Monthly water situation report: Devon and Cornwall Area

1 Summary - October 2025

Devon and Cornwall received 89% of the October long term average (LTA) rainfall, which was normal for the time of year. Soil moisture deficit (SMD) decreased overall during October. Monthly mean river flows were normal to below normal for the time of year across the area. Groundwater levels ended the month between normal and exceptionally high for the time of year. Total reservoir storage across Devon and Cornwall by 02 November was 52%, with Wimbleball, Colliford and Roadford at 27%, 44% and 62% respectively.

1.1 Rainfall

Devon and Cornwall received 122mm of rain during October (89% of the October LTA), which is normal for the time of year. October was very dry for the first half of the month, with nearly 80% of the month's rain falling between 18 to 31 October.

Cumulative rainfall for the last 3 months was normal across the area, with the exception of the Tamar hydrological area, which was above normal. Over the last 6 and 12 months, cumulative rainfall was normal across Devon and Cornwall, except the Otter, Sid, Axe and Lim and the Exe hydrological areas, where it was below normal.

1.2 Soil moisture deficit

SMD remained stable during the first half of October. In response to the rainfall from 18 October onwards, SMD decreased (got wetter) significantly, ending the month almost level with the LTA for the time of year and higher (drier) than the SMD at the same time in 2024.

The average deficit at the end of October was below 10mm across central areas of Devon and Cornwall. Eastern and western areas were drier, with the Exe, North Cornwall, Fal and St Austell and West Cornwall hydrological areas recording a deficit of between 11 and 40mm. The highest average deficit was in the Otter, Sid, Axe and Lim hydrological area, which was between 41 and 70mm.

SMD was 6 to 25mm higher (drier) than the long term average deficit for October in the Otter, Sid, Axe and Lim hydrological area. In the Tamar, Torridge and Hartland Streams, and Taw and North Devon Streams hydrological areas, SMD was between 6 and 25mm lower (wetter) than the LTA for October. All other hydrological areas ranged from a 5mm lower (wetter) to 5mm higher (drier) than the LTA for October.

1.3 River flows

October monthly mean river flows were normal at most sites across Devon and Cornwall, except for Chudleigh Bridge on the River Teign, which recorded below normal river flows for the month.

All sites experienced a decrease in daily mean river flows during the first half of October in response to the dry period, recording normal or below normal flows for the time of year. During the second half of the month, all sites recorded a significant increase in flows in response to rainfall, reaching between above normal and exceptionally high before dropping again in the final week of the month. Flows on 31 October were normal for all reporting sites except Gunnislake on the River Tamar and Bellever on the River Dart, which recorded above normal flows.

1.4 Groundwater levels

On 31 October, groundwater levels were classed as follows:

- Normal at Bussels No7A (monitoring the Dawlish sandstone), Coleford Production (monitoring the Permian Breccias and Sandstones), Woodbury Common No2 (monitoring the Budleigh Salterton Pebble Beds), Woodleys No1 (monitoring the Otterton Sandstone Formation), and Winnards Perch (monitoring the Staddon Formation).
- Above normal at Branscombe Lane (monitoring the Dawlish Sandstone).
- Exceptionally high at Whitlands (monitoring the Upper Greensand).

Groundwater levels at most sites continue to be in recession, except for Winnards Perch, whose hydrograph is now on its rising limb. Levels at this site respond quickly to rainfall due to the low storage of the Secondary Aquifer which it monitors.

1.5 Reservoir stocks

Total reservoir storage was 52% on 02 November, which is an overall increase of 1% since the end of September. This is higher than storage at the same time in 2022 (the most recent drought year), which was 30%. On 02 November, storage at Wimbleball, Colliford and Roadford was 27%, 44% and 62% respectively, compared to 18%, 15% and 34% at the same time in 2022.

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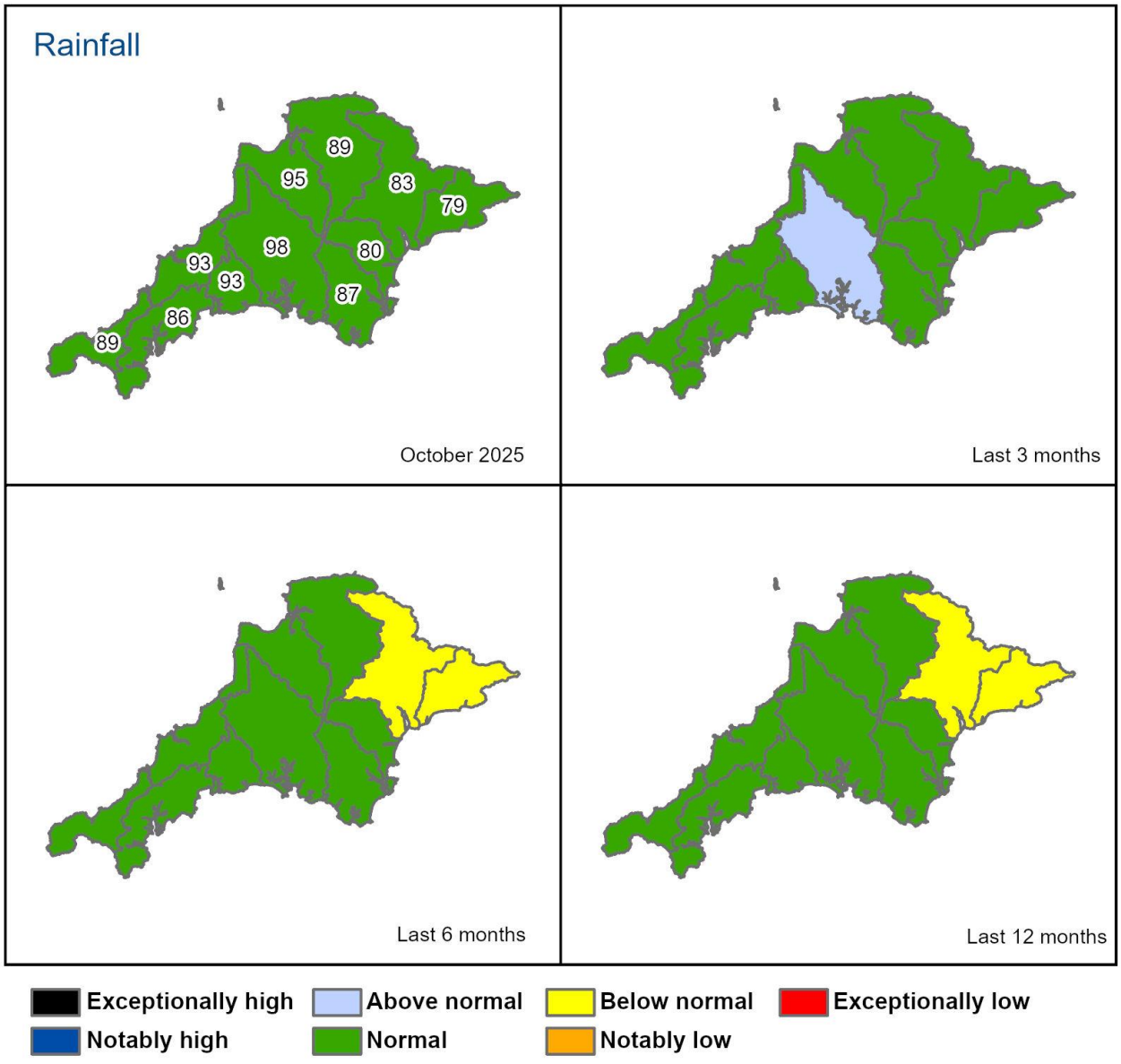
2 Rainfall

2.1 Rainfall map

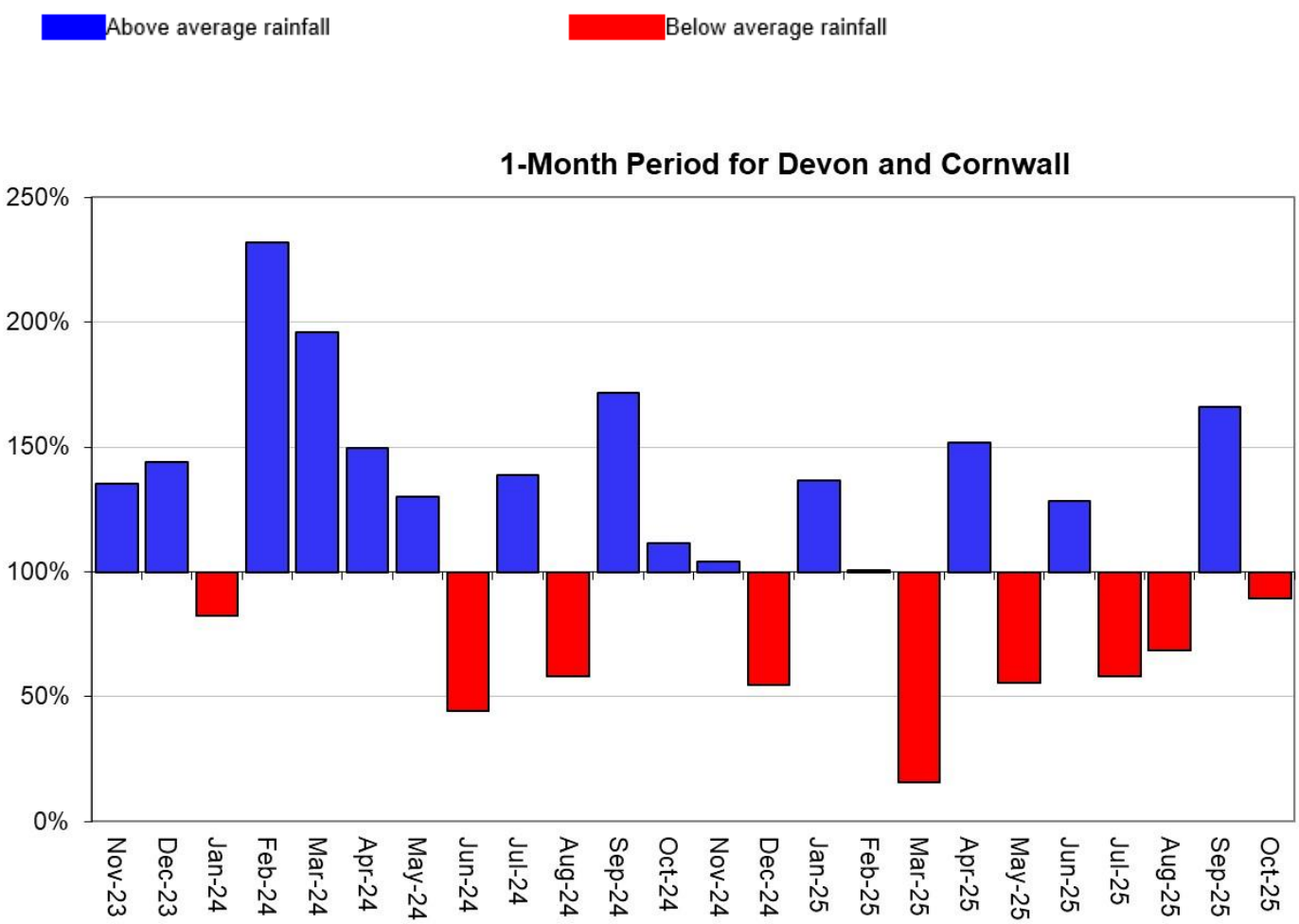
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 31 October 2025), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2025). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2025.

2.2 Rainfall charts

Figure 2.2: Monthly rainfall totals for the past 24 months as a percentage of the 1991 to 2020 long term average for Devon and Cornwall area.

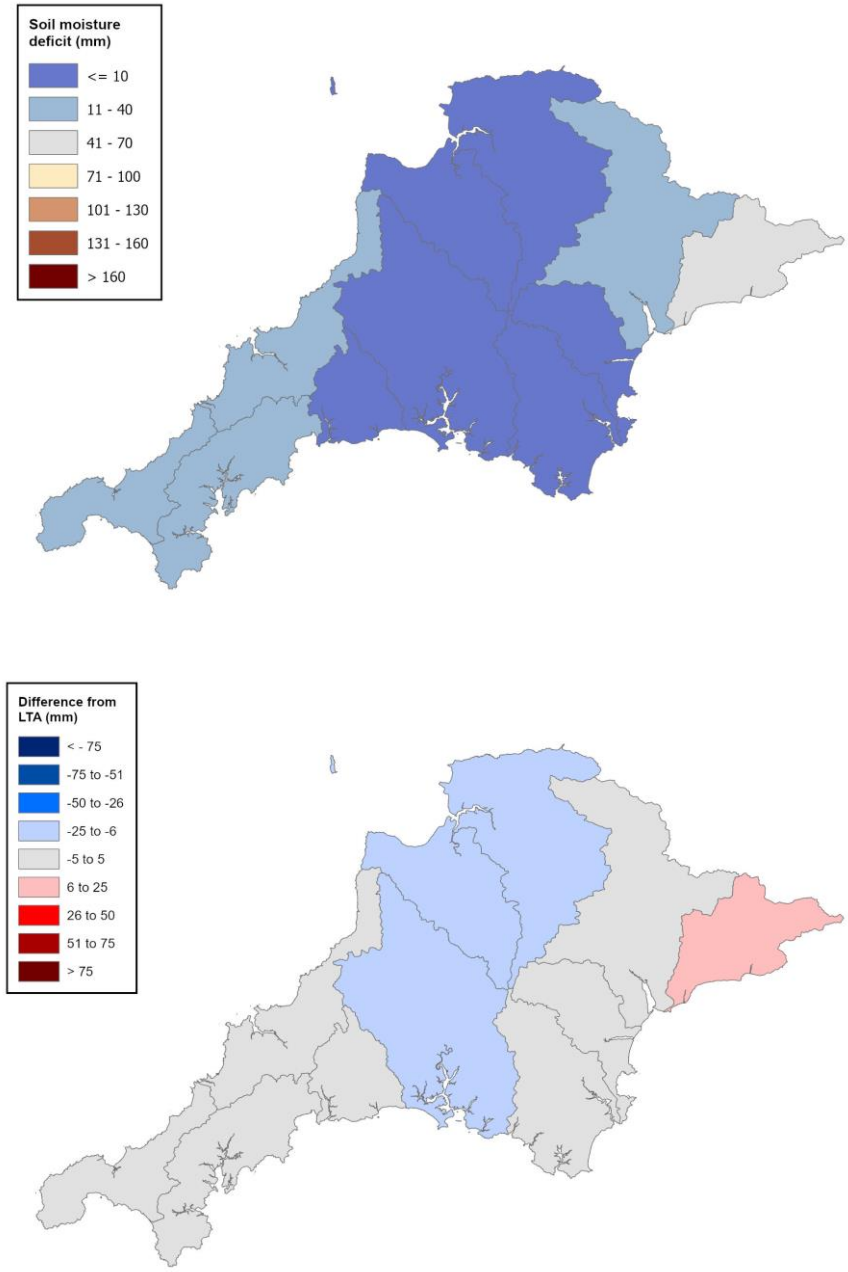


Rainfall data for 2025, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2025). Rainfall data prior to 2023, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

3 Soil moisture deficit

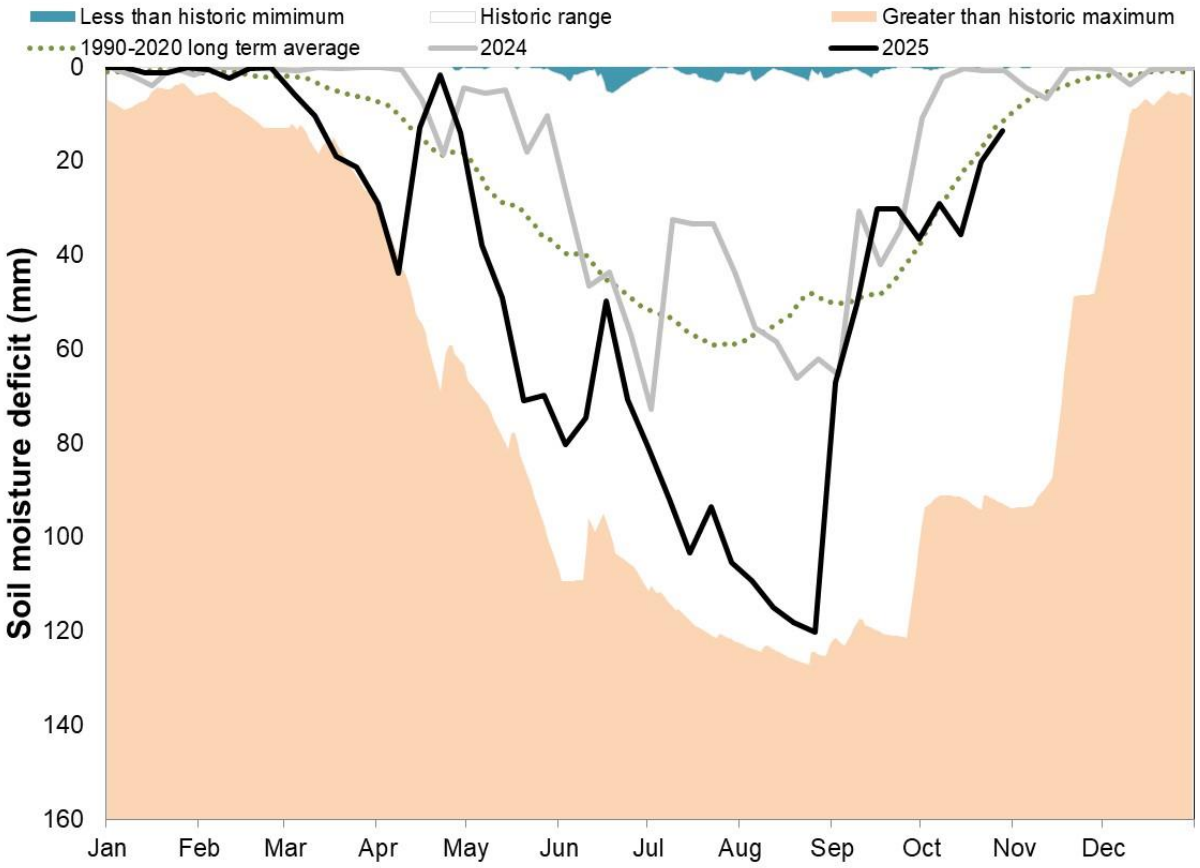
3.1 Soil moisture deficit map

Figure 3.1: Top map shows soil moisture deficit for week ending 28 October 2025. Bottom map shows the difference (mm) between the actual soil moisture deficit and the 1991 to 2020 long term average soil moisture deficits. MORECS data for real land use.



3.2 Soil moisture deficit charts

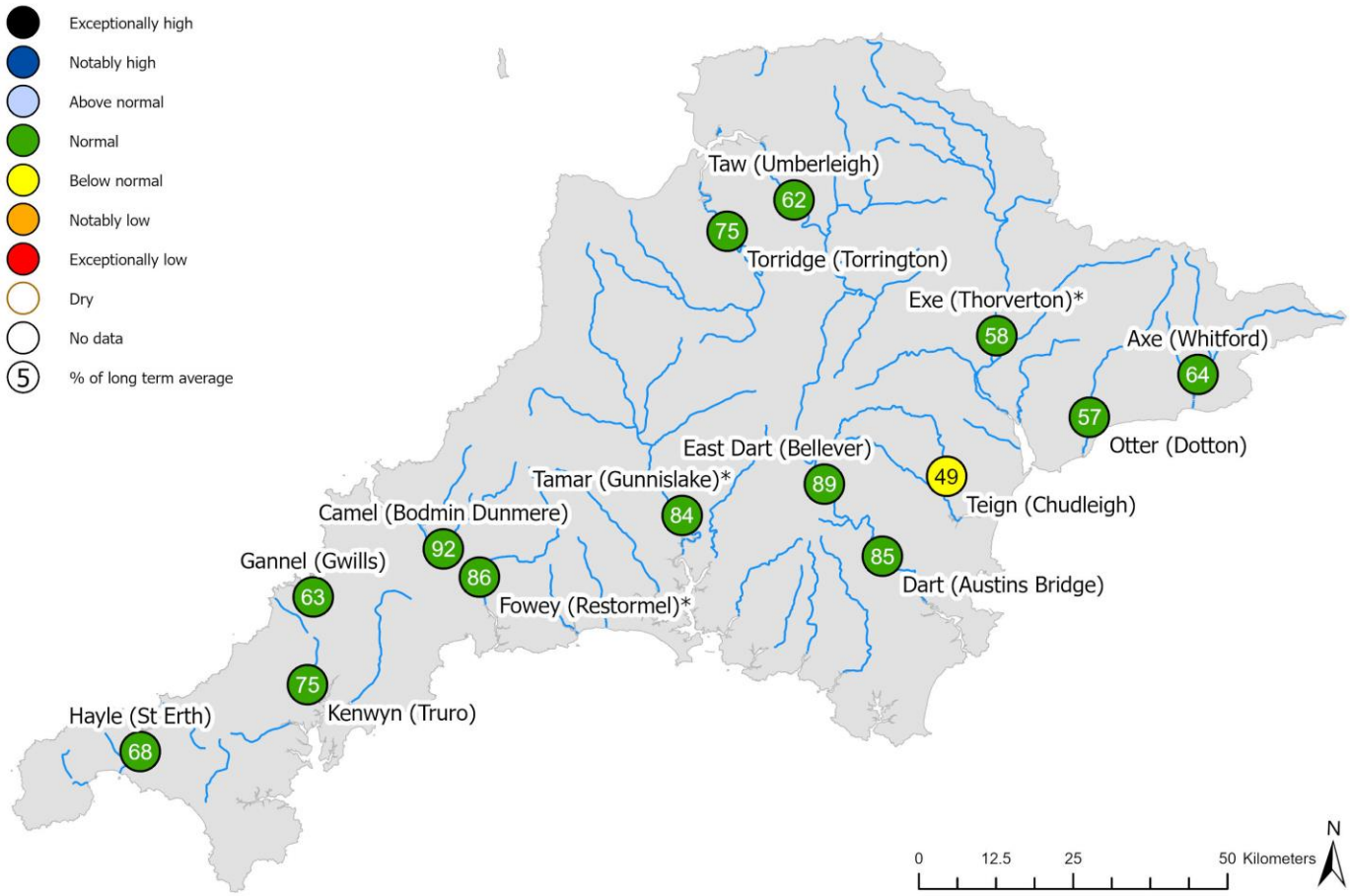
Figure 3.2: Latest soil moisture deficit compared to previous year, maximum, minimum, and 1991 to 2020 long term average. Weekly MORECS data for real land use.



4 River flows

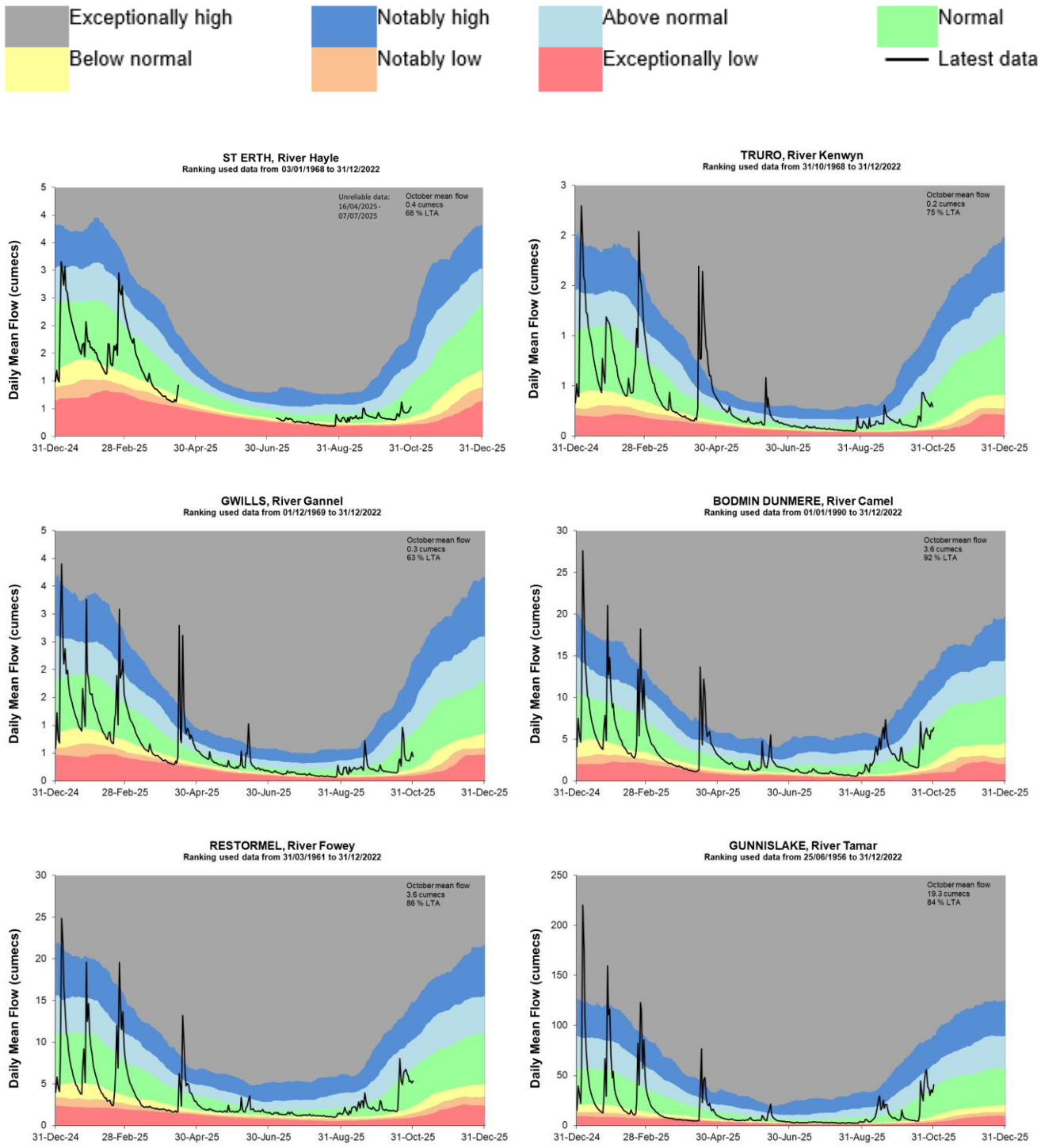
4.1 River flows map

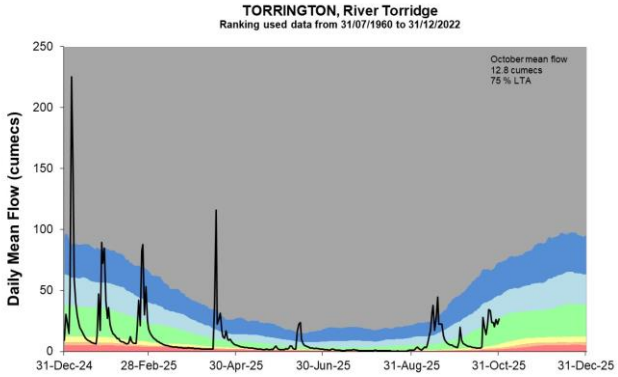
Figure 4.1: Monthly mean river flow for indicator sites for October 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic October monthly means. Table available in the appendices with detailed information.

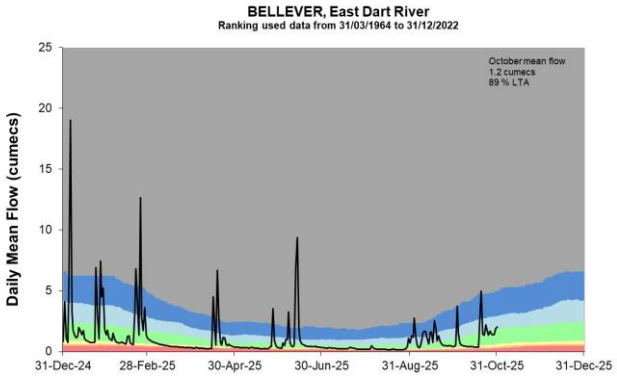


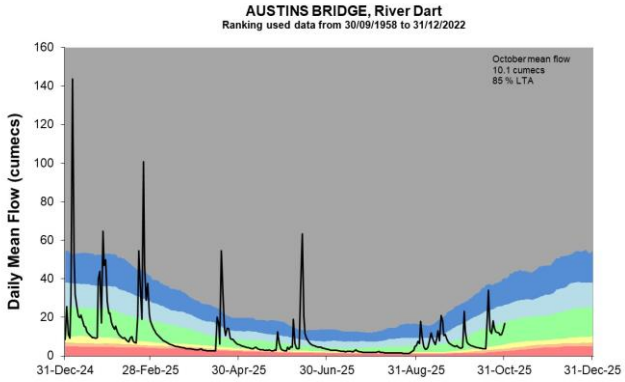
4.2 River flow charts

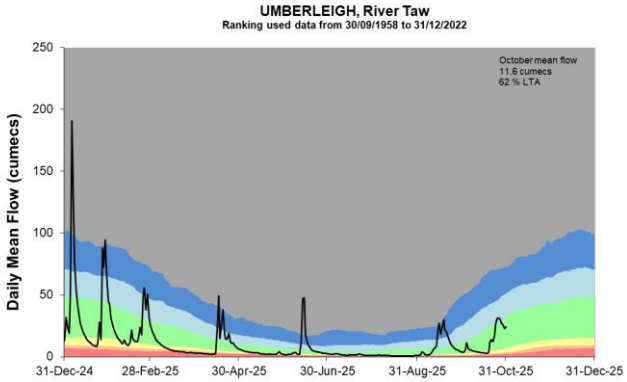
Figure 4.2: Daily mean river flow for indicator sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

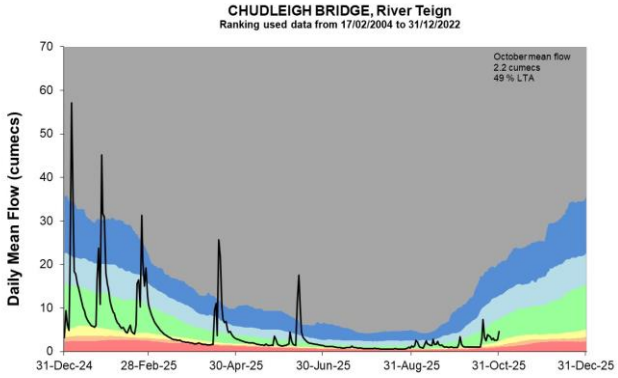


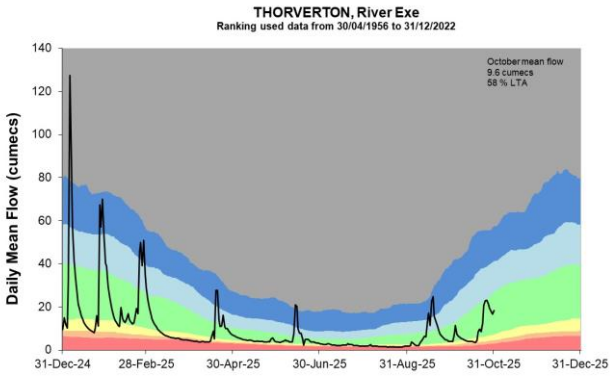


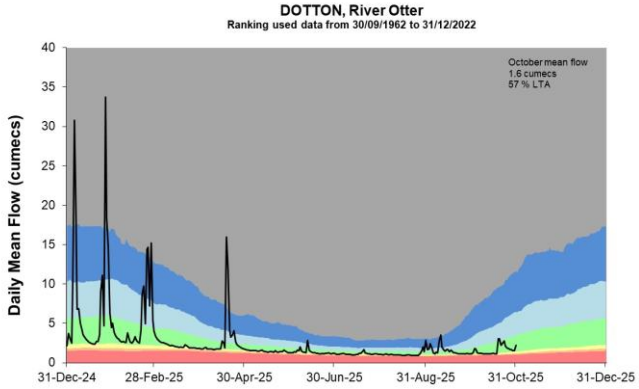


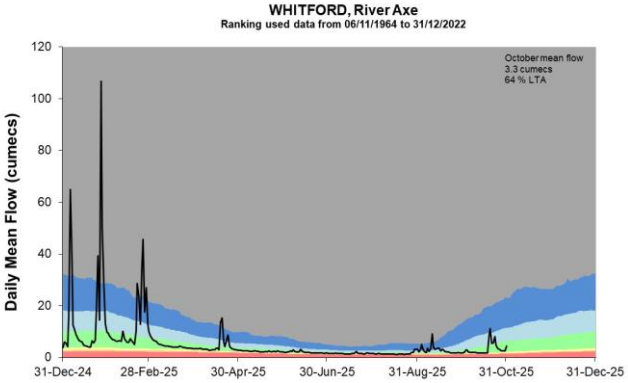










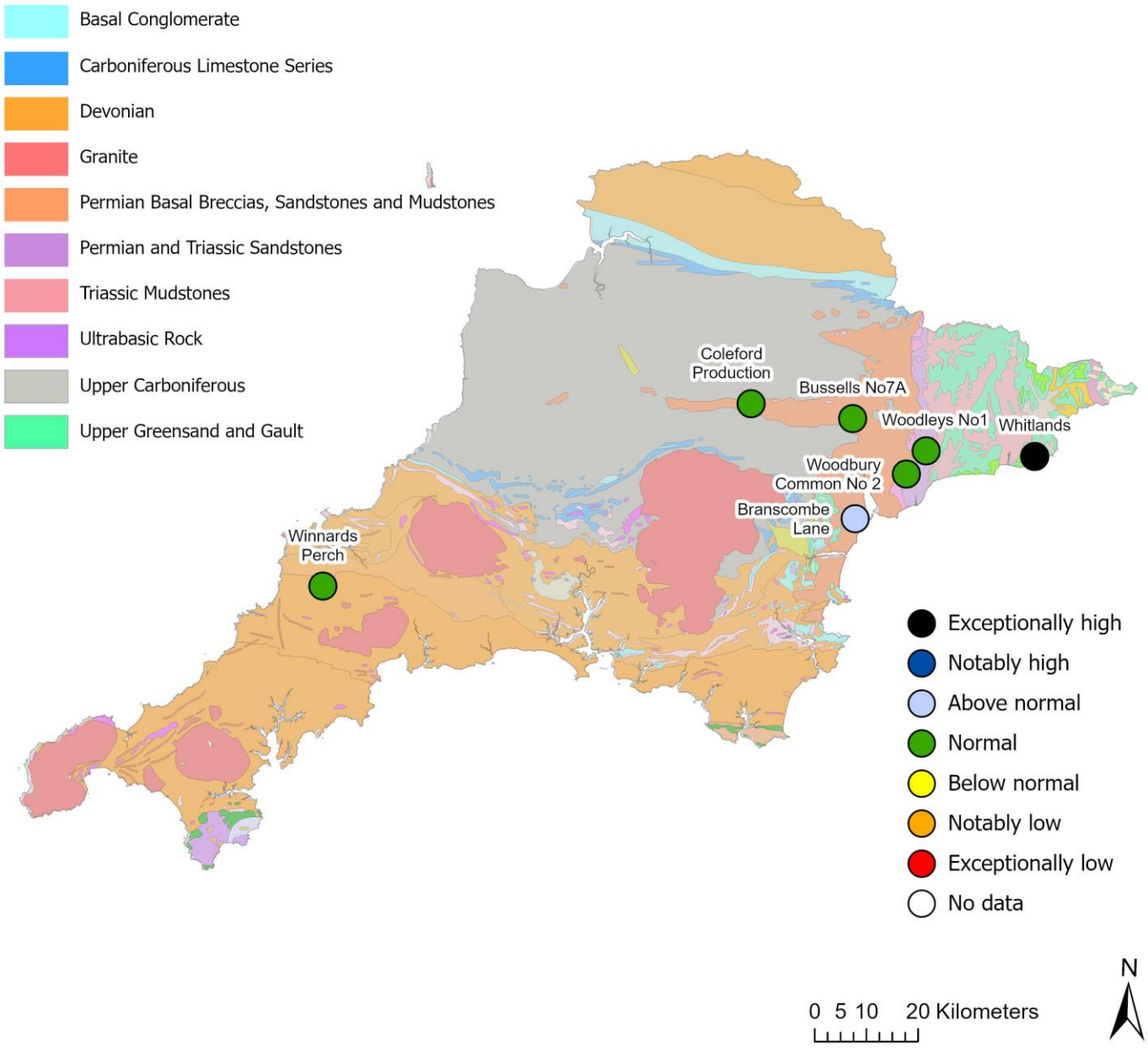


Source: Environment Agency.

5 Groundwater levels

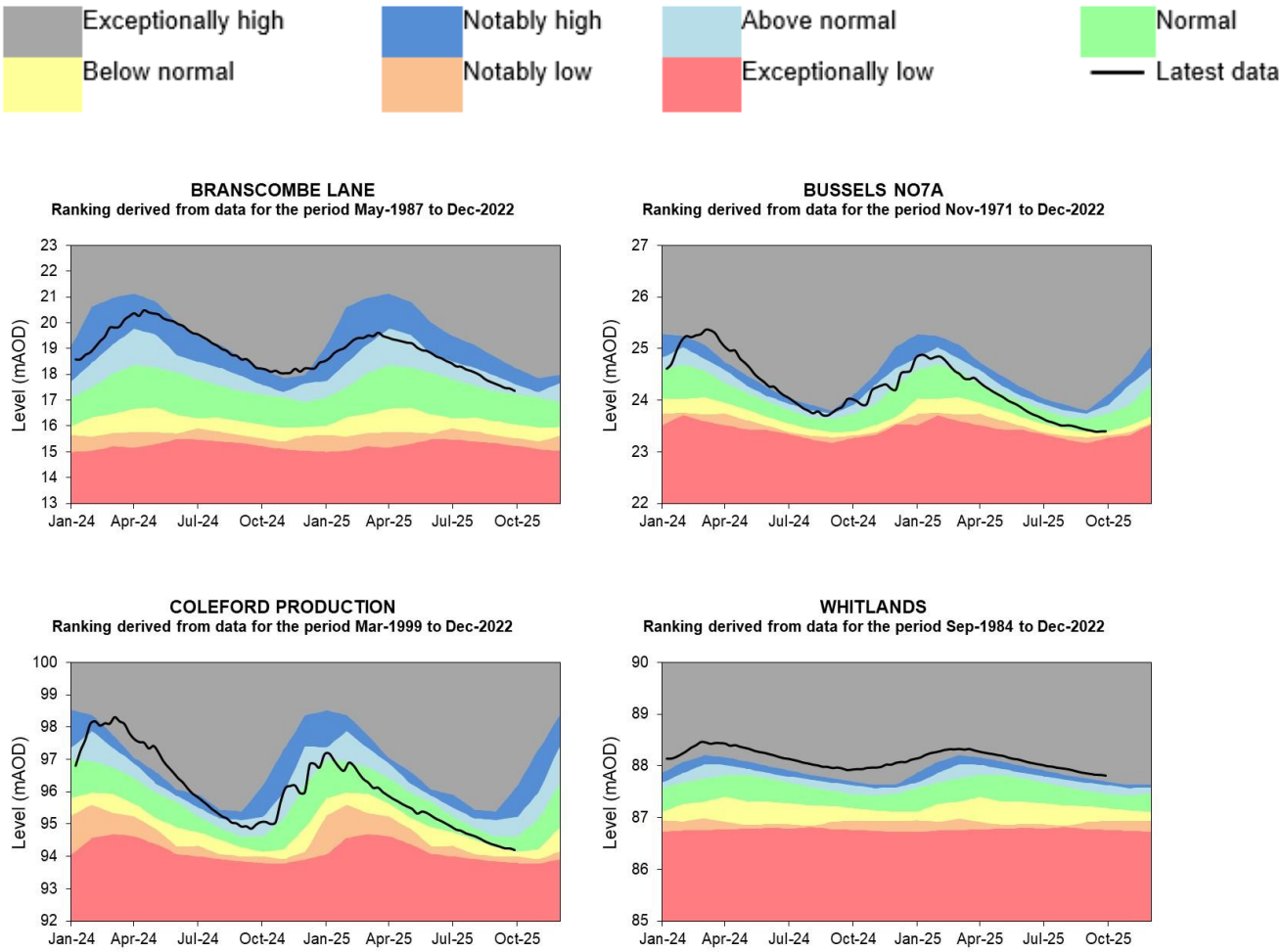
5.1 Groundwater levels map

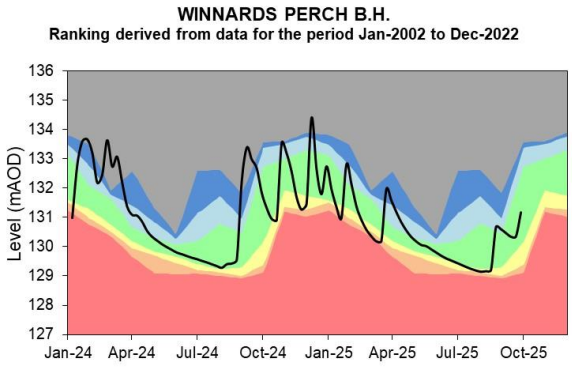
Figure 5.1: Groundwater levels for indicator sites at the end of October 2025, classed relative to an analysis of respective historic October levels. Table available in the appendices with detailed information.

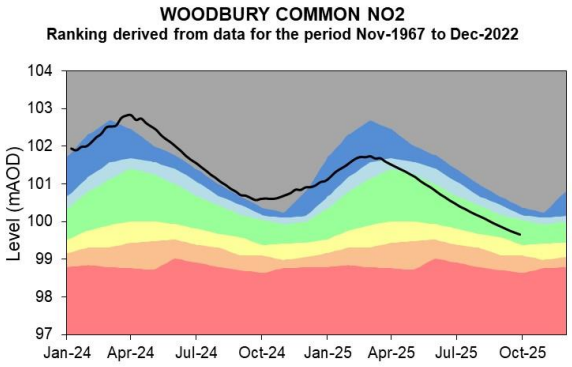


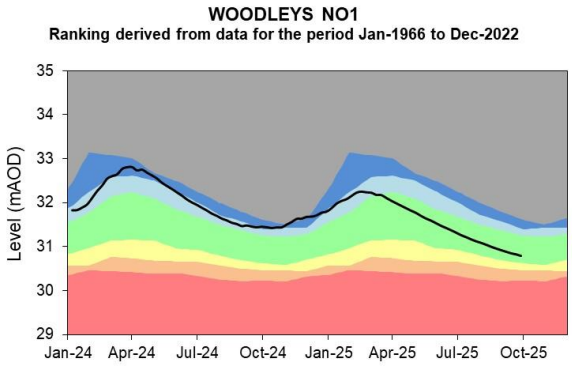
5.2 Groundwater level charts

Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.





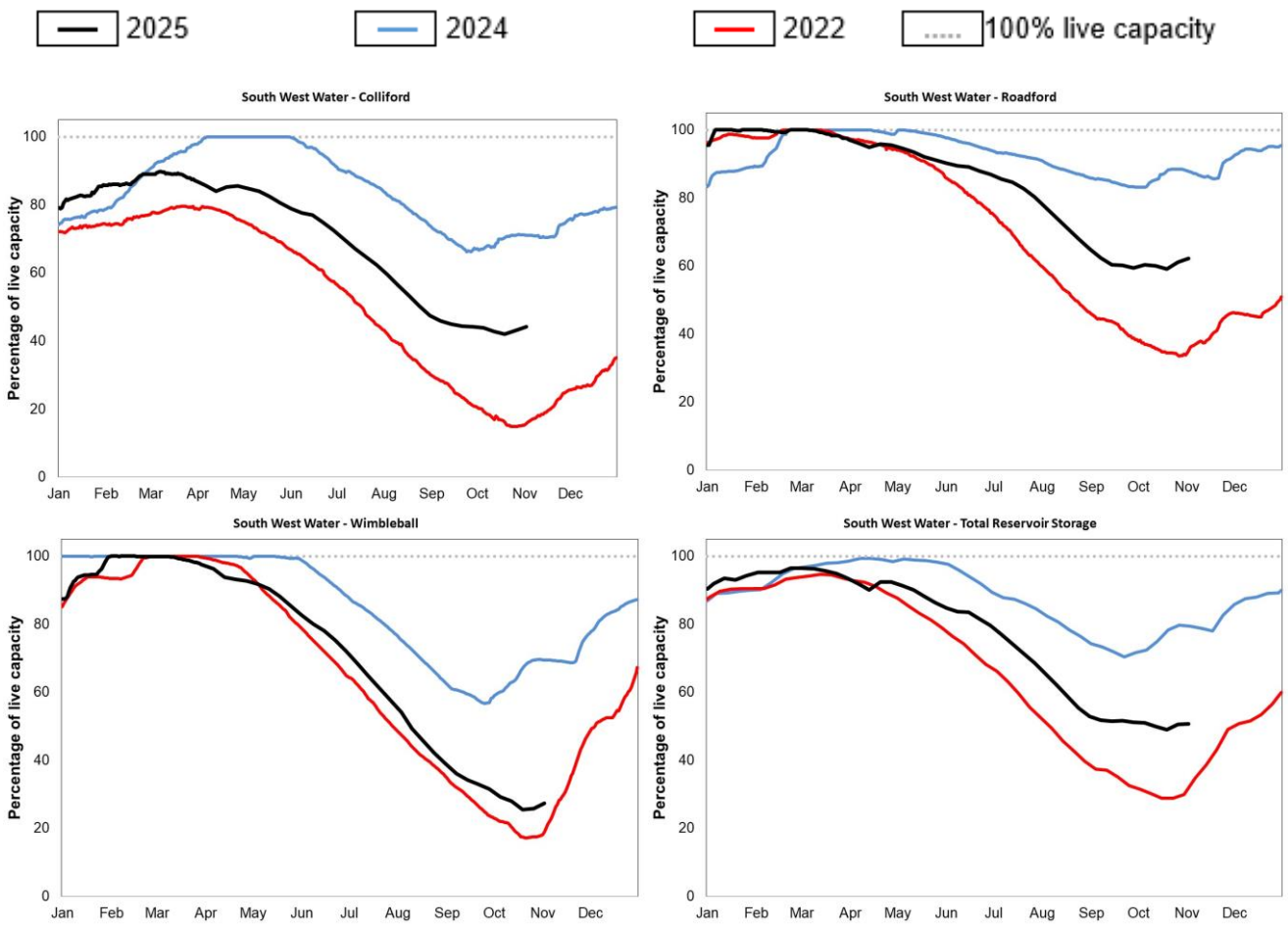




Source: Environment Agency, 2025.

6 Reservoir stocks

Figure 6.1: Reservoir storage (02 November) compared to previous year and a historic drought year. Note: Historic records of individual reservoirs vary in length.



(Source: South West Water).

7 Glossary

7.1 Terminology

Aquifer

A geological formation able to store and transmit water.

Areal average rainfall

The estimated average depth of rainfall over a defined area. Expressed in depth of water (mm).

Artesian

The condition where the groundwater level is above ground surface but is prevented from rising to this level by an overlying continuous low permeability layer, such as clay.

Artesian borehole

Borehole where the level of groundwater is above the top of the borehole and groundwater flows out of the borehole when unsealed.

Cumecs

Cubic metres per second (m^{3s-1}).

Effective rainfall

The rainfall available to percolate into the soil or produce river flow. Expressed in depth of water (mm).

Flood alert and flood warning

Three levels of warnings may be issued by the Environment Agency. Flood alerts indicate flooding is possible. Flood warnings indicate flooding is expected. Severe flood warnings indicate severe flooding.

Groundwater

The water found in an aquifer.

Long term average (LTA)

The arithmetic mean calculated from the historic record, usually based on the period 1991 to 2020. However, the period used may vary by parameter being reported on (see figure captions for details).

mAOD

Metres above ordnance datum (mean sea level at Newlyn Cornwall).

MORECS

Met Office Rainfall and Evaporation Calculation System. Met Office service providing real time calculation of evapotranspiration, soil moisture deficit and effective rainfall on a 40 by 40 km grid.

Naturalised flow

River flow with the impacts of artificial influences removed. Artificial influences may include abstractions, discharges, transfers, augmentation and impoundments.

NCIC

National Climate Information Centre. NCIC area monthly rainfall totals are derived using the Met Office 5 km gridded dataset, which uses rain gauge observations.

Recharge

The process of increasing the water stored in the saturated zone of an aquifer. Expressed in depth of water (mm).

Reservoir gross capacity

The total capacity of a reservoir.

Reservoir live capacity

The capacity of the reservoir that is normally usable for storage to meet established reservoir operating requirements. This excludes any capacity not available for use (for example, storage held back for emergency services, operating agreements or physical restrictions). May also be referred to as ‘net’ or ‘deployable’ capacity.

Soil moisture deficit (SMD)

The difference between the amount of water actually in the soil and the amount of water the soil can hold. Expressed in depth of water (mm).

7.2 Categories

Exceptionally high

Value likely to fall within this band 5% of the time.

Notably high

Value likely to fall within this band 8% of the time.

Above normal

Value likely to fall within this band 15% of the time.

Normal

Value likely to fall within this band 44% of the time.

Below normal

Value likely to fall within this band 15% of the time.

Notably low

Value likely to fall within this band 8% of the time.

Exceptionally low

Value likely to fall within this band 5% of the time.

8 Appendices

8.1 Rainfall table

Hydrological area	Oct 2025 rainfall % of long term average 1991 to 2020	Oct 2025 band	Aug 2025 to October cumulative band	May 2025 to October cumulative band	Nov 2024 to October cumulative band
Avon Dart And Erme	87	Normal	Normal	Normal	Normal
Exe	83	Normal	Normal	Below normal	Below normal
Fal And St Austell	86	Normal	Normal	Normal	Normal
North Cornwall	93	Normal	Normal	Normal	Normal
Otter Sid Axe And Lim	79	Normal	Normal	Below normal	Below normal
Seaton Looe And Fowey	93	Normal	Normal	Normal	Normal
Tamar	98	Normal	Above normal	Normal	Normal
Taw And North Devon Streams	89	Normal	Normal	Normal	Normal
Teign And Torbay	80	Normal	Normal	Normal	Normal

Hydrological area	Oct 2025 rainfall % of long term average 1991 to 2020	Oct 2025 band	Aug 2025 to October cumulative band	May 2025 to October cumulative band	Nov 2024 to October cumulative band
Torridge And Hartland Streams	95	Normal	Normal	Normal	Normal
West Cornwall	89	Normal	Normal	Normal	Normal

8.2 River flows table

Site name	River	Catchment	Oct 2025 band	Sep 2025 band
Austins Bridge	Dart	Dart	Normal	Above normal
Bellever	East Dart	Dart	Normal	Above normal
Bodmin Dunmere	Camel	Camel	Normal	Above normal
Chudleigh Bridge	Teign	Teign Upper	Below normal	Normal
Dotton	Otter	Otter	Normal	Normal
Gunnislake	Tamar	Tamar Lower	Normal	Normal
Gwills	Gannel	Gannel	Normal	Normal
Restormel	Fowey	Fowey	Normal	Normal
St Erth	Hayle	Hayle	Normal	Normal
Thorverton	Exe	Exe Lower	Normal	Normal
Torrington	Torridge	Torridge Middle	Normal	Above normal
Truro	Kenwyn	Tresillian Trevella Kenwyn	Normal	Above normal
Umberleigh	Taw	Taw Middle	Normal	Normal
Whitford	Axe	Axe Devon Middle	Normal	Normal

8.3 Groundwater table

Site name	Aquifer	End of Oct 2025 band	End of Sep 2025 band
Branscombe Lane	Dawlish Sandstone	Above normal	Above normal
Bussels No7a	Dawlish Sandstone	Normal	Normal
Coleford Production	Permian Breccias And Sandstones	Normal	Normal
Whitlands	Upper Greensand	Exceptionally high	Exceptionally high
Winnards Perch B.h.	Staddon Formation	Normal	Above normal
Woodbury Common No2	Budleigh Salterton Pebble Beds	Normal	Normal
Woodleys No1	Otterton Sandstone Formation	Normal	Normal

8.4 Hydrological Areas