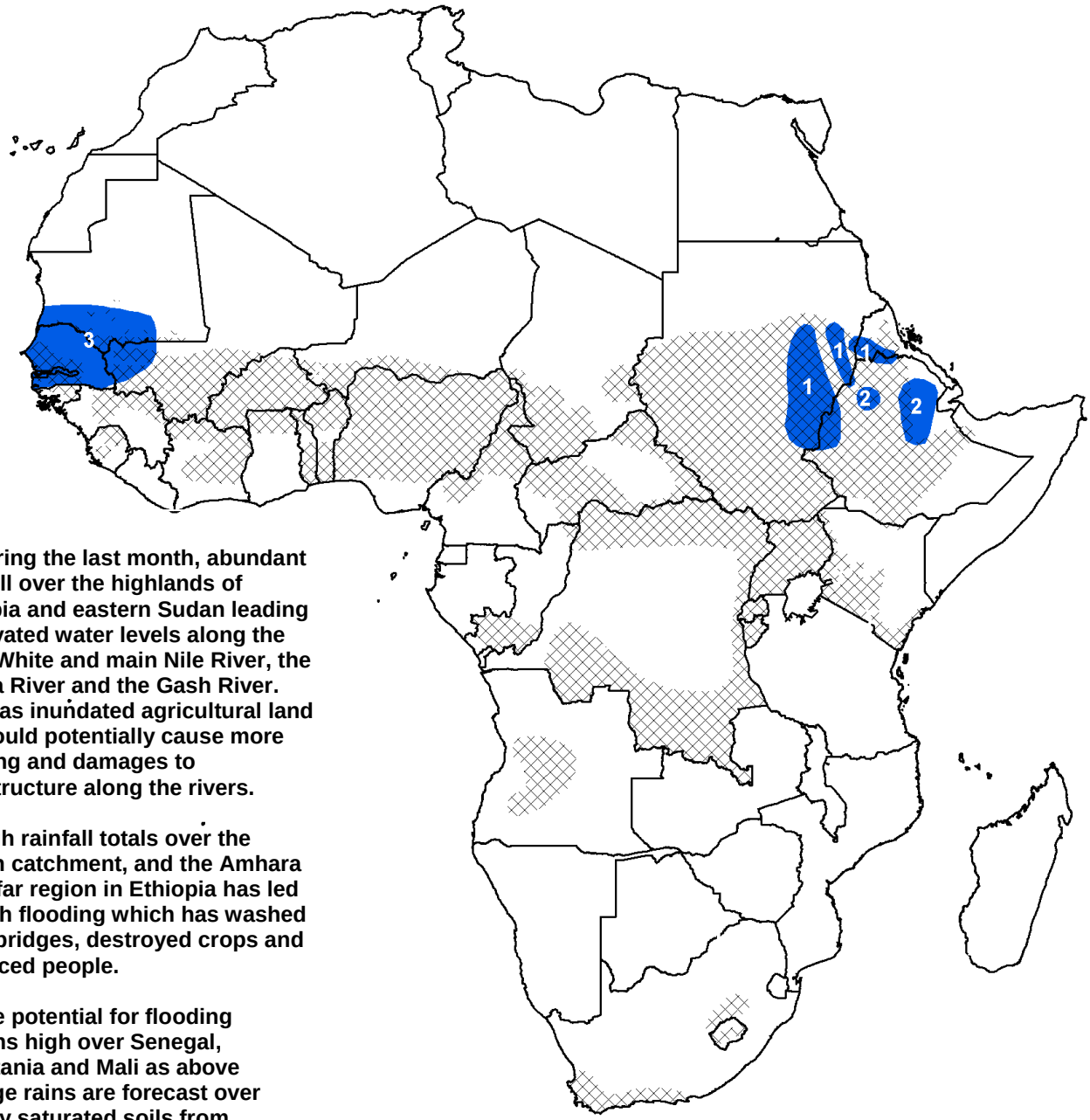
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
September 2 – September 8, 2010

- **River levels across Ethiopia and Sudan remain high after heavy rains fell across the highlands of Ethiopia.**
- **Although heavy precipitation was not as widespread as previous weeks, some localized areas across Guinea continued to observe abundant rainfall.**



1). During the last month, abundant rain fell over the highlands of Ethiopia and eastern Sudan leading to elevated water levels along the Blue, White and main Nile River, the Atbara River and the Gash River. This has inundated agricultural land and could potentially cause more flooding and damages to infrastructure along the rivers.

2). High rainfall totals over the Awash catchment, and the Amhara and Afar region in Ethiopia has led to flash flooding which has washed away bridges, destroyed crops and displaced people.

3). The potential for flooding remains high over Senegal, Mauritania and Mali as above average rains are forecast over already saturated soils from previous weeks.

Legend is very general, please see numbered descriptions for details.

- September Cropped Areas
- Favorable
- Somewhat Favorable
- Flooding
- Short-term Dryness
- Drought
- Improving Drought

Widespread heavy rain fell across Guinea for the second consecutive week.

Heavy rainfall (> 50 mm) over West Africa during the past week was not as widespread as previous weeks. However, rainfall in certain locations was intense across West Africa. Many areas in southern Guinea observed greater than 100 mm of rainfall for a second consecutive week. Towards the Atlantic coast, localized areas in Sierra Leone, northern Guinea, and Guinea-Bissau also saw high rainfall totals greater than 75 mm. Above average rain (> 50 mm) also fell across Mali, Burkina Faso western Niger, Benin, and northern Nigeria. In contrast to the previous week, lighter rains (< 30 mm) fell across Cote d'Ivoire, Ghana, Mauritania and northern Senegal (**Figure 1**). Coastal Cote d'Ivoire experienced less than 10 mm of rainfall a week after observing greater than 100 mm.

An analysis of the soil moisture in West Africa shows very moist conditions across portions of southern Senegal, Guinea, Mali, Burkina Faso and western Niger which could be susceptible to flooding if rains continue (**Figure 2**).

Rainfall is expected to be heavy (> 75 mm) across Senegal, Mali, southern Mauritania, northern Guinea, Guinea-Bissau, and Sierra Leone for the next week which could potentially cause flooding across already soaked areas in Senegal, Mali and Mauritania. Elsewhere, Burkina Faso, Ghana, Niger and Nigeria could see ample rainfall (> 50 mm) potentially leading to flooding as well.

Satellite Estimated Precipitation (mm)
Valid: August 24 – August 30, 2010

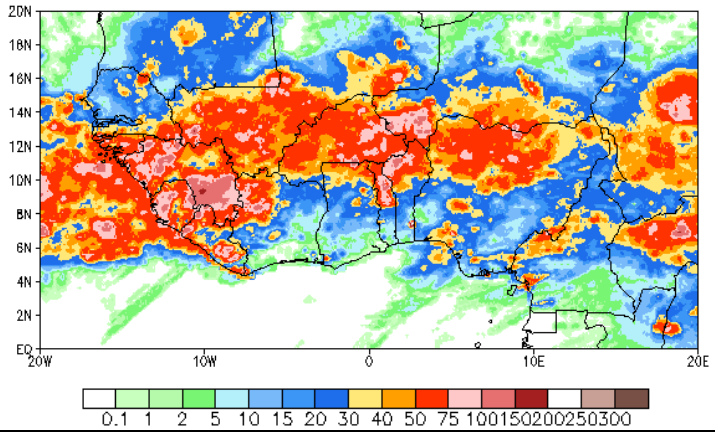


Figure 1: NOAA/CPC

Daily 10-day Moisture Index
Valid: August 30, 2010

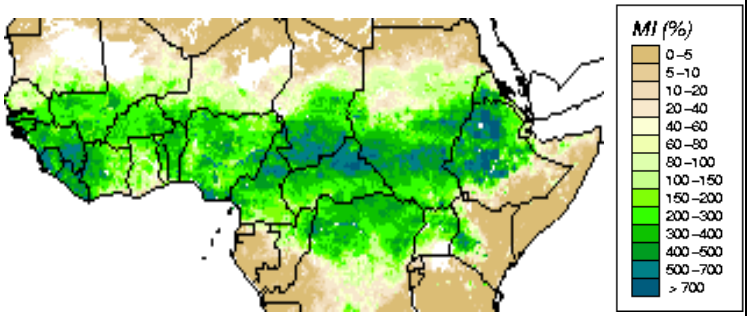


Figure 2: USGS/EROS

River levels continue to be elevated after another week of abundant rainfall across the highlands of Ethiopia.

Similar to the past several weeks, copious amounts of rain (> 100 mm) fell across the highlands regions of Ethiopia. These rains have led to high Moisture Index values, indicating very wet soil conditions, across the Tigray, Amhara, Afar and Oromiya regions of Ethiopia (**Figure 2**) as well as flash flooding in the Amhara and Afar regions which have washed away bridges, destroyed crops, caused fatalities and displaced location populations. In addition, the rains have kept river water levels elevated to or near flood level for the Blue and White Nile, Atbara River and Gash River. Agricultural land upstream of Khartoum along the Blue Nile has already been inundated with the possibility of more flooding if rains continue. The White Nile is also elevated as the river's width has stretched to 1 km in some locations. This has led to flooding risks along the main Nile as water levels are at full banks north of Khartoum. To the east, the Atbara River water levels continue to be elevated while water levels of Gash River threaten to overflow their banks potentially affecting areas near Kassala in Sudan. Elsewhere, rainfall was locally heavy (> 75 mm) in the Nile, Sennar, greater Bahr El Ghazal, and Southern Darfur regions of Sudan. Rains also returned to the Kassala region of Sudan after several weeks of little to no rainfall (**Figure 3**).

Due to forecast abundant rains (> 50 mm) over the highlands of Ethiopia, river levels are expected to remain elevated for the next week possibly endangering low lying areas along the banks of the Blue and White Nile River, Atbara River and the Gash River. Rainfall is also forecast to be locally high (> 50 mm) in western Sudan along the Chad and Central African Republic border potentially causing flash flooding.

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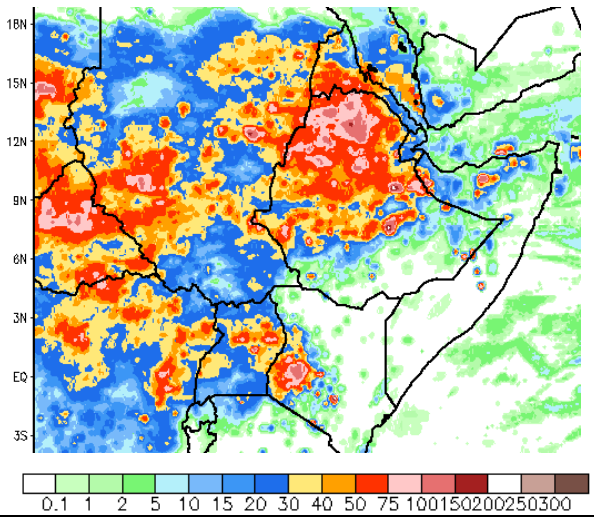

Figure 3: NOAA/CPC

Note: The hazards assessment 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.