

SOMALIA WEEKLY WEATHER FORECAST

Valid: 1 to 7 May 2024

Light to moderate rain is expected over most parts of the country, with chances of heavy rain expected in some areas of Hiraaan, Galgaduud and Mudug regions.

Weather Review for the Week Between 23 and 29 April 2024

The last week of April was marked by light to heavy rains received at fifty-four (54) stations (*Figure 1*) spread across the country particularly in the following regions: Awdal, Woqooyi Galbeed, Togdheer, Sool, Mudug, Hiraaan, Lower Shabelle, Middle Shabelle, Gedo, Lower Juba, and Middle Juba. Generally dry conditions were observed in most parts of Puntland particularly Nugaal and Bari regions. The cloud breaks associated with these dry conditions led to elevated surface temperature with reported thermal discomfort.

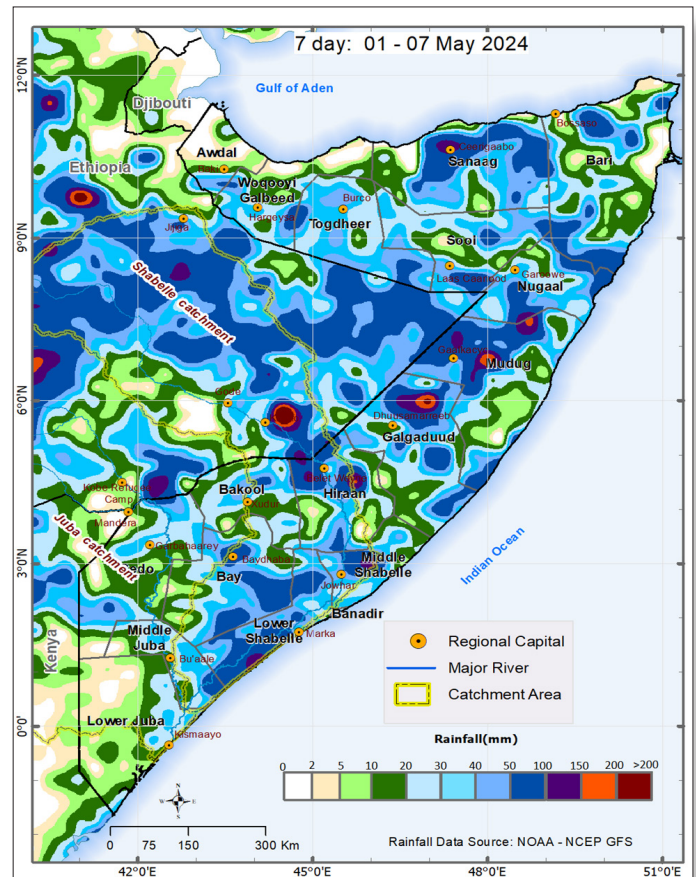
The following individual stations (*Figure 1*) received more than 20 mm of cumulative rain between 23 and 29 April 2024: Amoud (22.0 mm), Baki (26.0 mm), Borama (26.5 mm), and Boon (63.0 mm) in Awdal region; Geedeble and Las Dacawo (26.0 mm), Dooxaguban (26.5 mm), Malawle (33.0 mm), Taysa (56.0 mm), Gacan-libah (68.0 mm), Dhubato (70.0 mm), Baligubadle (92.5 mm), and Gumburaha (116.0 mm) in Woqooyi Galbeed region; Beer (40.0 mm) in Togdheer region; Waridaad (42.0 mm), Caynabo (44.0 mm), and Yagori (53.0 mm) in Sool region; Galdogob (128.7 mm) in Mudug region; Mahas (41.4 mm), Mataban (60.2 mm), Bulu Burte (84.2 mm), Belet weyne (144.4 mm) and in Hiraaan region, Wanle Weyne (45.0 mm) and Aw dheegle (74.5 mm) in Lower Shabelle region; Qansax Dheere (96.0 mm) in Bay region; Jowhar (31.0 mm) and Mahaday Weyn (97.5 mm) in Middle Shabelle; Dollow (46.2 mm), Luuq (54.6 mm), and Bardheere (110.0 mm) in Gedo region; Kismayo (76.1 mm) in Lower Juba and Bualle (78.0 mm) in Middle Juba region.

Weather Forecast for the Week Between 1 and 7 May 2024

During the week between 1 and 7 May 2024, and based on NOAA-NCEP GFS, light to moderate rain is expected over most parts of the country, with chances of heavy rain and flash floods expected in some areas of Hiraaan, Galgaduud and Mudug regions. Based on climatology, the observed and anticipated northward spread of the rains into the central and northern parts of Somalia is favored by the northward movement of the Inter Tropical Convergence Zone (ITCZ). The arrival of the ITCZ will attract low-level incursions of precipitable water inland thereby mitigating the prolonged dry conditions over Bari.

The Madden Julian Oscillation (MJO) index, which ideally is expected to propagate eastwards covering the entire globe in 40 – 60 days, and therefore anticipated to be present over 1 of the 8 regions for about one week, has stagnated over the eastern Indian Ocean for about two weeks. This is favoring the observed moderate to heavy rains in Somalia and the extremely heavy rains elsewhere within the Greater Horn of Africa (GHA). The location of the index since 25 April shows improvement in strength and increase in forecast skill and reliability. As of 1 May, the index is at region 4 and is forecast to be back to region 2 within the next two weeks.

Its lagged effect favors a continuation of moderate rains in the first half of the forecast period (1 – 4 May) with expected possible resumption of heavy rainfall activity in the second week of May. The favorable effect of the Indian Ocean Dipole (IOD) on the rains cannot also be ruled out. According to Australian Bureau of Meteorology, the warming in the Indian Ocean indicates a likelihood of positive



Map 1 : Cumulative rainfall forecast over Somalia between 01 and 07 May 2024

IOD developing earlier than usual.

Although Somalia is not within the direct path of the current tropical disturbance in the western Indian Ocean, the low pressure associated with it may lead to sucking of moisture causing generally less rainfall over the southern part of the country. Week by week and day-to-day monitoring is therefore advised.

The temporal and spatial distribution of the forecast rainfall (*Map 1*) are as follows:

Very heavy cumulative rainfall between 150 mm and 200 mm is likely over some isolated areas in central and eastern parts of Dhuusamareeb district in Galgaduud region, northern parts of Hobyo district, southern parts of Gaalkacyo district, northern parts of Jaariban district in Mudug region, and southern parts of Belet Weyne district in Hiraaan region. The rains over isolated areas in the above places particularly in the central and eastern parts of Dhuusamareeb district may be very intense leading to more than 200 mm in cumulative terms and are likely to fall between 1 and 3 May 2024 with likelihood of flash flooding in vulnerable spots including flat and crowded human settlements.

Heavy cumulative rainfall between 100 mm and 150 mm is likely over the rest of the other areas in the following places: central and eastern parts of Dhuusamareeb district in Galgaduud region, northern parts of Hobyo district, southern parts of Gaalkacyo district, northern parts of Jaariban district, and eastern parts of

Galdogob district in Mudug region, and western and southern parts of Belet Weyne district in Hiraan region. Similarly heavy rains are likely over northern parts of Ceerigaabo district in Sanaag region, southern parts of Burtinle district in Nugaal region, eastern parts of Jowhar district in Middle Shabelle region and Baraawe district in Lower Shabelle.

Moderate cumulative rainfall between 50 mm and 100 mm is likely over the rest of the areas in Dhuusamareeb district, and eastern parts of both Ceel Buur and Ceel Dheer districts in Galgaduud region, Gaalkacyo and Galdogob district and coastal parts of Xaradheere district in Mudug region, and Belet Weyne district and northern parts of Bulo Burte district in Hiraan region, northern parts of both Ceerigaabo and Laas Qoray districts in Sanaag region, Burtinle district and northern parts of Eyl district in Nugaal region, Jowhar district in Middle Shabelle region, Baraawe, Sablaale, Kurtunwaarey and Wanla Weyne districts in Lower Shabelle region. Similar rains are likely over Qandala district and southern parts of both Qardho and Bandarbeyla districts in Bari region, central parts of Hargeisa-Odweyne districts' border, Buhoodle district in Togdherregion, Las Anod and Xudun-Taleex districts' border in Sool region. Rains of similarly moderate intensity are likely over some areas in South West State including Buur Hakaba district and central parts of Baydhaba district in Bay region, central parts of Bakool region and central parts of Bardheere district in Gedo region.

Light cumulative rainfall of less than 50 mm is forecast over most of the following regions: Lower Juba, Middle Juba, Bay, Bakool, Gedo, Togdheer, Woqooyi Galbeed, Bari, Nugaal, coastal parts of Mudug, southern parts of Sanaag, central parts of Sool, and southern parts of Awdal.

Dry conditions are likely to prevail over southwestern, northwestern, and northeastern parts of the country. These include western parts of Afmadow district in Lower Juba region, Zeylac and Lughaye districts in Awdal region, Berbera district in Woqooyi Galbeed region, Caluul and Iskushuban districts in Bari region.

Temperature Forecast:

Moderately high temperatures of between 35°C and 40°C are likely over most inland parts Lower and Middle Juba regions, Lower and Middle Shabelle regions, central inland parts of Galgaduud, Mudug, Bari, northern inland parts of Zeylac and Lughaye districts in Awdal region, northern inland parts of Berbera district in Woqooyi Galbeed region, inland parts of Ceel Afweyn district in Sanaag region, and Dollwo district in Gedo region.

Moderate temperatures of between 30°C and 35°C are likely over the rest of the country except over Cerigaabo district in Sanaag region, Qandala district in Bari region and northern parts of Odweyne district in Togdheer region where temperatures less than 30°C are anticipated.

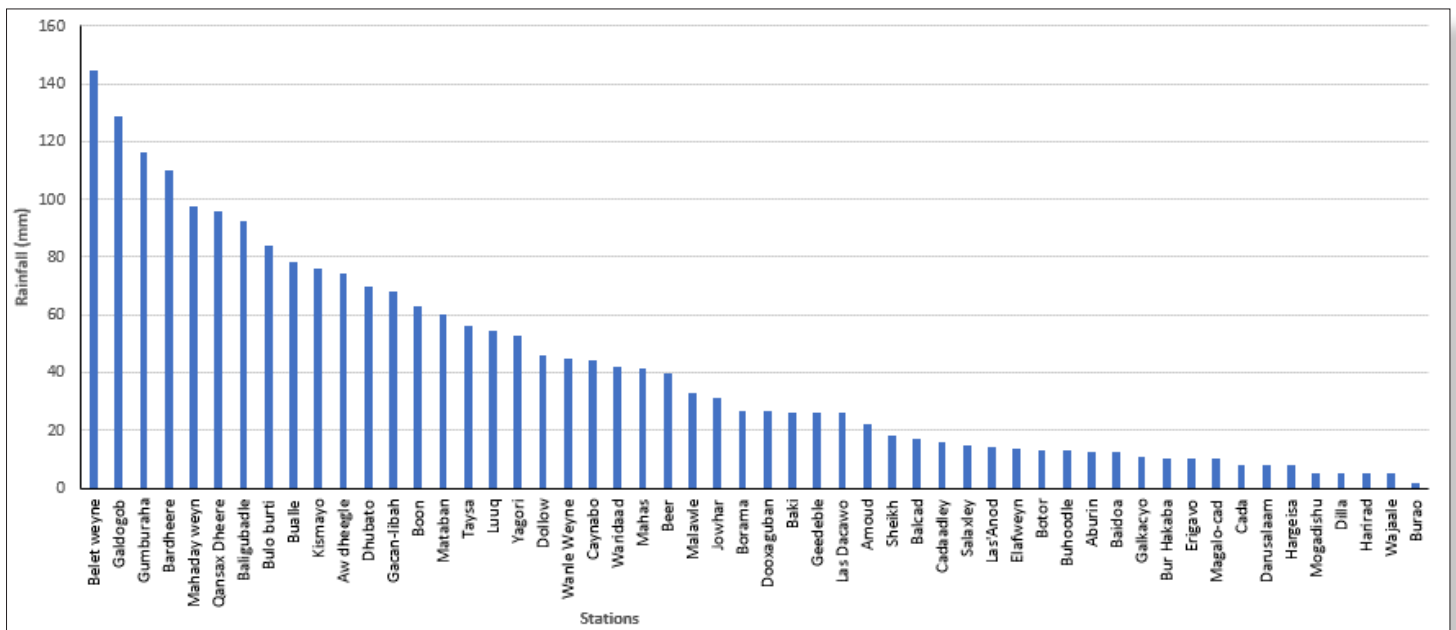


Figure 1: Stations that observed rainfall of more than 1 mm between 23 and 29 April 2024

Current River Levels

Along the Shabelle River, the current level at Belet Weyne is above the station Long Term Mean (LTM) and above the moderate risk levels (Graph 1). At Bulo Burte, the current river level is slightly above the station LTM and below the level same time last year. The level at Jowhar has dropped slightly below the moderate flood risk threshold. Compared to observations taken on 24 April 2024, levels recorded on 1 May 2024 at Belet Weyne (6.50 m), at Bulo Burte (4.46 m) and at Jowhar (4.60 m) represent 30 cm, 78 cm rise, and 30 cm drop, respectively.

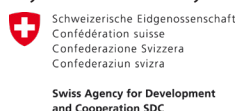
Current levels along the Juba River are above the station LTM and slightly below the 2023 levels at Luuq (Graph 2).

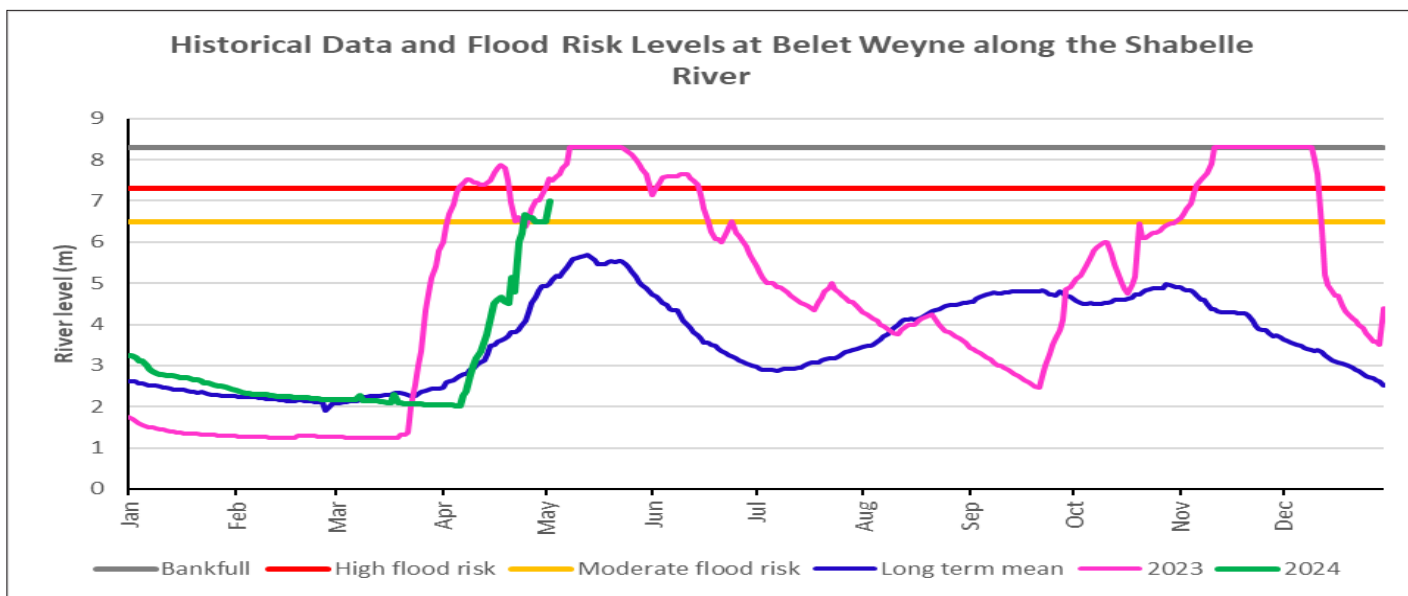
Compared to observations taken on 24 April 2024, levels recorded on 1 May 2024 at Dollow (3.26 m) and Luuq (3.72 m) represent 0.02 cm and 54 cm rise, respectively, in response to light to moderate rains observed within the Juba River catchment in the last week. Even with the unavailability of measurements from the traditional gauging stations at Bardheere and Bu'aale, it is anticipated that a similar slight rise in the levels is likely along the central and lower sections of the Juba River due to moderate to heavy rains observed in middle Juba.

SWALIM is a multi-donor project managed by FAO and currently funded by The European Union, SDC, FCDO, Government of France and USAID

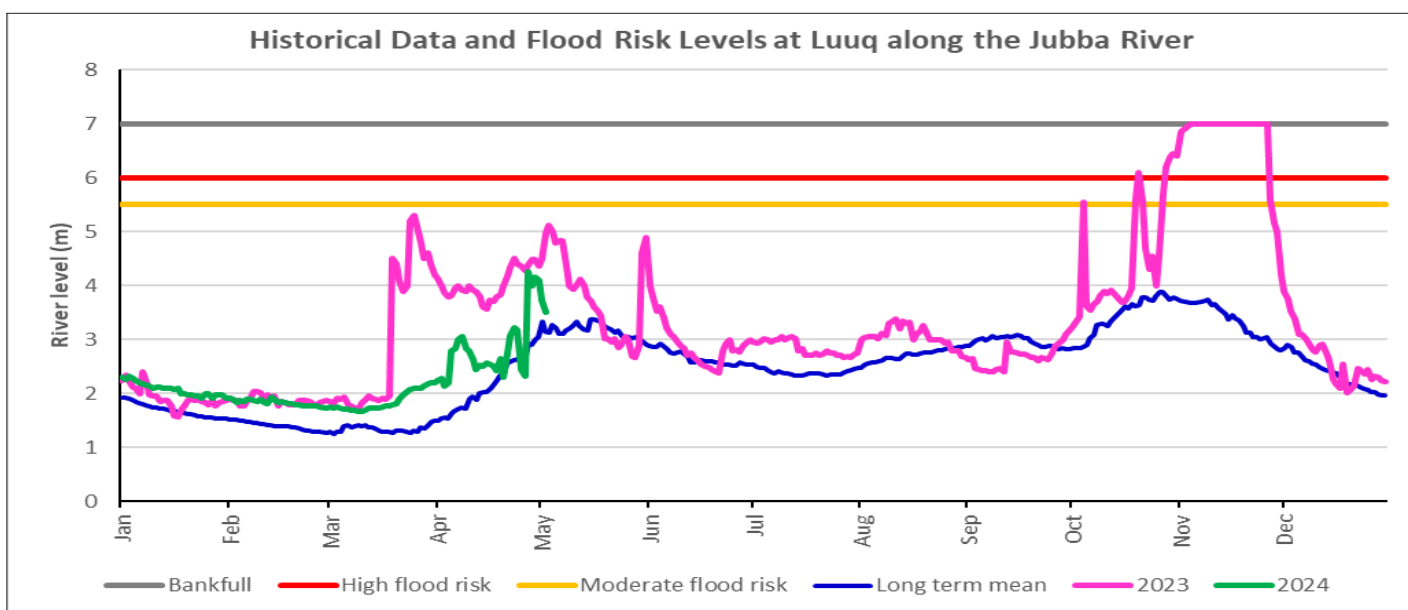


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Graph 1: Shabelle River level at Belet Weyne Gauging Station as of 1 May 2024



Graph 2: Juba River level at Luuq Gauging Station as of 1 May 2024

Impacts Associated with the Weekly Weather Forecast

Considering the current saturated soil conditions, the moderate to heavy rains that are likely to fall within some isolated areas within the middle and upper catchments of Shabelle river are likely to generate sufficient run off to cause a rise in the river levels posing high flood risk at Belet Weyne and moderate flood risk at Bulo Burte and Jowhar by the end of the forecast period, particularly at vulnerable breakage points.

The light to moderate rains expected along the entire Jubba River are likely to generate less runoff leading to sustained river levels with low riverine flooding risk. However, the known high sensitivity of the Juba River levels to rainfall events calls for day by day monitoring of storm events within its catchments.

The extremely heavy cumulative rainfall is likely to pose flash flooding risk at some vulnerable spots including flat and crowded human settlements in some isolated areas in central and eastern

parts of Dhuusamareeb district in Galgaduud region, northern parts of Hobyo district, southern parts of Gaalkacyo district, and northern parts of Jaariban district in Mudug region, and southern parts of Belet Weyne district in Hiraan region. The risk of flash flooding is particularly imminent in the central and eastern parts of Dhuusamareeb district.

Given the inherent Gu forecast uncertainty, the activated flash and riverine flood response plans should be sustained along the entire reach of both Juba and Shabelle Rivers.

The observed and forecast rains, accompanied by low riverine flood risks, are beneficial to agropastoral livelihoods in many aspects including favorable soil moisture conditions for crop and fodder production, and replenishment of surface and ground water sources.

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