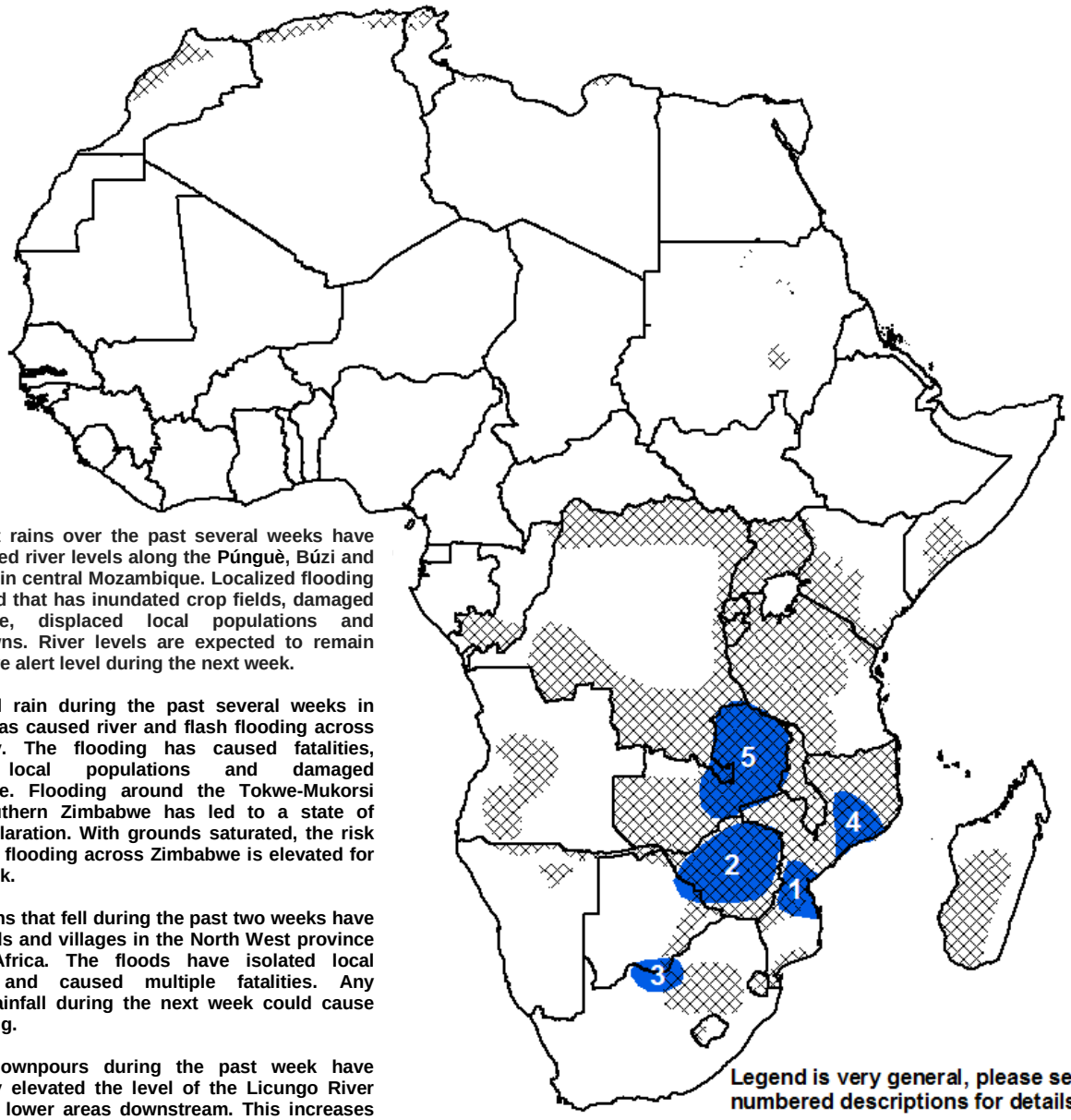
Climate Prediction Center's Africa Hazards Outlook
February 20 – February 26, 2014

- **Heavy downpours during the past observation period have caused flooding over many local areas of eastern Southern Africa.**



1) Abundant rains over the past several weeks 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. River levels are expected to remain near or above alert level during the next week.

2) Torrential rain during the past several weeks in Zimbabwe has caused river and flash flooding across the country. The flooding has caused fatalities, displaced local populations and damaged infrastructure. Flooding around the Tokwe-Mukorsi dam in southern Zimbabwe 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 rains that fell during the past two weeks have flooded roads and villages in the North West province of South Africa. The floods have isolated local population and caused multiple fatalities. Any additional rainfall during the next week could cause more flooding.

4) 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 to heavy rains during the next outlook period could trigger new flooding and worsen ground conditions.

5) 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.

Enhanced rains observed in eastern Southern Africa.

After abundant rains during the prior week, heavy rains have persisted across the eastern portions of Southern Africa. Rainfall in excess of 50 mm was registered in northern Zimbabwe, eastern Zambia, northern Malawi, southern Tanzania, and the northern half of Mozambique (**Figure 1**). According to reports from the ground, the Licungo River level has already exceeded the 2001 flood level. The increasing river water level has already flooded lower areas downstream and is threatening the Namacura and Maganja da Costa across the Licungo Basin. A flood situation has already been declared over the Licungo Basin by the water authorities of Mozambique. In Zambia, the consistent, heavy rains over the past few weeks have also resulted in flooding, infrastructure damages, and affected people over many local areas, including the Luano Valley, Kitwe, and Chipata districts. Farther west and south, moderate to heavy rains were recorded over central a Namibia and South Africa. Meanwhile, little to no rainfall was observed elsewhere. Over Angola, the reduced rains have contributed to sustain moderate to strong rainfall deficits during the past thirty days.

An analysis of the percent of normal rainfall during the past thirty days indicated a dipole pattern, with average to above-average rainfall throughout the eastern two-thirds of Southern Africa and below-average rainfall over its western counterpart, particularly, Angola and northwestern Namibia (**Figure 2**). Botswana, Zimbabwe, and northeastern Tanzania have received over 200 percent of their average rainfall since mid-January to date. This was mainly due to the shift of rain-producing system over the eastern parts of Southern Africa. In contrast, northwestern Namibia and southern Angola have accumulated rainfall accounting for only less than 50 percent of their average over the past thirty days. An analysis of rainfall time series showed that despite a wet spell during late January, rainfall has significantly been reduced throughout the region over the past thirty days. The most recent vegetation indices, including the Normalized Difference Vegetation and Vegetation Health Indices also showed below-average and degrading conditions over the dry portions of western Southern Africa. Reports have already indicated deteriorated ground conditions over some local areas. Significant amounts of rainfall are needed to eliminate deficits and replenish soil moisture in the region.

During the next outlook period, model rainfall forecast suggests heavy rains to fall across the northern portions of Southern Africa, extending from Angola and northern Namibia, Zambia, Malawi, to Mozambique and Madagascar (**Figure 3**). Over Angola, the forecast increased rains are expected to reduce rainfall deficits associated with the lack of rainfall over the past several weeks. The development of Tropical Storm GUITO is also forecast over the Mozambique Channel, which could bring abundant rains along the coasts of Mozambique and western Madagascar. Meanwhile, light to moderate rains are expected over South Africa and central portions of Namibia. In contrast, suppressed rains are forecast elsewhere. The suppressed rains over the central parts of Southern Africa should help to provide relief to oversaturated grounds and excess moisture across parts of Botswana and southern Zimbabwe.

Satellite Estimated Rainfall (mm)
Valid: February 11 – February 17, 2014

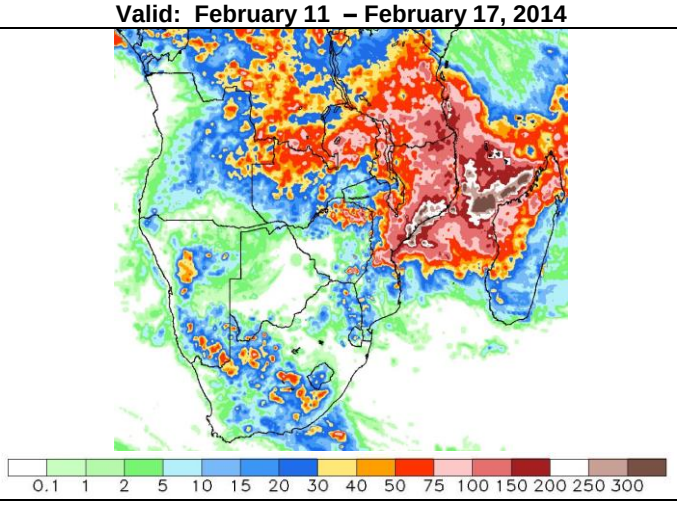


Figure 1: NOAA/CPC

Satellite Estimated Percent of Normal Rainfall (%)
Valid: January 19 – February 17, 2014

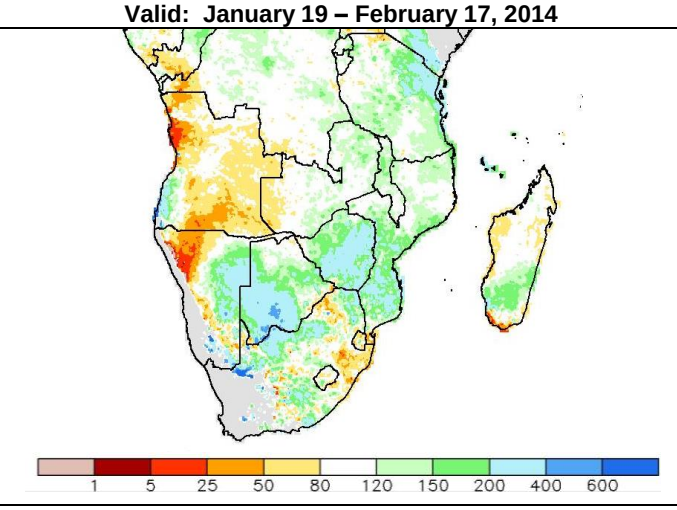


Figure 2: NOAA/CPC

GFS Rainfall Forecast (mm)
Valid: February 19 – February 26, 2014

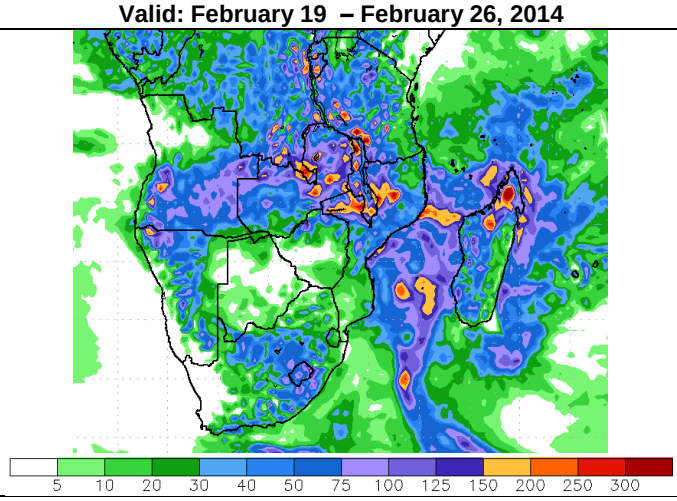


Figure 3: NOAA/CPC

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.