# Monthly water situation report: Wessex Area

## 1 Summary - August 2025

August was the sixth consecutive dry month in Wessex. An average of 39mm of rain, 54% of the long term average (LTA) fell across Wessex. Most rain fell between 27 and 31 August at the end of the month. This has now been the second driest 6 month period (March to August) since records began in 1871. The north of Wessex received notably less rain in August than in the south. For several hydrological areas in the north, this has been the driest 6 month period (March to August) on record. Soil moisture deficit (SMD) increased gradually throughout most of August but fell sharply in the last week of the month following the rain. Monthly mean flows recorded across Wessex in August were largely below normal or notably low. Daily mean flows in August peaked towards the end of the month, in response to rain between 27 and 31 August. Most groundwater sites, including all sites monitoring the Chalk aquifer, reported notably or exceptionally low levels at the end of August. The only exception was Allington in the north which reported below normal levels. Overall reservoir levels for Wessex Water were approximately 42% capacity at the end of August while for Bristol Water, levels were approximately 39% capacity.

### 1.1 Rainfall

An average of 39mm of rain fell across Wessex in August (54% of the LTA). This is the sixth consecutive dry month, resulting in the second driest 6 month period (March to August) since records began in 1871 and the driest since 1976. However, for several catchments in the north of Wessex such as the Bristol Avon and the Mendips, this is the driest 6 month period (March to August) on record. In total, 84% of the month's rain fell between 27 and 31 August. Overall, rainfall was notably low in most hydrological areas in the north and either normal or below normal in most areas to the south. the highest relative rainfall fell in the Poole Harbour and Purbeck area with 80% of the LTA. The Little Avon in the north of Wessex received the least relative rainfall with 34% of the LTA.

Over the past 3 months, the majority of hydrological areas in the north and west of Wessex received notably low rainfall while the majority of sites in the south received below normal rainfall. Over the past 6 months, all hydrological areas have received exceptionally low rainfall. Over the past 12 months however, all areas have received normal rainfall.

### 1.2 Soil moisture

SMD in Wessex continued to increase for most of August, spending the majority of August close to the historic maximum SMD. However, due to the rain in the last week of August, SMD decreased rapidly at the end of the month. At the end of August, SMD was notably lower than the historic maximum and only slightly higher than this time last year. Across most

hydrological areas, SMD ended August between 101mm to 130mm. The other areas all ended August with an average SMD between 71mm to 100mm. For all but two hydrological areas, SMD at the end of August was between 6mm to 25mm greater than the LTA.

## 1.3 River flows

In August, most flow sites in Wessex recorded below normal or notably low monthly mean flows. The only exceptions were Frenchay on the Bristol Frome to the north and South Newton on the Wylye to the south which both recorded exceptionally low mean flows during August. Most sites monitoring flows on or downstream of the Chalk aquifer recorded slightly higher relative monthly mean flows because of supporting baseflow from the aquifer. Daily mean flows across Wessex peaked toward the end of the month around 29 August following the rain on the previous 2 days with most flows starting to recede at the end of the month.

## 1.4 Groundwater levels

Following 6 consecutive dry months, the majority of groundwater sites in Wessex, including all sites monitoring the Chalk aquifer, ended August reporting notably or exceptionally low levels. Allington (monitoring the Great Oolite) was the only site to record below normal groundwater levels at the end of August. For most monitoring sites, groundwater levels decreased throughout August.

## 1.5 Reservoir stocks

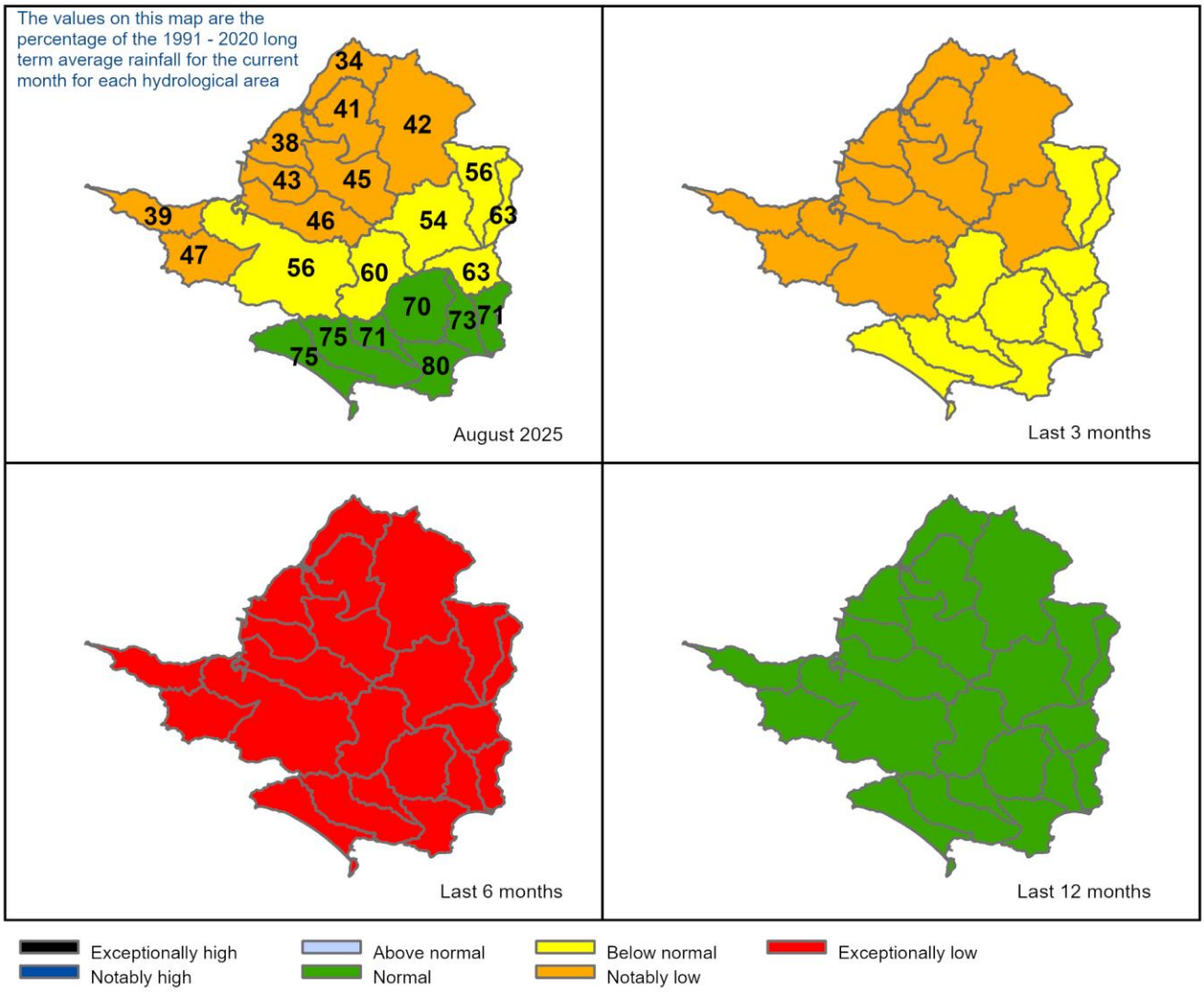
Both Wessex Water and Bristol Water reservoir levels continued to decrease throughout August. The combined levels at the end of the month for Wessex Water were approximately 42% capacity while for Bristol Water, combined levels were approximately 39% capacity. For both water companies, this is notably lower than reservoir levels recorded this time last year.

Author: Wessex Hydrology, hydrology.wessex@environment-agency.gov.uk

# 2 Rainfall

## 2.1 Rainfall map

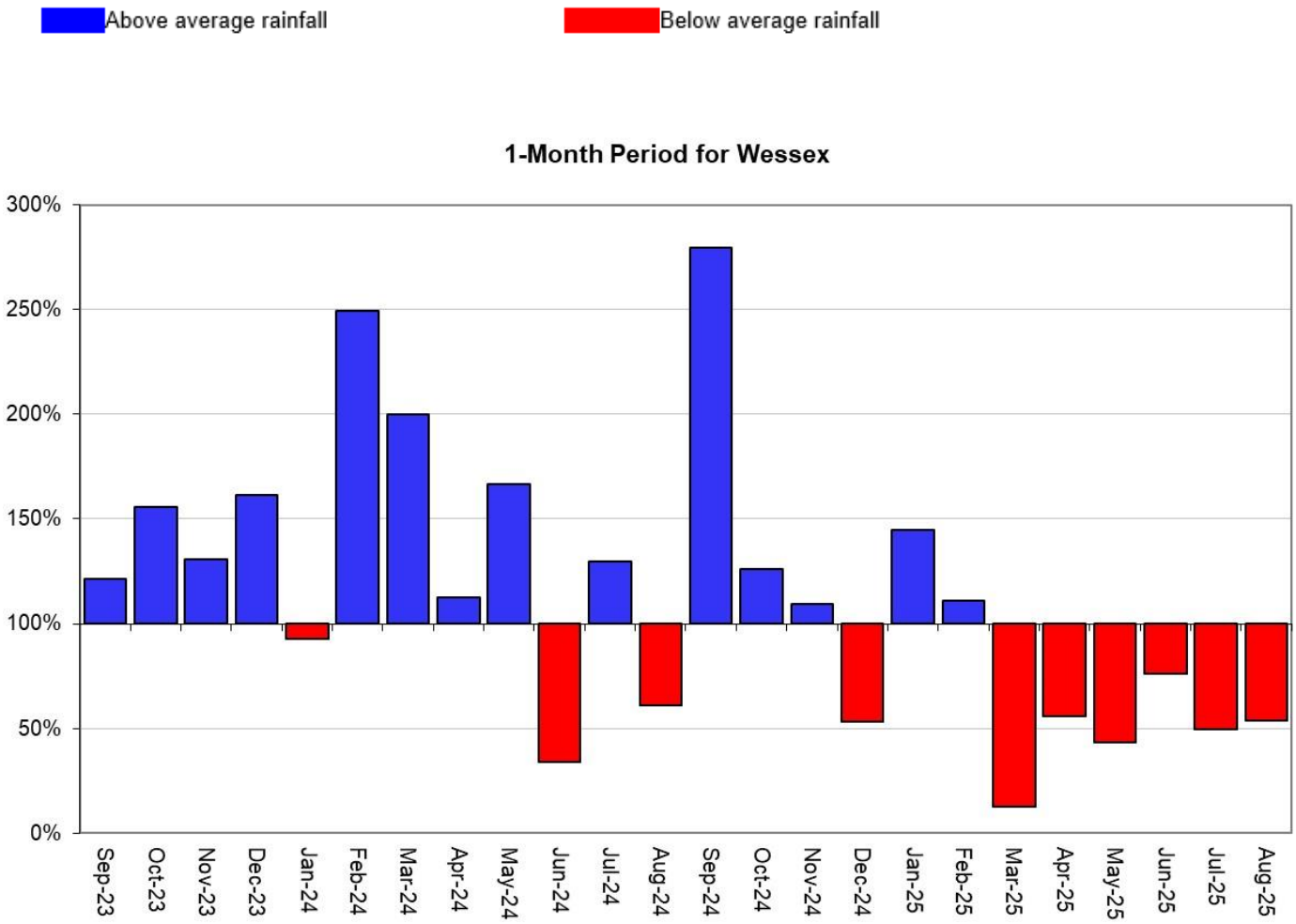
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 31 August 2025), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals between 1991 and 2020. Table available in the appendices with detailed information.




Rainfall data for October 2023 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2025). Rainfall data prior to October 2023, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 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 each region and for England.

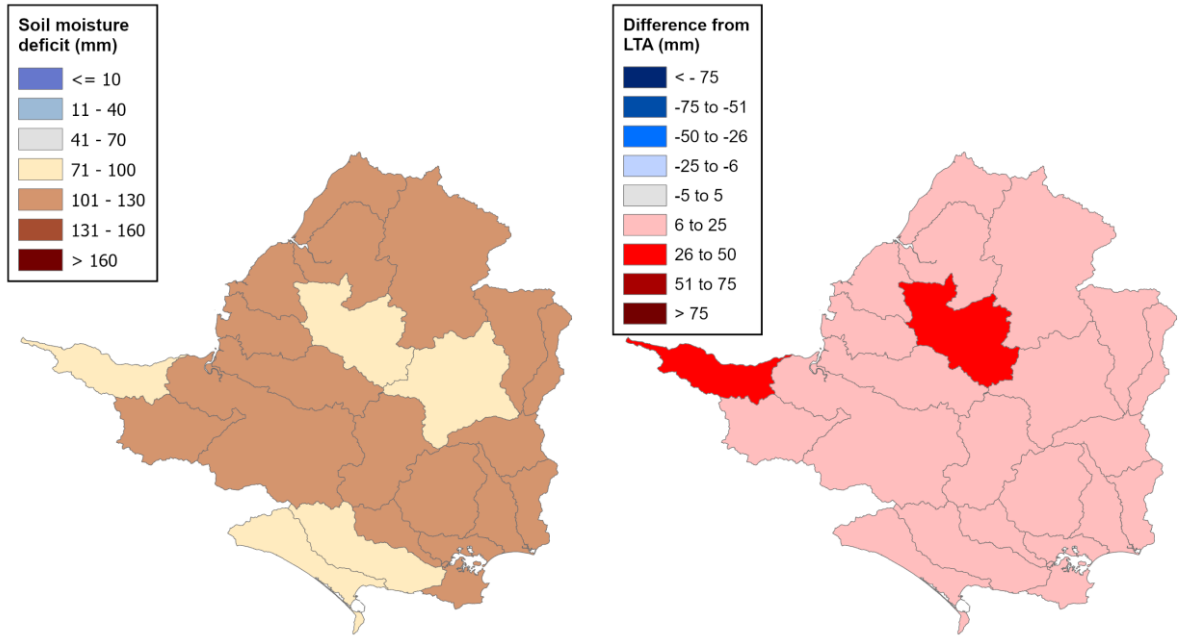



Rainfall data for October 2023 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2025). Rainfall data prior to October 2023, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

# 3 Soil moisture deficit

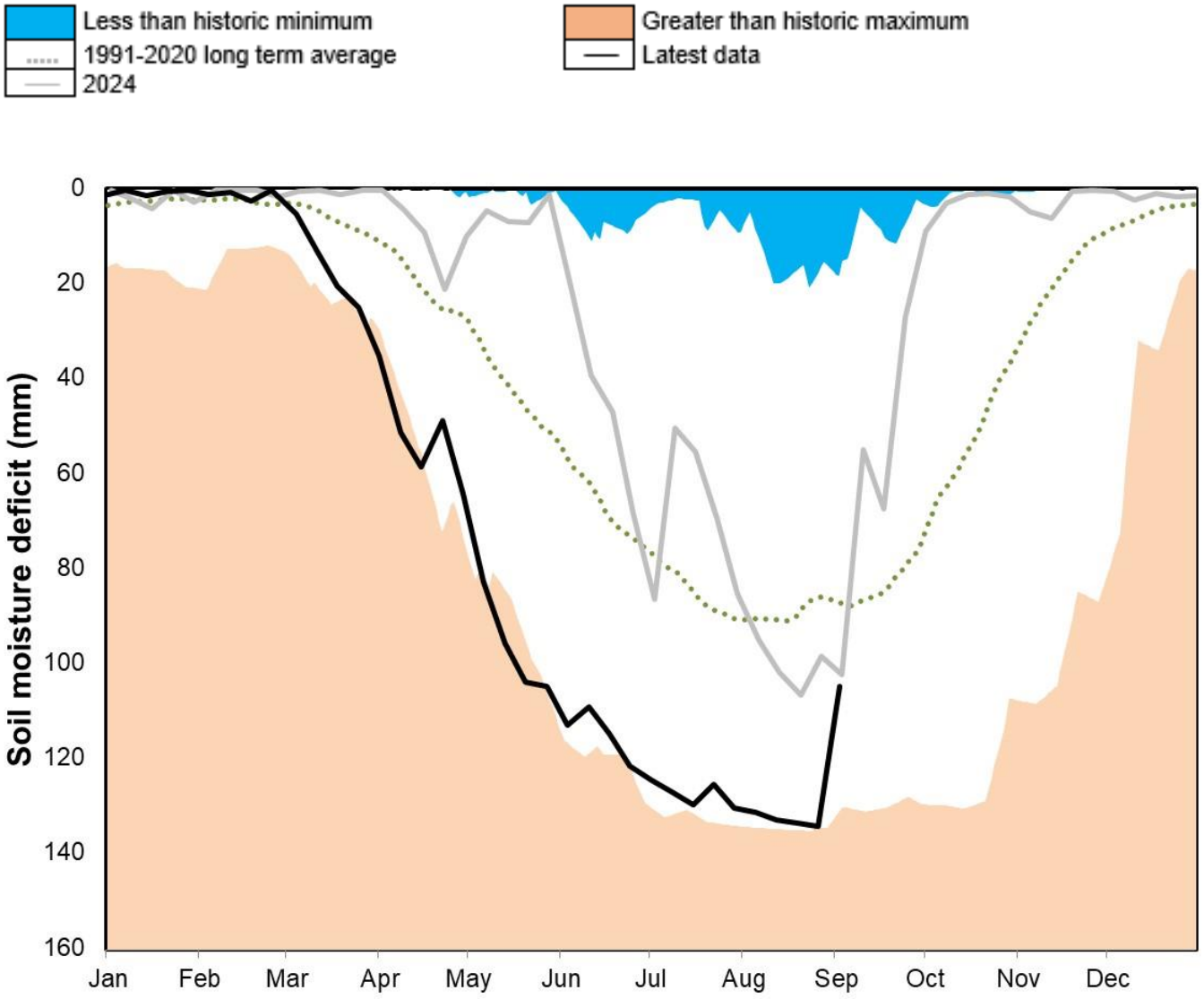
## 3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending 31 August 2025. Shows the difference (mm) of the actual soil moisture deficit from the 1991 to 2020 long term average soil moisture deficits. MORECS data for real land use.



## 3.2 Soil moisture deficit charts

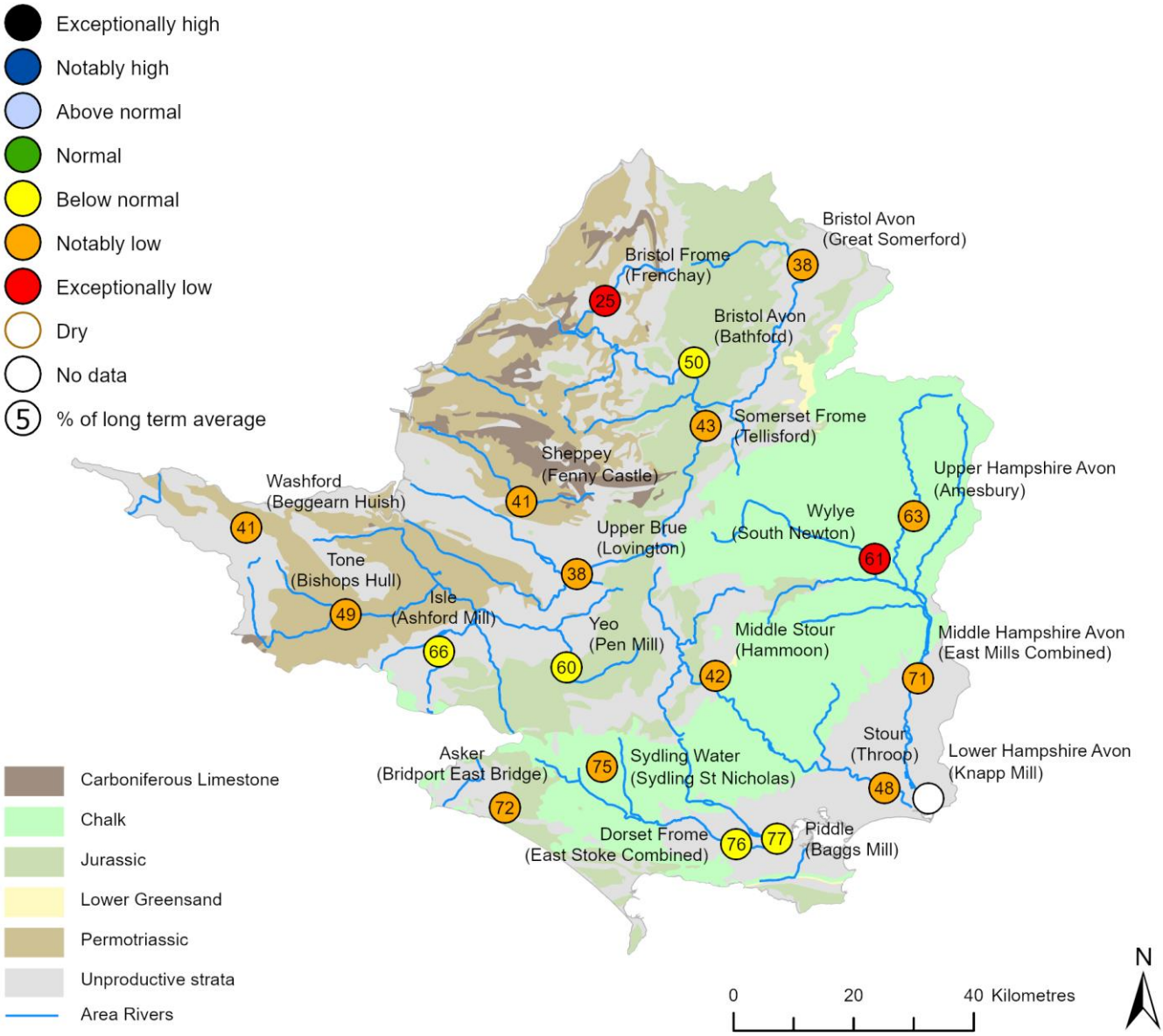
Figure 3.2: Latest soil moisture deficit compared to previous year, maximum, minimum, and 1991 to 2020 long term average. Weekly MORECS data for real land use.



# 4 River flows

## 4.1 River flows map

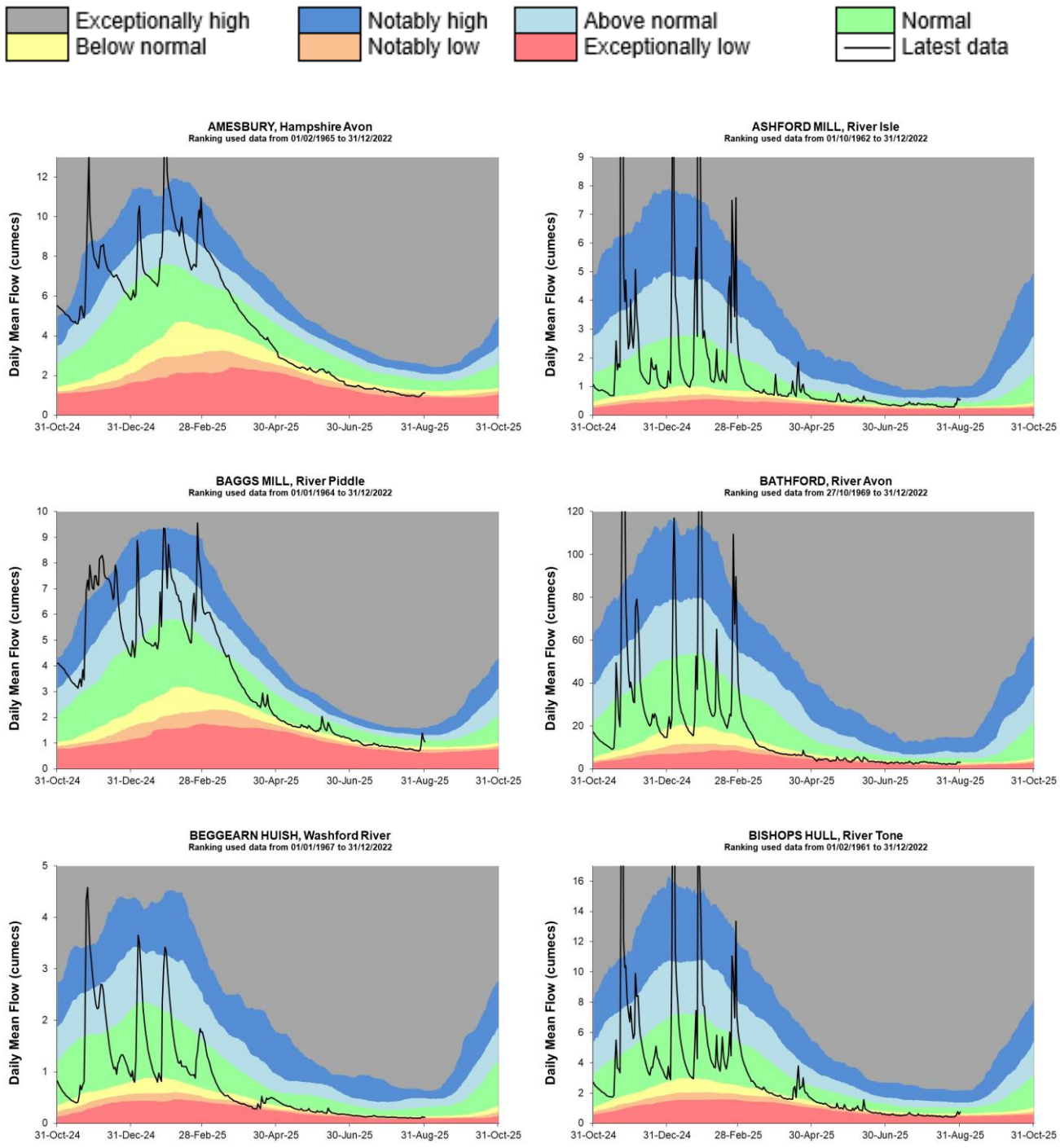
Figure 4.1: Monthly mean river flow for indicator sites for August 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic August monthly means Table available in the appendices with detailed information.



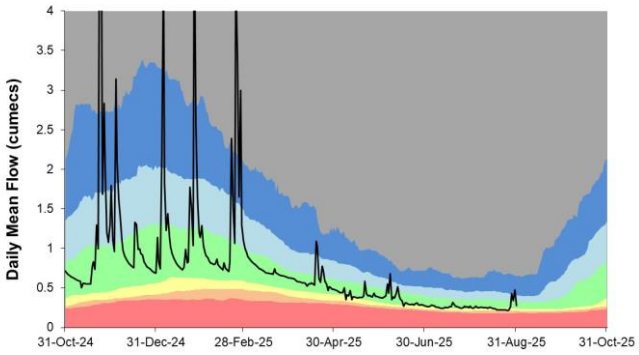

(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2025. Knapp Mill omitted due to ongoing data issues.

## 4.2 River flow charts

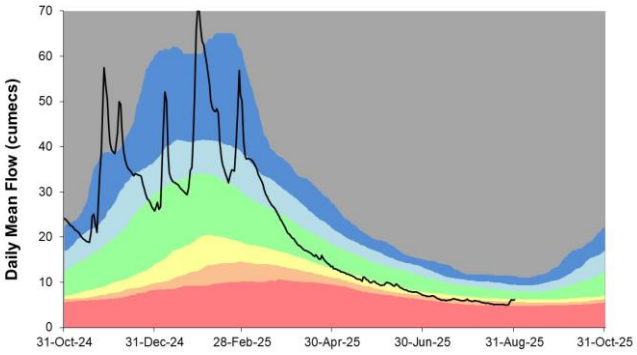
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows.



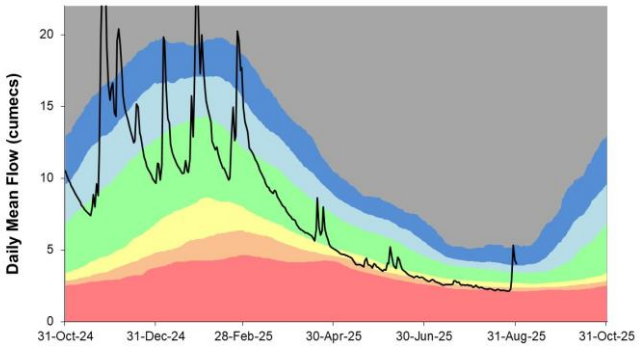
**BRIDPORT EAST BRIDGE, River Asker**
Ranking used data from 01/03/1996 to 31/12/2022



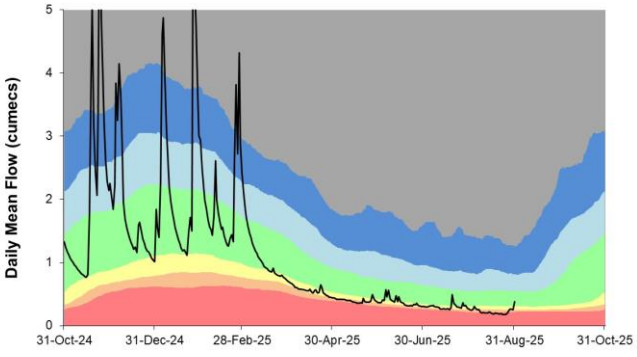

**EAST MILLS COMBINED, Hampshire Avon**
Ranking used data from 01/11/1965 to 31/12/2022



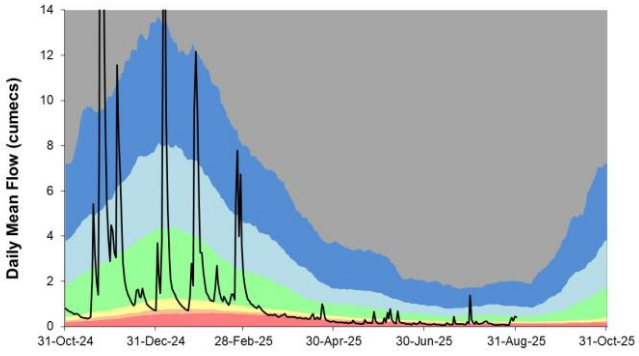

**EAST STOKE COMBINED, Dorset Frome**
Ranking used data from 01/10/1965 to 31/12/2022



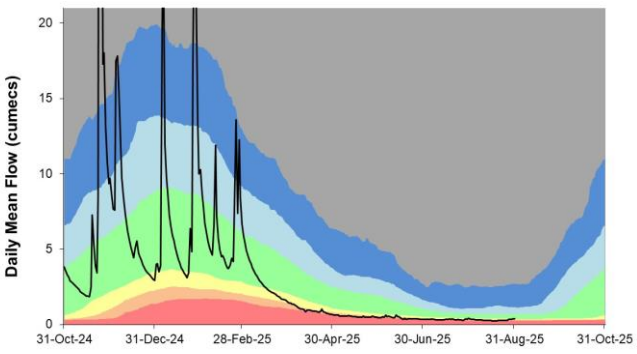

**FENNY CASTLE , River Sheppey**
Ranking used data from 01/01/1964 to 31/12/2022



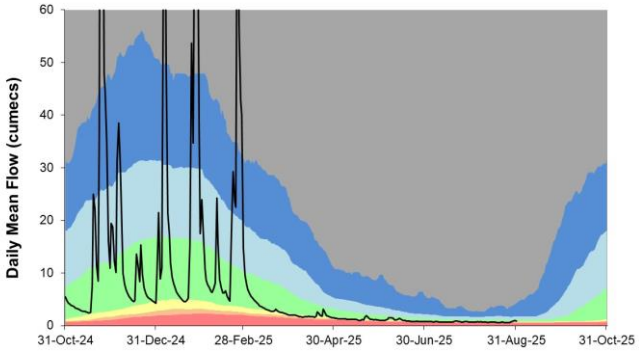

**FRENCHAY, Bristol Frome**
Ranking used data from 01/09/1961 to 31/12/2022



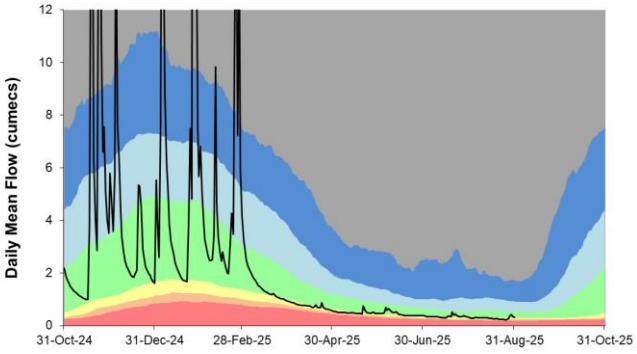

**GREAT SOMERFORD, River Avon**
Ranking used data from 16/12/1963 to 31/12/2022

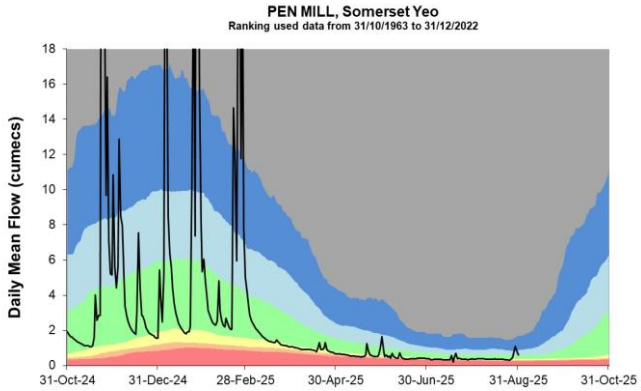


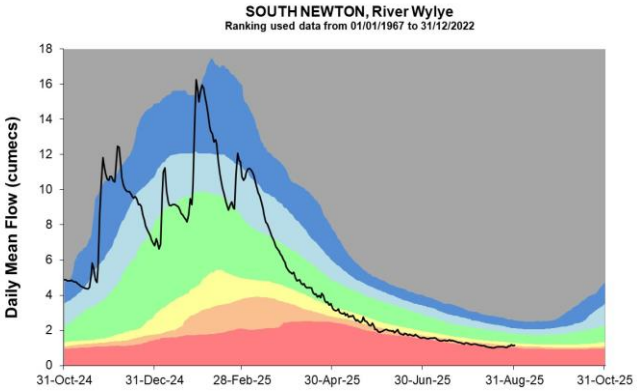

**HAMMOON, River Stour**
Ranking used data from 01/03/1968 to 31/12/2022

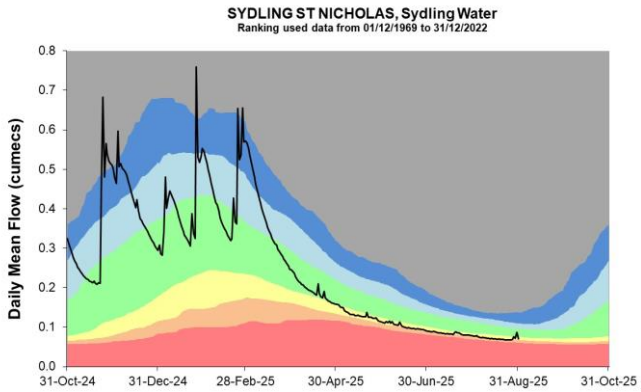


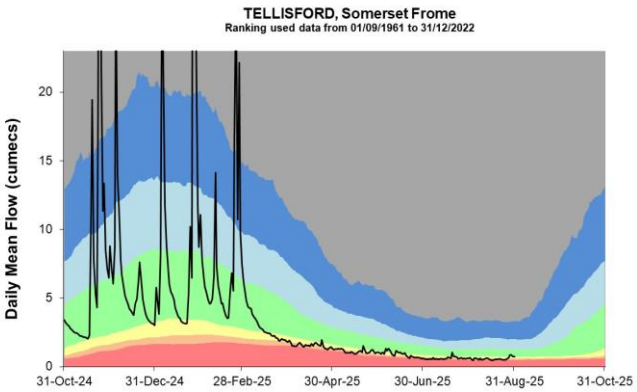

**LOVINGTON, River Brue**
Ranking used data from 01/10/1964 to 31/12/2022

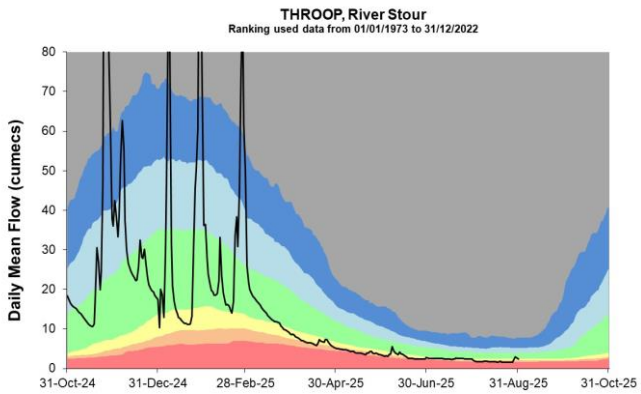




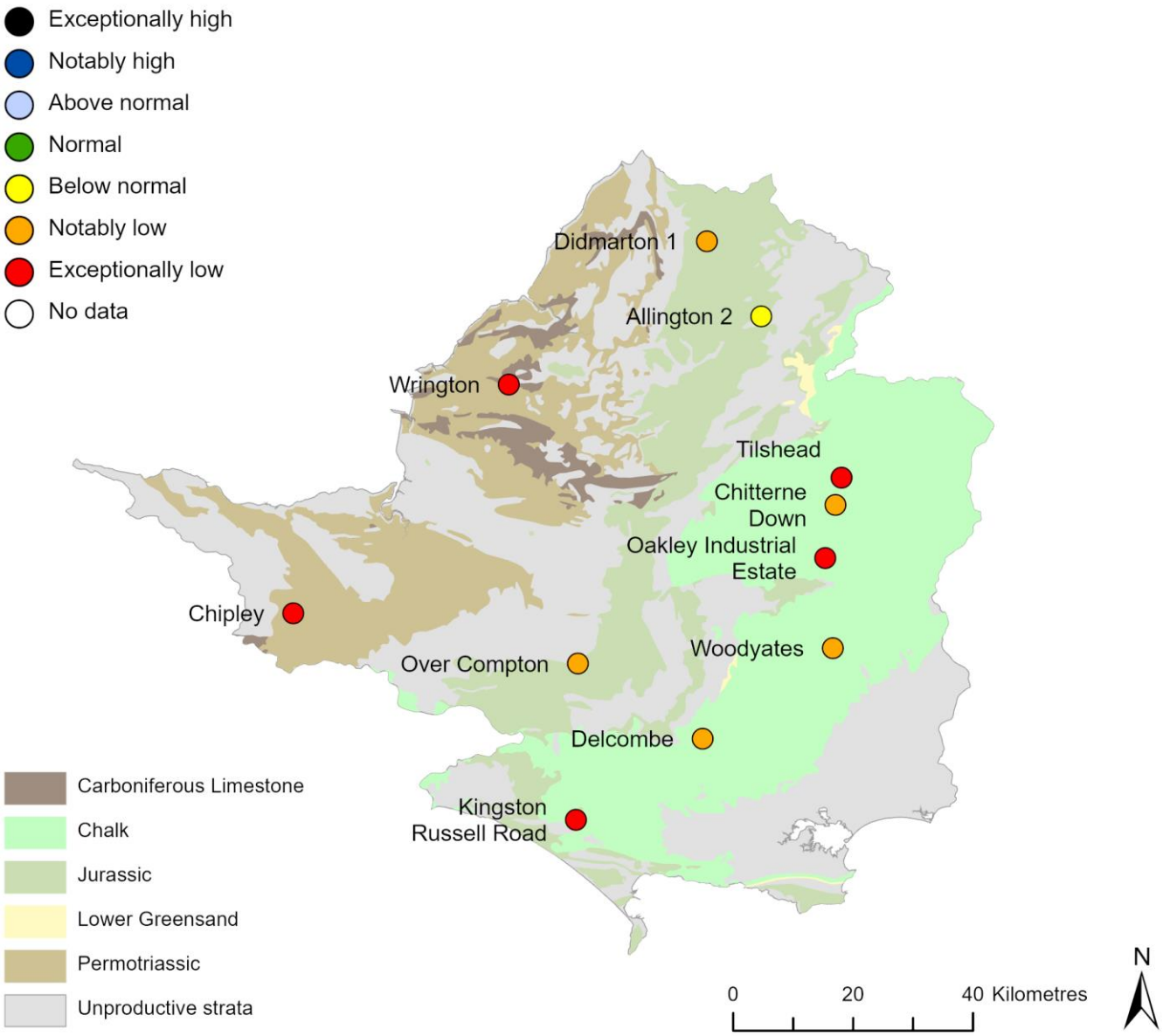




Source: Environment Agency, 2025.

# 5 Groundwater levels

## 5.1 Groundwater levels map

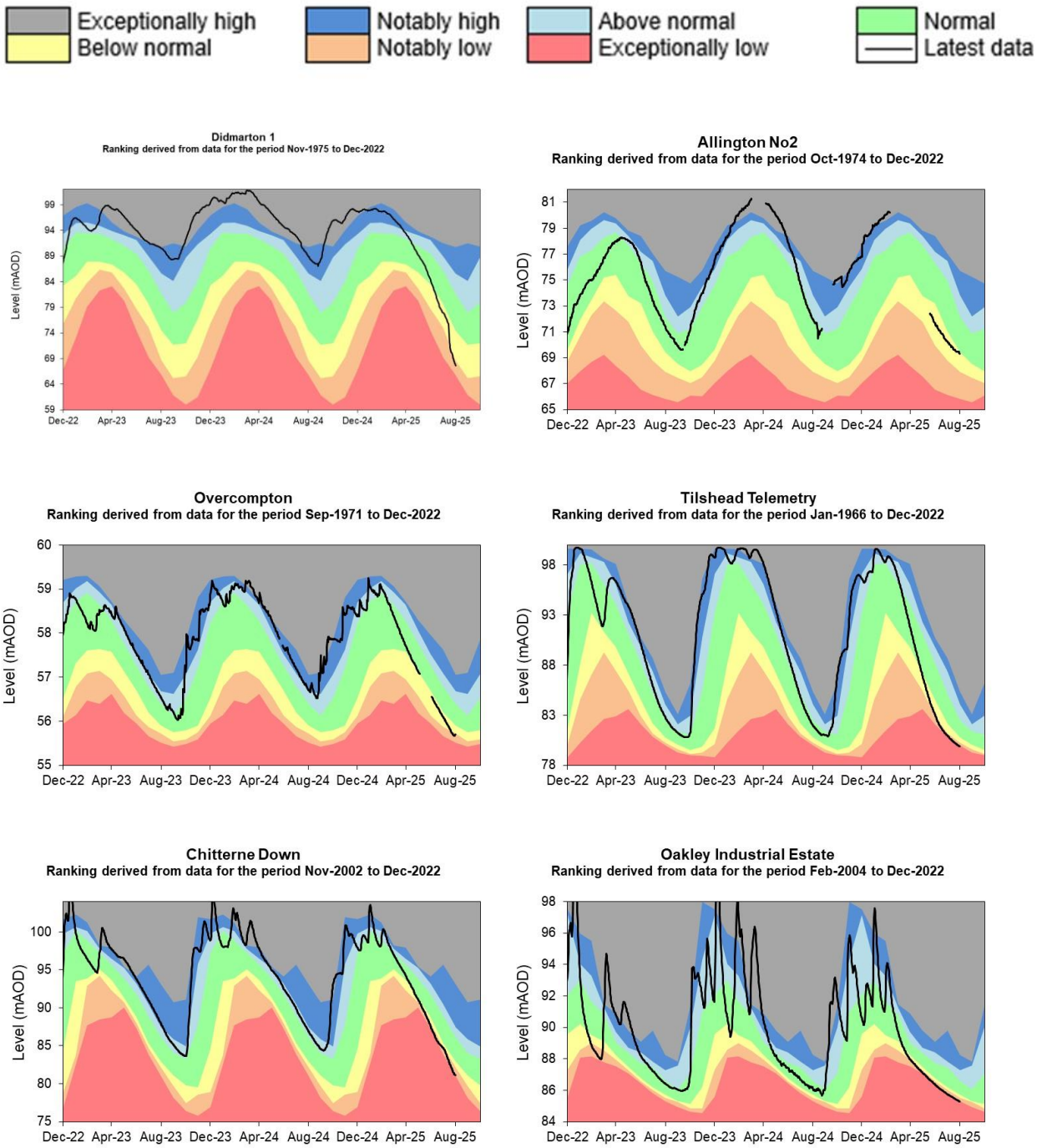
Figure 5.1: Groundwater levels for indicator sites at the end of August 2025, classed relative to an analysis of respective historic August levels. Table available in the appendices with detailed information.

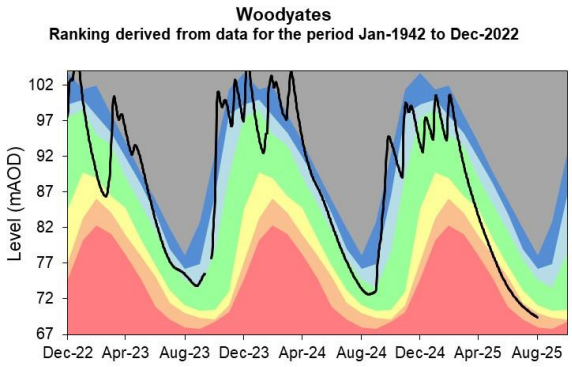


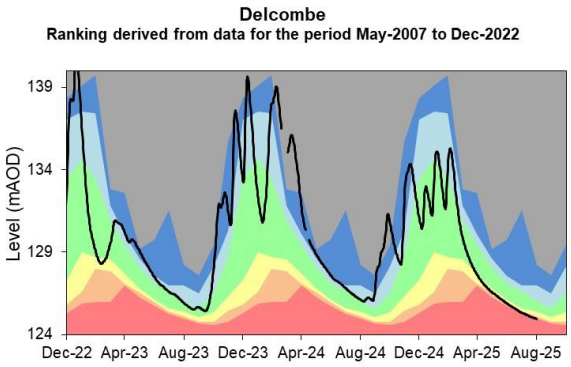

(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

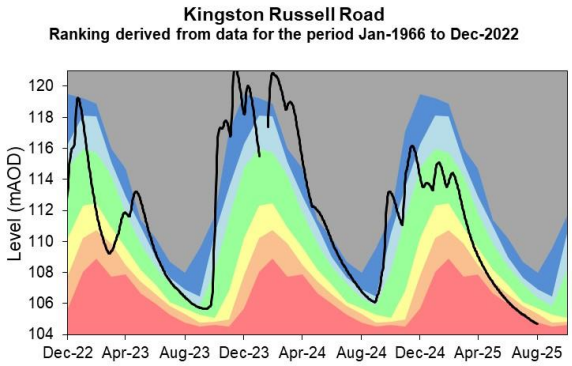
## 5.2 Groundwater level charts

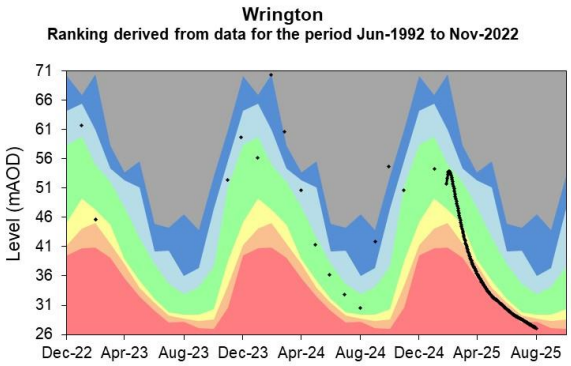
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 34 months compared to an analysis of historic end of month levels.

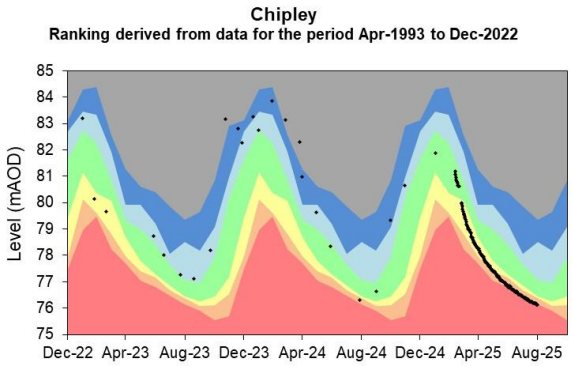




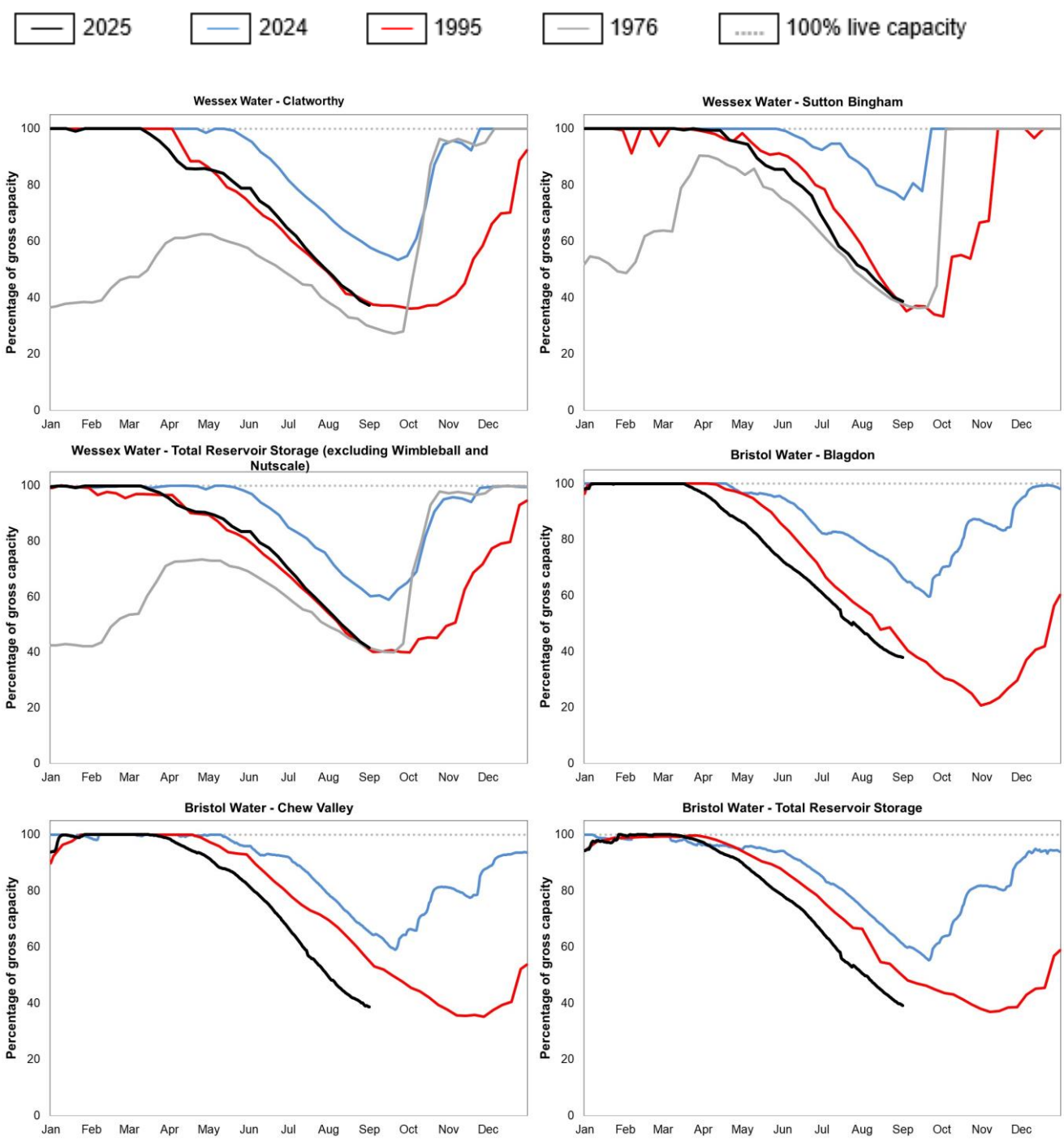




Source: Environment Agency, 2025.

# 6 Reservoir stocks

Figure 6.1: End of month regional reservoir stocks compared to the previous year, and if available, also a comparison to reservoir stocks in 1995 and 1976.




(Source: Wessex Water and Bristol Water).

# 7 Flood alerts and warnings

## 7.1 Flood alerts

Table 1: Fluvial, coastal and groundwater flood alerts issued during August

| Area | Number of fluvial flood alerts in August | Number of coastal flood alerts in August | Number of groundwater flood alerts in August |
|---|---|---|---|
| North Wessex | 0 | 0 | 0 |
| South Wessex | 0 | 0 | 0 |

## 7.2 Flood warnings

Table 2: Fluvial, coastal and groundwater flood warnings issued during August

| Area | Number of fluvial flood warnings in August | Number of coastal flood warnings in August | Number of groundwater flood warnings in August |
|---|---|---|---|
| North Wessex | 0 | 0 | 0 |
| South Wessex | 0 | 0 | 0 |

## 7.3 Severe flood warnings

Table 3: Fluvial, coastal and groundwater severe flood warnings issued during August

| Area | Number of fluvial severe flood warnings in August | Number of coastal severe flood warnings in August | Number of groundwater severe flood warnings in August |
|---|---|---|---|
| North Wessex | 0 | 0 | 0 |
| South Wessex | 0 | 0 | 0 |

# 8 Stream support

## 8.1 Sites providing stream support

Table 4: End of August status for stream support sites.

| Catchment | River | Stream support site | Gauging station | End of August status |
|---|---|---|---|---|
| Bristol Avon | Chalfield Brook | South Wraxall | Great Chalfield (Wessex Water) | On |
| Bristol Avon | Chalfield Brook | Little Chalfield | Great Chalfield (Wessex Water) | On |
| Bristol Avon | Charlton Stream | Charlton | Crabb Mill | On |
| Bristol Avon | Gauze Brooke | Hullavington | Rodbourne | On |
| Bristol Avon | Horscombe Stream | Tucking Mill | No Gauge | Off |
| Bristol Avon | Luckington Brook | Luckington | Fossway | On |
| Bristol Avon | Rodbourne Brook | Lower Stanton St. Quinton | Startley | On |
| Bristol Avon | Semington Brook | Easterton | No Gauge | Off |
| Bristol Avon | Sherston Avon | Stanbridge | Fossway | On |
| Bristol Avon | Tetbury Avon | Tetbury | Brokenborough | On |
| Dorset Frome | South Winterbourne | Winterbourne Abbas | Winterbourne Steepleton | Off |

| | | | | |
|---|---|---|---|---|
| Dorset Frome | Watergates Stream | Watergates | No Gauge | On |
| Piddle | Devil's Brook | Dewlish | Dewlish Woodsdown Cross | On |
| Piddle | Piddle | Alton Mill | South House & Little Puddle | On |
| Piddle | Piddle | Morningwell | South House & Little Puddle | On |
| Piddle | Piddle | Briantspuddle | Briantspuddle | On |
| Dorset Stour | Crichel Stream | Long Crichel | No Gauge | On |
| Dorset Stour | Gussage Stream | Gussage All Saints | Bowerswain | On |
| Dorset Stour | Allen | Wyke Down | All Hallows | On |
| Dorset Stour | Pimperne Stream | Pimperne | No Gauge | Off |
| Hampshire Avon | Bourne | Porton | Salisbury Bourne | On |
| Hampshire Avon | Chitterne Brook | Codford Road | Codford | On |
| Hampshire Avon | Wylye | Brixton Deverill | Brixton Deverill & Heytesbury | On |
| Hampshire Avon | Wylye | Kingston Deverill | Brixton Deverill & Heytesbury | On |

# 9 Abstraction licences subject to restrict or cease

## 9.1 Abstraction licences subject to restrict or cease

Table 5: Number of licences at restrict or cease at the end of August.

| Catchment | Number of licences at restrict at the end of August | Number of licences at cease at the end of August |
|---|---|---|
| Bristol Avon | 0 | 2 |
| Dorset | 3 | 4 |
| Hampshire Avon | 4 | 6 |
| Somerset | 3 | 12 |

# 10 Glossary

## 10.1 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).

## 10.2 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.

## 10.3 Rainfall Areas Map

Figure 6.2 Rainfall catchments in Wessex.

# 11 Appendices

## 11.1 Rainfall table

| Hydrological area | Aug 2025 rainfall % of long term average 1991 to 2020 | Aug 2025 band | Jun 2025 to August cumulative band | Mar 2025 to August cumulative band | Sep 2024 to August cumulative band |
|---|---|---|---|---|---|
| Axe | 43 | Notably Low | Notably low | Exceptionally low | Normal |
| Brue | 46 | Notably Low | Notably low | Exceptionally low | Normal |
| Little Avon | 34 | Notably Low | Notably low | Exceptionally low | Normal |
| Lower Bristol Avon And Bristol Frome | 41 | Notably Low | Notably low | Exceptionally low | Normal |
| Lower Dorset Stour And River Crane | 73 | Normal | Below normal | Exceptionally low | Normal |
| Lower Hampshire Avon | 71 | Normal | Below normal | Exceptionally low | Normal |
| Mendips And River Chew | 45 | Notably Low | Notably low | Exceptionally low | Normal |
| Middle And Upper Bristol Avon | 42 | Notably Low | Notably low | Exceptionally low | Normal |

| | | | | | |
|---|---|---|---|---|---|
| Middle Dorset Stour | 70 | Normal | Below normal | Exceptionally low | Normal |
| Middle Hampshire Avon | 63 | Below Normal | Below normal | Exceptionally low | Normal |
| Parrett | 56 | Below Normal | Notably low | Exceptionally low | Normal |
| Poole Harbour And Purbeck | 80 | Normal | Below normal | Exceptionally low | Normal |
| River Bourne | 63 | Below Normal | Below normal | Exceptionally low | Normal |
| River Frome | 75 | Normal | Below normal | Exceptionally low | Normal |
| River Piddle | 71 | Normal | Below normal | Exceptionally low | Normal |
| Tone | 47 | Notably Low | Notably low | Exceptionally low | Normal |
| Upper Dorset Stour | 60 | Below Normal | Below normal | Exceptionally low | Normal |
| Upper Hampshire Avon | 56 | Below Normal | Below normal | Exceptionally low | Normal |
| West Dorset Streams | 75 | Normal | Below normal | Exceptionally low | Normal |

| | | | | | |
|---|---|---|---|---|---|
| West Somerset Streams | 39 | Notably Low | Notably low | Exceptionally low | Normal |
| Wylye And Nadder | 54 | Below Normal | Notably low | Exceptionally low | Normal |
| Yeo And Kenn | 38 | Notably Low | Notably low | Exceptionally low | Normal |

## 11.2 River flows table

| Site name | River | Catchment | Aug 2025 band | Jul 2025 band |
|---|---|---|---|---|
| Amesbury | Upper Hampshire Avon | Hampshire Avon | Notably low | Notably low |
| Ashford Mill | Isle | Parrett | Below normal | Below normal |
| Baggs Mill | Piddle | Piddle | Below normal | Below normal |
| Bathford | Bristol Avon | Bristol Avon | Below normal | Notably low |
| Beggearn Huish | Washford | Washford River | Notably low | Below normal |
| Bishops Hull | Tone | Tone | Notably low | Exceptionally low |
| Bridport East Bridge | Asker | Asker | Notably low | Below normal |
| Fenny Castle | Sheppey | Brue | Notably low | Notably low |
| East Mills Combined | Middle Hampshire Avon | Hampshire Avon | Notably low | Notably low |
| East Stoke Combined | Dorset Frome | Dorset Frome | Below normal | Notably low |
| Frenchay | Bristol Frome | Bristol Frome | Exceptionally low | Exceptionally low |

| | | | | |
|---|---|---|---|---|
| Great Somerford | Bristol Avon | Bristol Avon | Notably low | Notably low |
| Hammoon | Middle Stour | Dorset Stour | Notably low | Notably low |
| Knapp Mill | Lower Hampshire Avon | Hampshire Avon | No data | No data |
| Lovington | Upper Brue | Brue | Notably low | Below normal |
| Pen Mill | Yeo | Parrett | Below normal | Notably low |
| South Newton | River Wylye | Hampshire Avon | Exceptionally low | Notably low |
| Sydling St Nicholas | Sydling Water | Dorset Frome | Notably low | Below normal |
| Tellisford | Somerset Frome | Bristol Avon | Notably low | Exceptionally low |
| Throop | Lower Stour | Dorset Stour | Notably low | Exceptionally low |

## 11.3 Groundwater table

| Site name | Aquifer | End of Aug 2025 band | End of Jul 2025 band |
|---|---|---|---|
| Allington No2 | Upper Bristol Avon Great Oolite | Below normal | Below normal |
| Chitterne Down | Upper Hampshire Avon Chalk | Notably low | Notably low |
| Delcombe | Dorset Frome And Piddle Chalk/upper Greensand | Notably low | Notably low |
| Didmarton 1 | Upper Bristol Avon Inferior Oolite | Notably low | Below normal |
| Kingston Russell Road | Dorset Frome Chalk | Exceptionally low | Notably low |
| Overcompton | Somerset Yeo Bridport Sand | Notably low | Below normal |
| Tilshead | Upper Hampshire Avon Chalk | Exceptionally low | Notably low |
| Woodyates | Dorset Stour Chalk | Notably low | Notably low |
| Oakley Industrial Estate | Upper Hampshire Avon Chalk | Exceptionally low | Exceptionally low |

| | | | |
|---|---|---|---|
| Chipley | Somerset Tone Otter Sandstone | Exceptionally low | Exceptionally low |
| Wrington | North Somerset Carboniferous Limestone | Exceptionally low | Notably low |