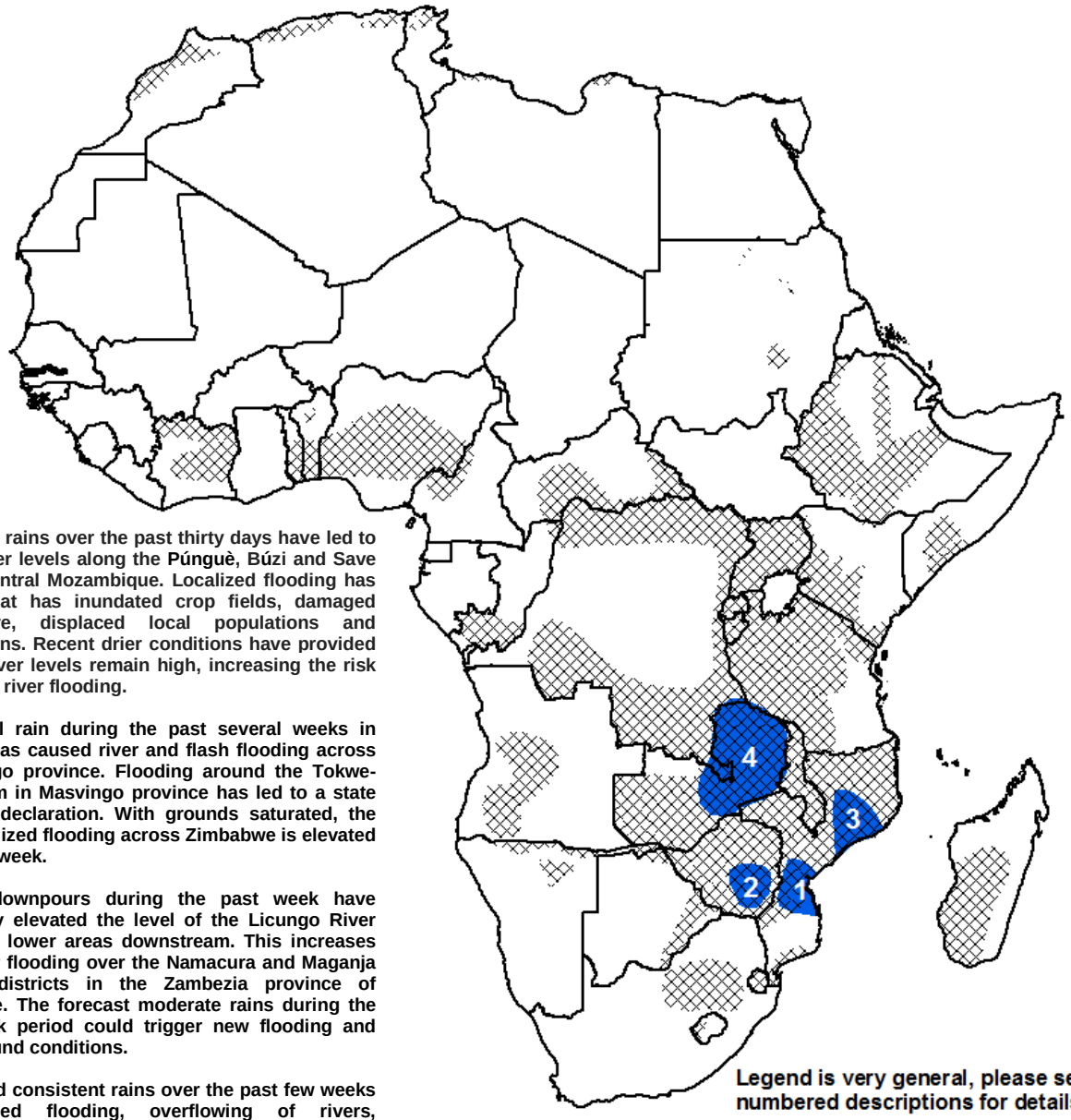
Climate Prediction Center's Africa Hazards Outlook
February 27 – March 5, 2014

- **Torrential rains continued over saturated areas in Zambia and Mozambique**
- **An extended dry spell continued during the past week over southern Uganda, increasing rainfall deficits.**



1) Abundant rains over the past thirty days have led to elevated river levels along the Púnguè, Búzi and Save Rivers in central Mozambique. Localized flooding has occurred that has inundated crop fields, damaged infrastructure, displaced local populations and isolated towns. Recent drier conditions have provided relief, but river levels remain high, increasing the risk for localized river flooding.

2) Torrential rain during the past several weeks in Zimbabwe has caused river and flash flooding across the Masvingo province. Flooding around the Tokwe-Mukorsi dam in Masvingo province has led to a state of disaster declaration. With grounds saturated, the risk for localized flooding across Zimbabwe is elevated for the next week.

3) Heavy downpours during the past week have substantially elevated the level of the Licungo River and flooded lower areas downstream. This increases the risks for flooding over the Namacura and Maganja da Costa districts in the Zambezia province of Mozambique. The forecast moderate rains during the next outlook period could trigger new flooding and worsen ground conditions.

4) Heavy and consistent rains over the past few weeks have caused flooding, overflowing of rivers, infrastructure damages, and displaced people in many local areas of central and eastern Zambia, including the Luano Valley, Kitwe, and Chipata regions. Heavy downpours are forecast to continue during the next outlook period, which could exacerbate ground conditions.

Above-average rains observed in northern southern Africa.

During the past seven days, heavy rains (>50mm) were widespread across northern southern Africa. The heavy rains were located along a west to east axis stretching from central Angola in the west to Tanzania/northern Mozambique in the east. The heaviest rains (>75mm) were observed in northern Mozambique and Madagascar and were associated with Tropical Storm Guito. Guito moved south through the Mozambique Channel bringing wind and rain to coastal areas in Madagascar and northern Mozambique. The abundant rains in northern Mozambique continued flooding concerns along the Licungo River. The Licungo River level has already exceeded the 2001 flood level. The increasing river water level has flooded lower areas downstream and is threatening the Namacura and Maganja da Costa across the Licungo Basin. A flood situation has been declared over the Licungo Basin by the water authorities of Mozambique. The copious amounts of rain in eastern Zambia (>50mm) also exacerbated saturated conditions in the Luano Valley, Kitwe, and Chipata districts where flooding and infrastructure damage has been observed. Elsewhere, localized heavy rain showers (>40mm) were observed in central South Africa while lighter amounts of rain (<20mm) fell in Zimbabwe, Botswana, Namibia and southern Mozambique (**Figure 1**).

The rainfall pattern across southern Africa during the past thirty days has indicated a dipole pattern as above-average rains have fallen across southern and eastern portions of southern Africa while below-average rain has been observed across the western third, including northern Namibia and Angola (**Figure 2**). Areas in Zimbabwe, Mozambique, Botswana and South Africa that have observed flooding during the past thirty-days have also seen rains greater than 100mm of normal over the same time period. Flooding issues remain, especially along the Púnguè, Búzi and Save Rivers in Mozambique and in areas around the Tokwe-Mukorsi Dam in the Masvingo province of southern Zimbabwe. Rainfall surpluses between 50-150mm also have led to flooding in northeastern Zambia. In contrast, due to an extended dry spell during February, thirty-day rainfall deficits have grown to between 50-100mm in Angola and northwestern Namibia. After a wet January, these areas then experienced an extended period of dryness that has only recently ended. Vegetative indices, though, show average conditions. Farther north, a poor start of seasonal rains in Uganda has led to growing rainfall deficits and degrading vegetative conditions.

During the next seven days, models forecast much needed moderate to heavy rain (>30mm) across Angola and Namibia. The rains should help to reduce long-term rainfall deficits. Elsewhere, heavy rains (>50mm) are expected across saturated areas in Zambia, maintaining high flooding risks. Elsewhere, light rain (<15mm) is forecast for Tanzania, Kenya, Uganda, Zimbabwe, southern and Mozambique. The lack of rain should provide relief to wet conditions in Zimbabwe and Mozambique, although river levels should remain elevated. However, the below-average rains will add to growing rainfall deficits around Lake Victoria, especially in Uganda, which could impact seasonal cropping activities. Lastly, in South Africa, moderate rains (10-40mm) are expected, which are around average for this time of year.

Satellite Estimated Rainfall (mm)
Valid: February 18 – February 24, 2014

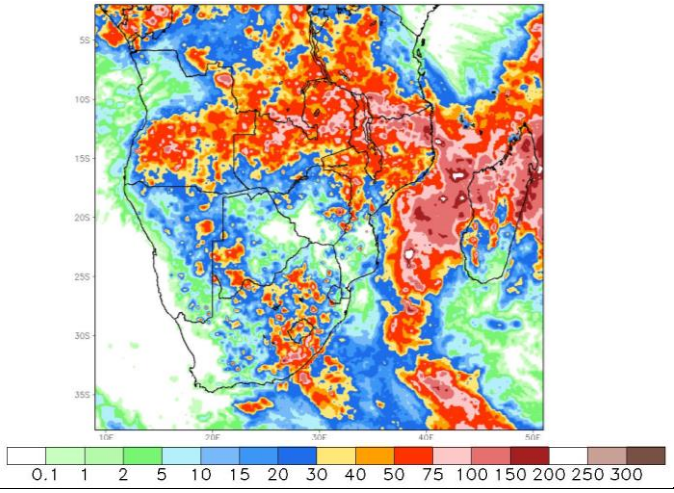


Figure 1: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm)
Valid: January 26 – February 24, 2014

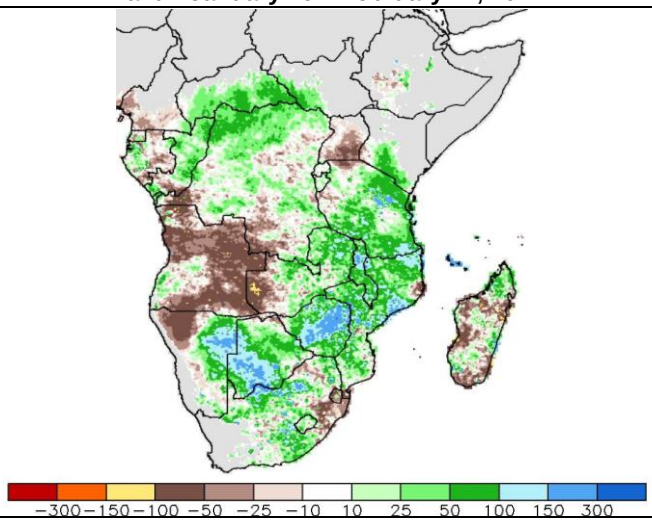


Figure 2: NOAA/CPC

GFS Rainfall Forecast (mm)
Valid: February 26 – March 5, 2014

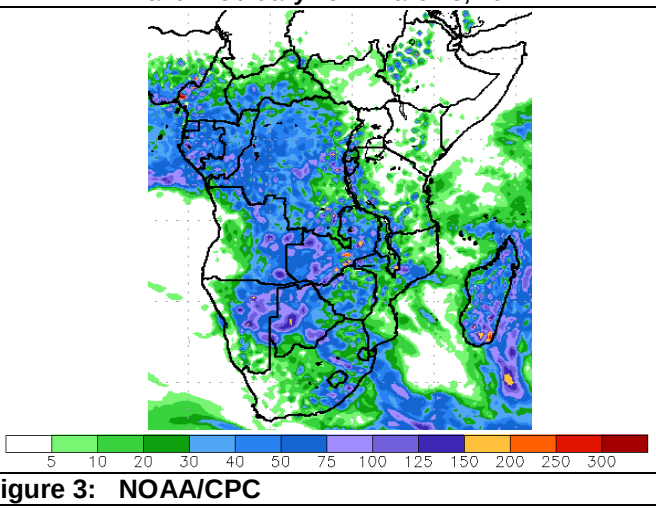


Figure 3: NOAA/CPC

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.

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