Monthly water situation report: Wessex Area

1 Summary - September 2025

An average of 95mm rain fell across Wessex in September, 142% of the long-term average (LTA). Most of the month's rain occurred within the first two weeks. Soil moisture deficit (SMD) initially decreased in September to close to the LTA, before rising again due to the drier period towards the end of the month. Monthly mean flows recorded across Wessex in September were largely normal. Daily mean flows peaked around 15 September following a period of rainfall across Wessex. The majority of groundwater sites, including most sites monitoring the chalk aquifer, reported below normal or notably low levels at the end of September. The exceptions were Tilshead and Kingston Russell Road which reported exceptionally low levels. At the end of September, reservoirs were at 36% and 37% capacity for Wessex Water and Bristol Water, respectively.

1.1 Rainfall

An average of 95mm fell across Wessex in September (142% of the LTA). Most rainfall occurred between 1 to 17 September (96% of the month's rain), with the remainder of the month remaining relatively dry. The highest monthly rainfall was recorded at Cromhall in the Bristol Avon (224% of LTA). The lowest monthly rainfall was recorded at Bruton Dam in the Brue (101% of LTA).

All hydrological areas in Wessex received normal or above normal rainfall in September. Over the past three months, hydrological areas in Wessex received either below normal or normal rainfall. Over the past 6 months, four areas in Wessex including the Brue have received exceptionally low rainfall, nine areas including the Hampshire Avon have received notably low rainfall. The West Dorset Streams received normal rainfall over the past 6 months. Over the past 12 months (which constitutes the water year), most areas in Wessex received below normal rainfall. Rainfall over the last 7 months was 63% of LTA making it the fifth driest for this period on record.

1.2 Soil moisture

SMD in Wessex initially decreased at the beginning of September to the LTA. Following a period of dry weather, SMD increased again by the end of the month. Across most hydrological areas in Wessex, SMD was in the range of 71mm to 100mm at the end of September. SMD was between -5mm to 5mm difference to the LTA in south Wessex, the majority of north Wessex SMD was 6mm to 25mm greater than the LTA .

1.3 River flows

In September, most flow sites in Wessex recorded normal monthly mean flows. There were 3 sites in south Wessex within the chalk catchments which recorded below normal monthly mean flows in September. These are all supported by the chalk aquifer and reflects that groundwater is recorded between exceptionally and notably low. The Bristol Frome at Frenchay recorded as above normal monthly mean flows. Daily mean river flows responded to rainfall in the first 2 weeks of September. For the majority of Wessex, daily mean river flows began to reduce from 15 September due to decreased rainfall.

1.4 Groundwater levels

Following 5 consecutive dry months between March and August, the majority of groundwater sites in Wessex, including most sites monitoring the Chalk aquifer, ended September reporting either below normal or notably low levels. Tilshead and Kingstone Russell Road (both monitoring the Chalk) were the only sites to report exceptionally low levels at the end of the month. For the majority of monitoring sites in Wessex, groundwater levels continued to decrease throughout the month. Groundwater levels increased at quicker responding sites Wrington (monitoring the Carboniferous Limestone) and Didmarton (monitoring the Inferior Oolite) during September.

1.5 Reservoir stocks

The majority of Wessex Water and Bristol Water reservoir levels recorded an initial increase in capacity in September, however by the end of September reservoir levels began to decrease. The exception was Clatworthy reservoir where capacity continued to decrease throughout September. The combined levels at the end of the month for Wessex Water were approximately 36% capacity while for Bristol Water, combined levels were approximately 37% which are lower than levels recorded this time last year and in 1995.

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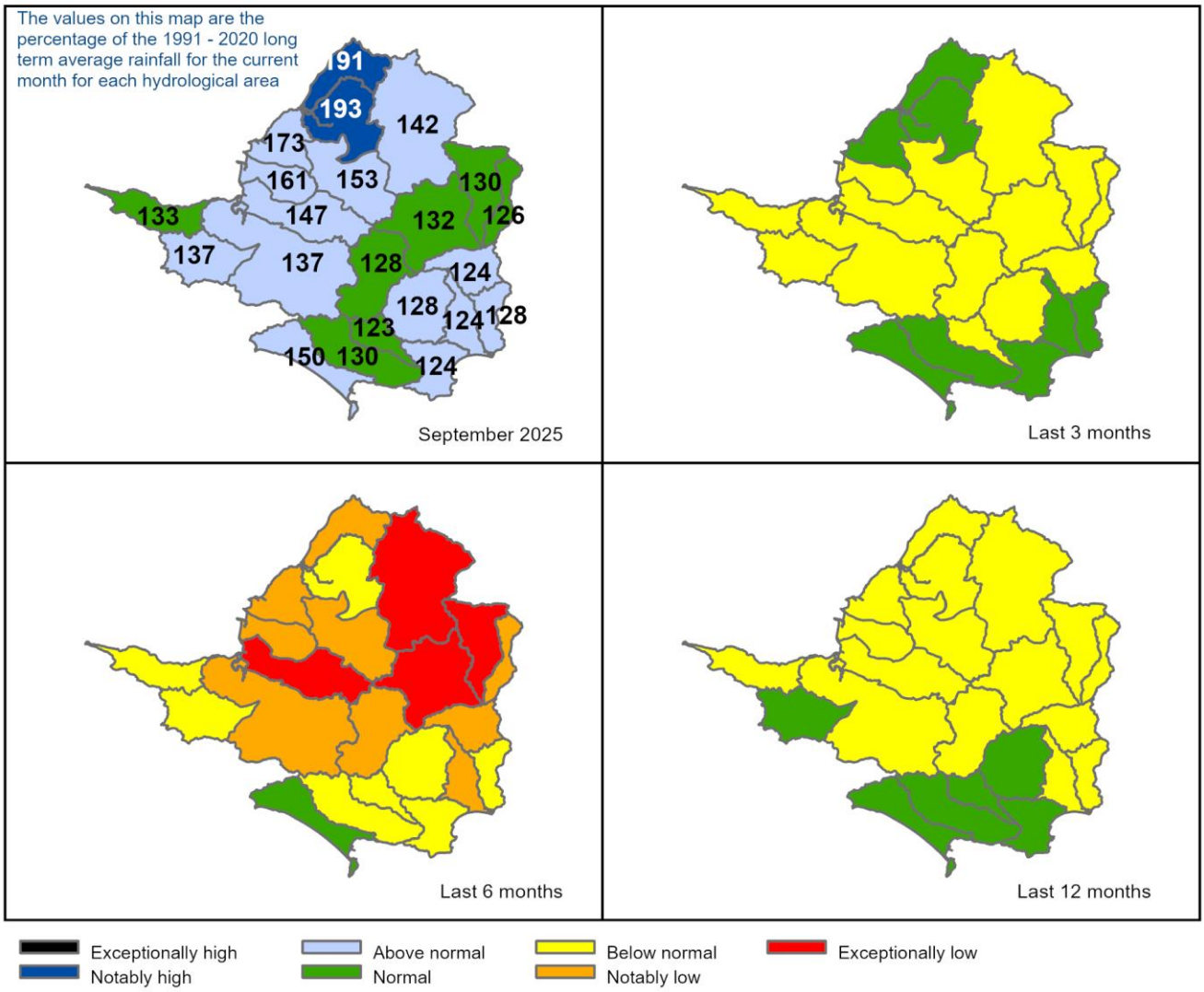
2 Rainfall

2.1 Rainfall map

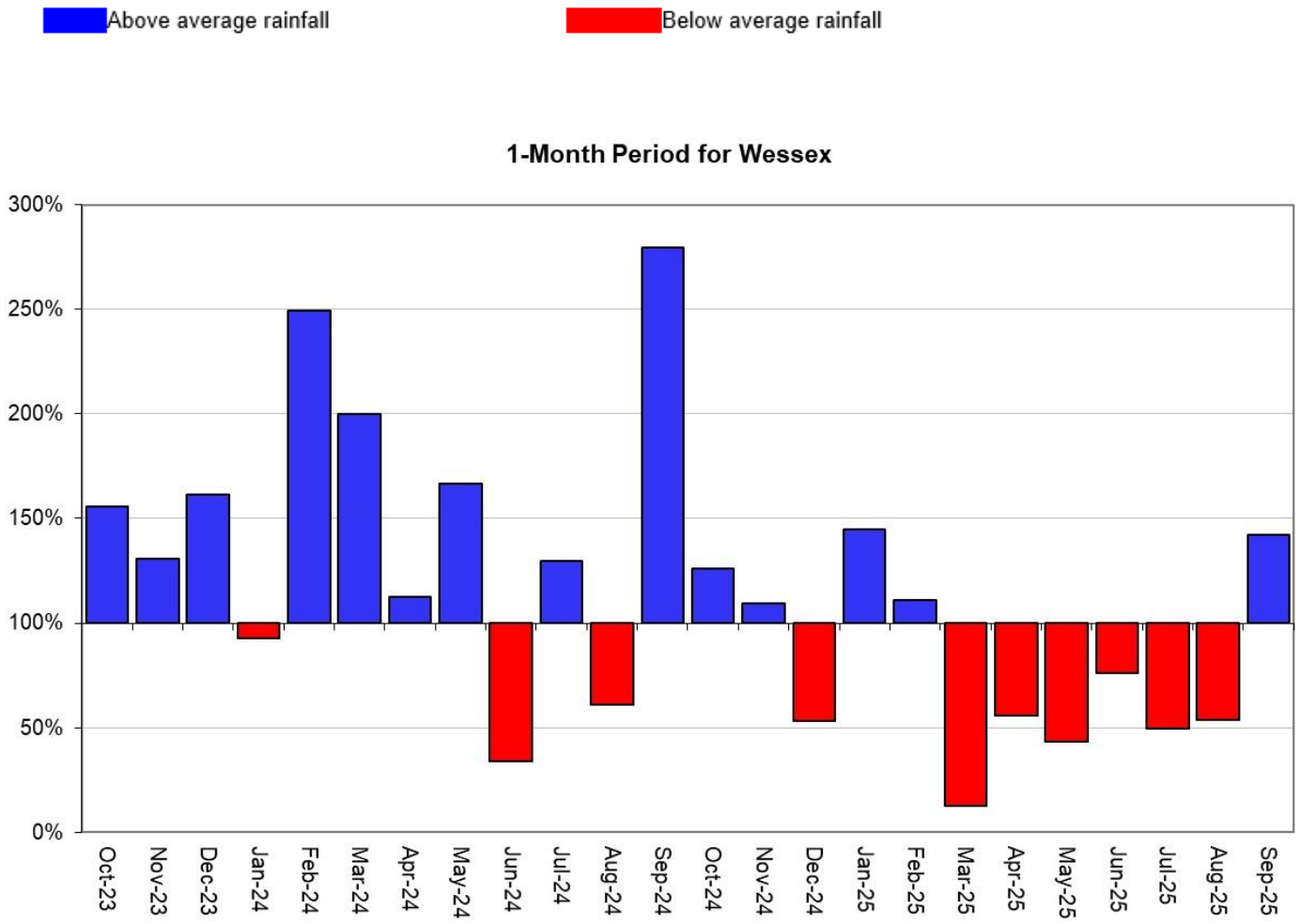
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 30 September 2025), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals between 1991 and 2020. Table available in the appendices with detailed information.



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, AC0000807064, 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.

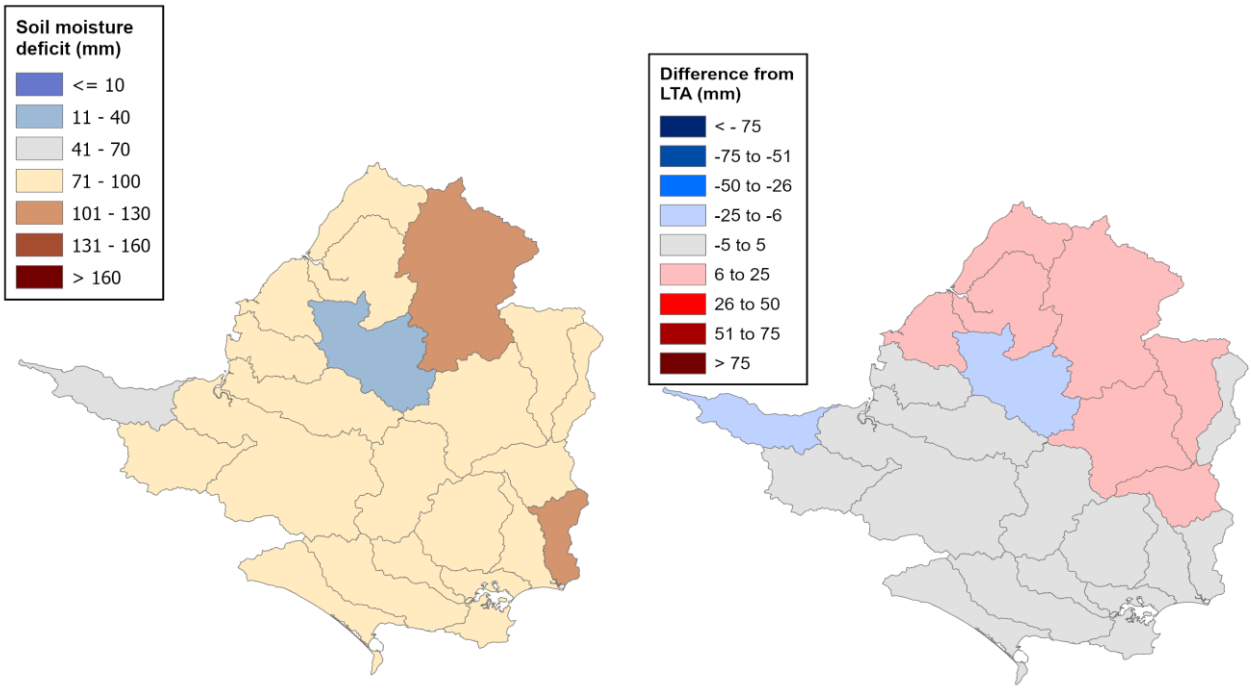


Rainfall data for October 2023 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2025). Rainfall data prior to October 2023, extracted from Met Office HadUK 1km gridded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

3 Soil moisture deficit

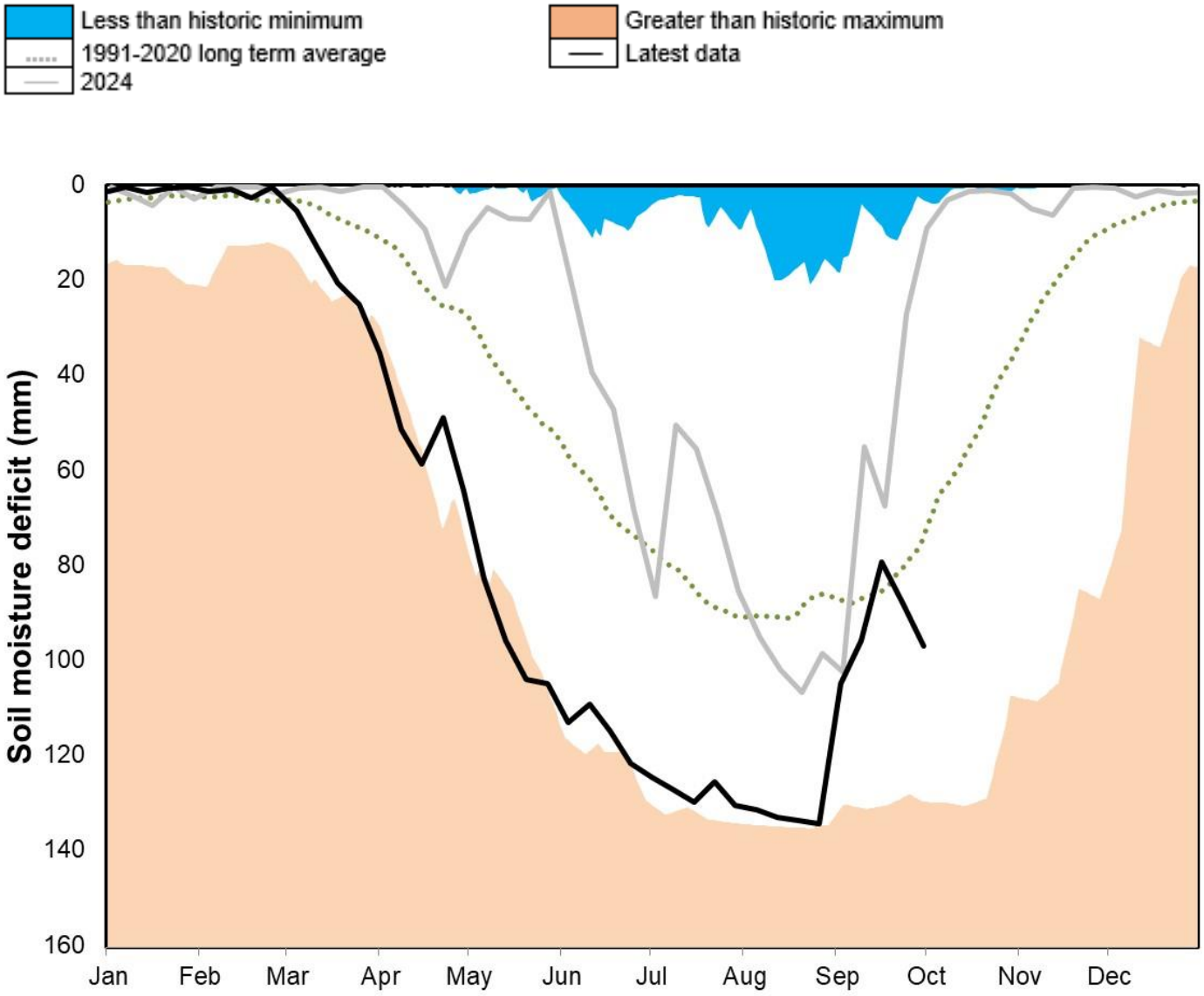
3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending 30 September 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.



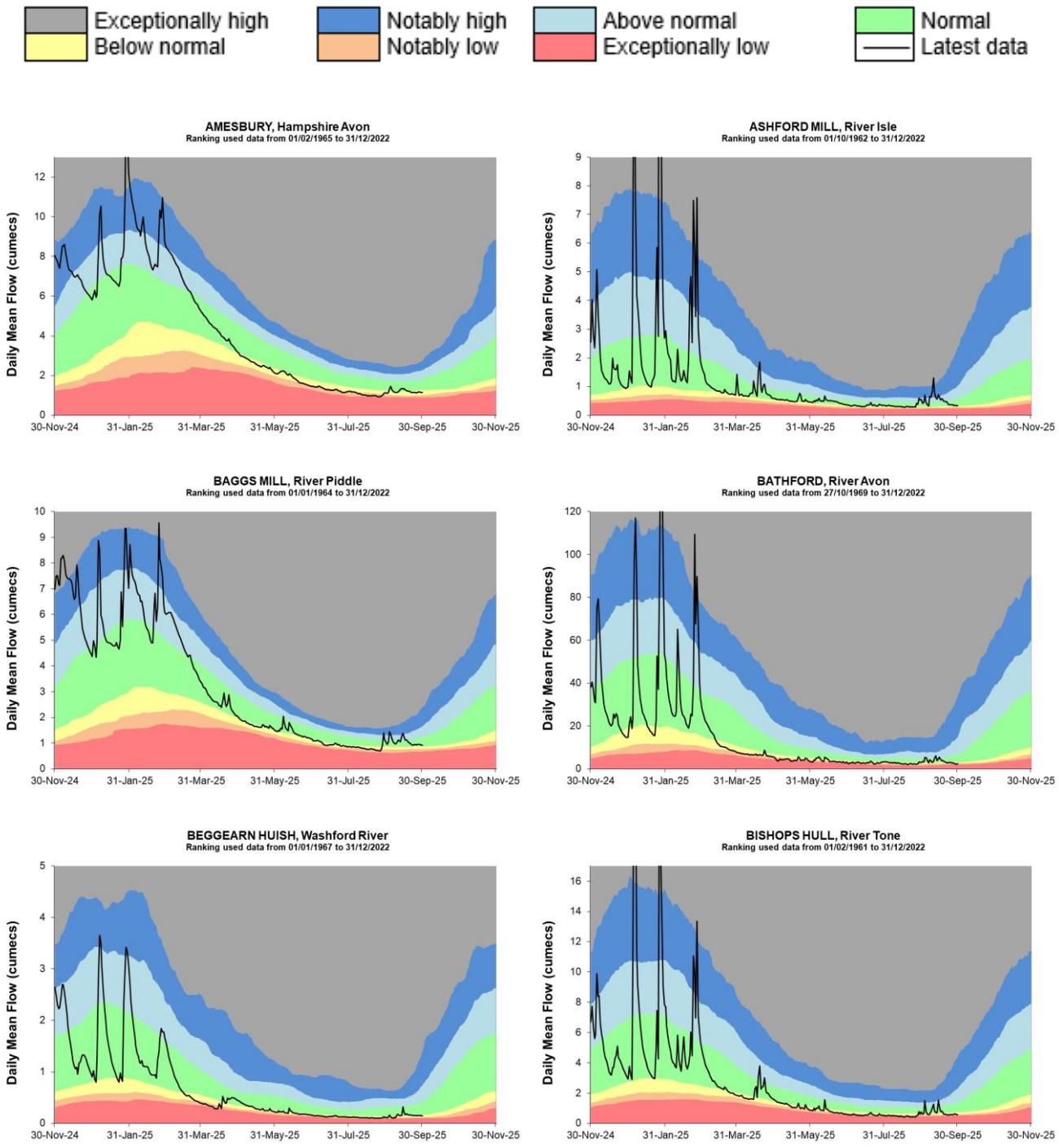
4 River flows

4.1 River flows map

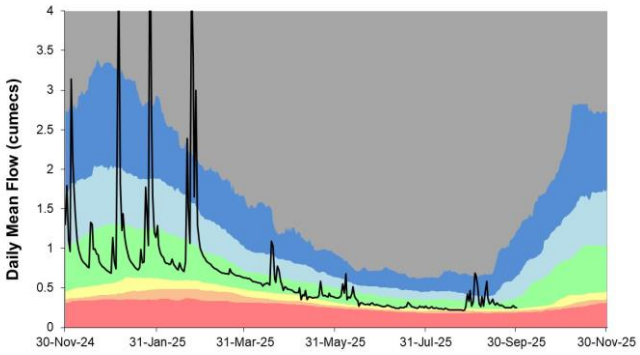
Figure 4.1: Monthly mean river flow for indicator sites for September 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic September monthly means Table available in the appendices with detailed information.

4.2 River flow charts

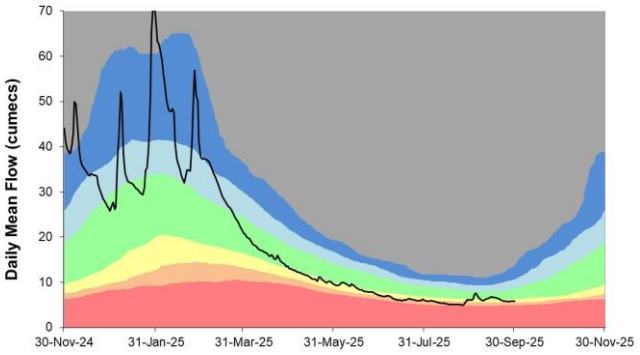
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows.



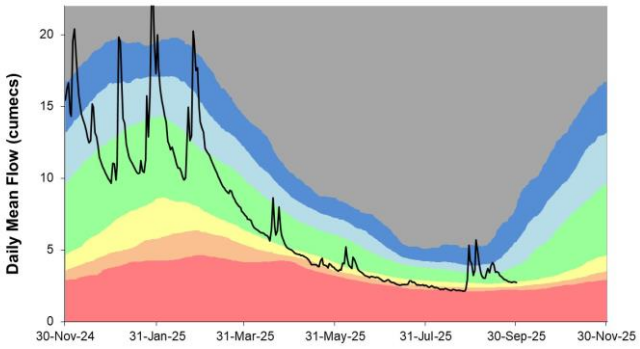
BRIDPORT EAST BRIDGE, River Asker
Ranking used data from 01/03/1996 to 31/12/2022



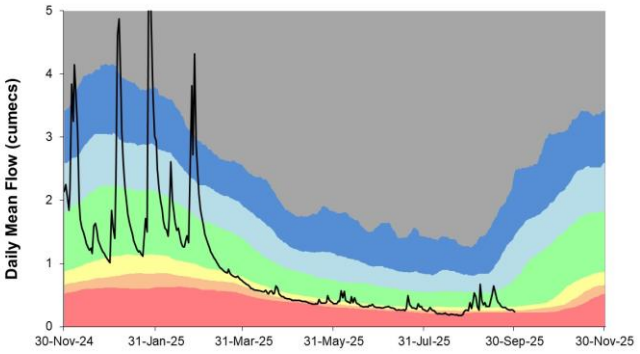
EAST MILLS COMBINED, Hampshire Avon
Ranking used data from 01/11/1965 to 31/12/2022



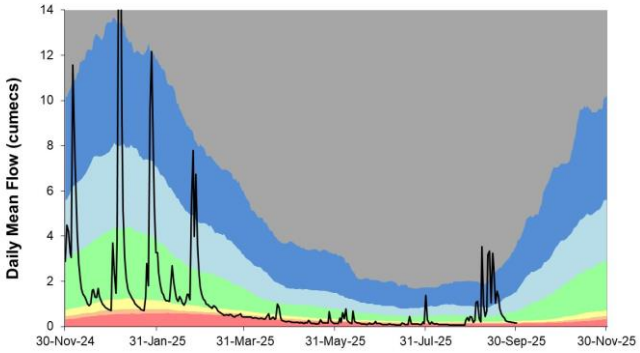
EAST STOKE COMBINED, Dorset Frome
Ranking used data from 01/10/1965 to 31/12/2022



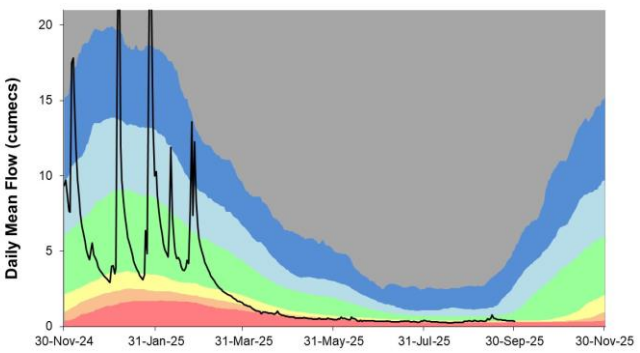
FENNY CASTLE , River Sheppey
Ranking used data from 01/01/1964 to 31/12/2022



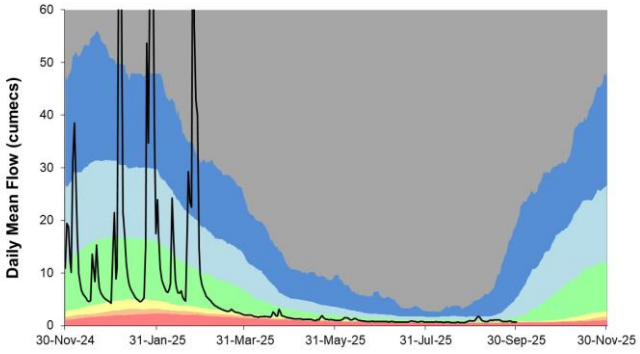
FRENCHAY, Bristol Frome
Ranking used data from 01/09/1961 to 31/12/2022



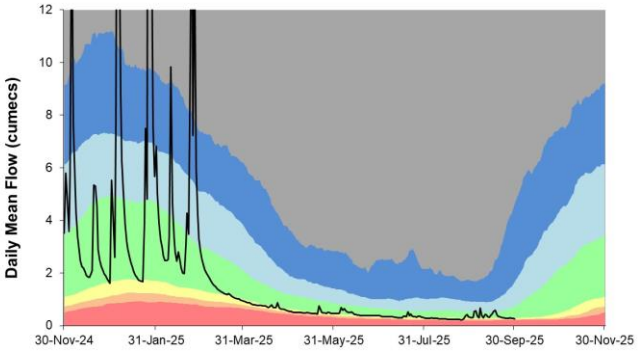
GREAT SOMERFORD, River Avon
Ranking used data from 16/12/1963 to 31/12/2022

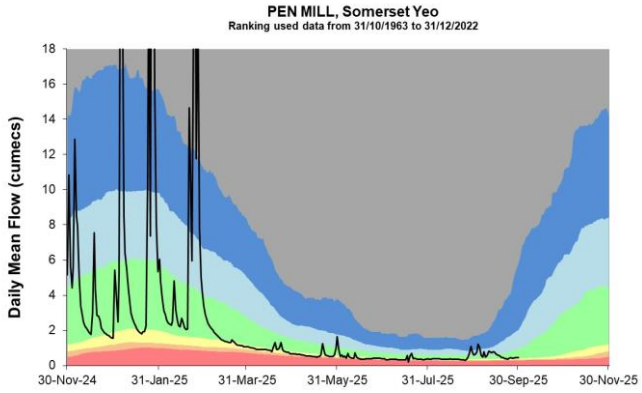


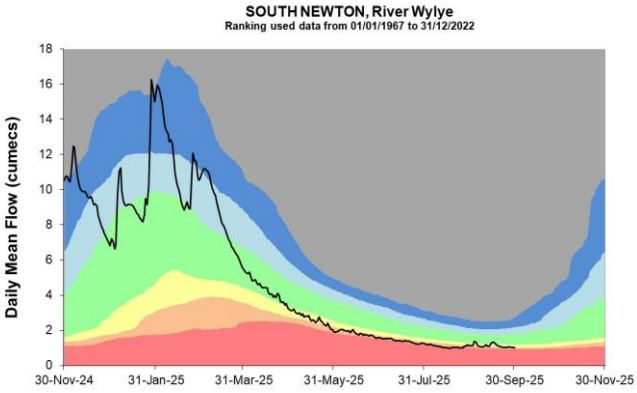
HAMMOON, River Stour
Ranking used data from 01/03/1968 to 31/12/2022

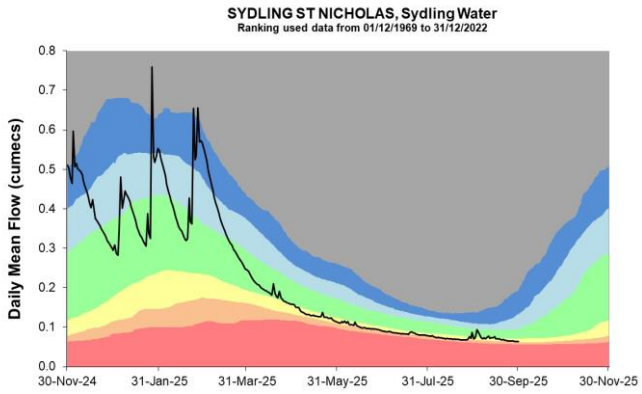


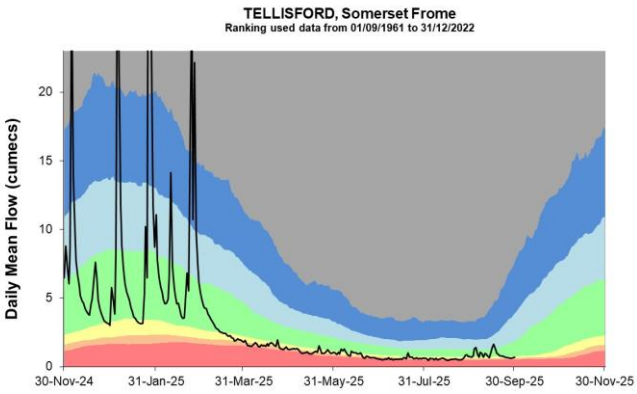
LOVINGTON, River Brue
Ranking used data from 01/10/1964 to 31/12/2022

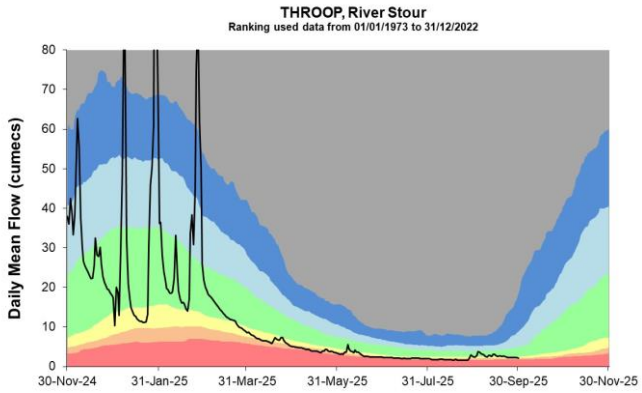










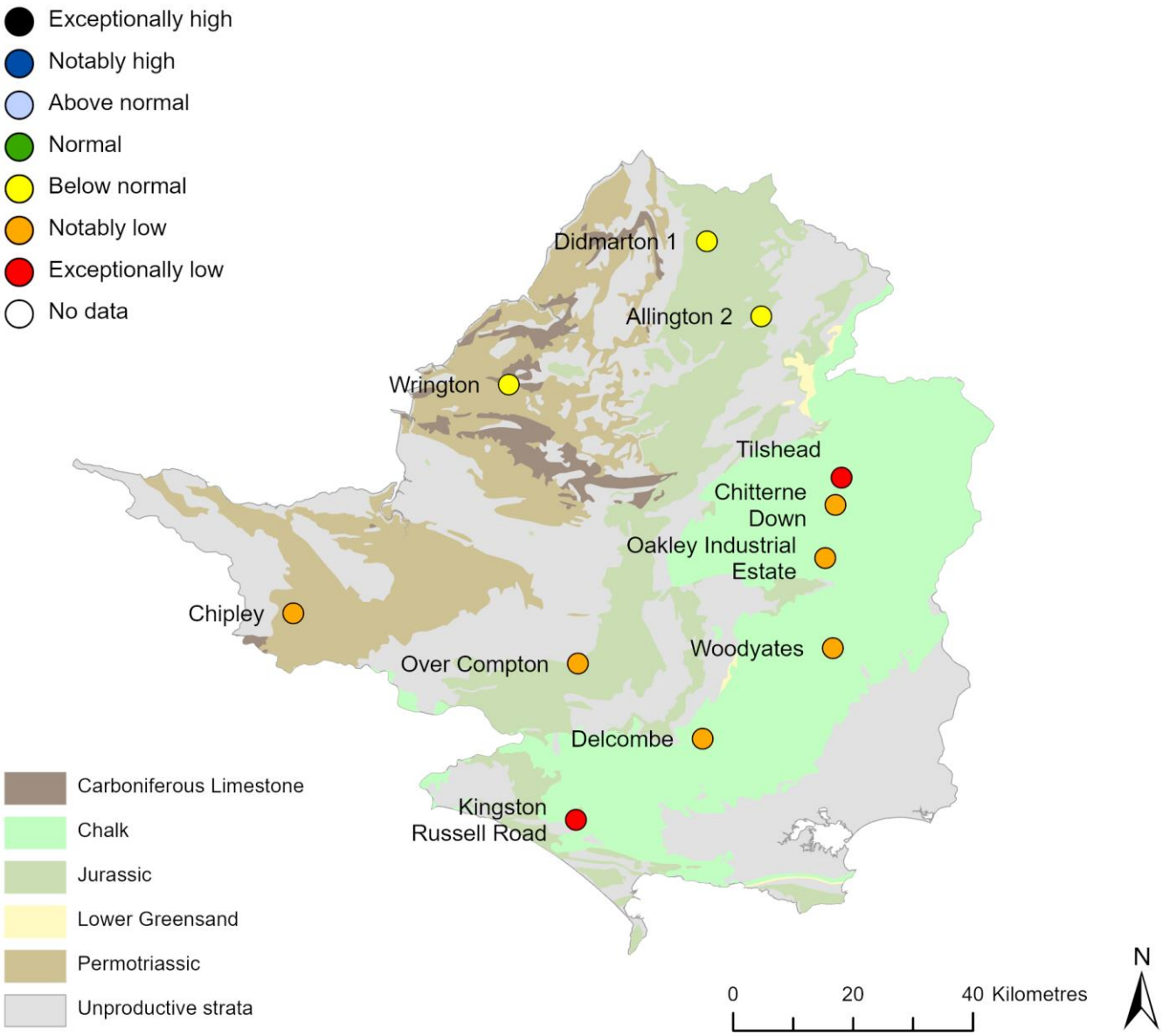


Source: Environment Agency, 2025. The Dorset Stour at Throop should be treated with caution due to data issues.

5 Groundwater levels

5.1 Groundwater levels map

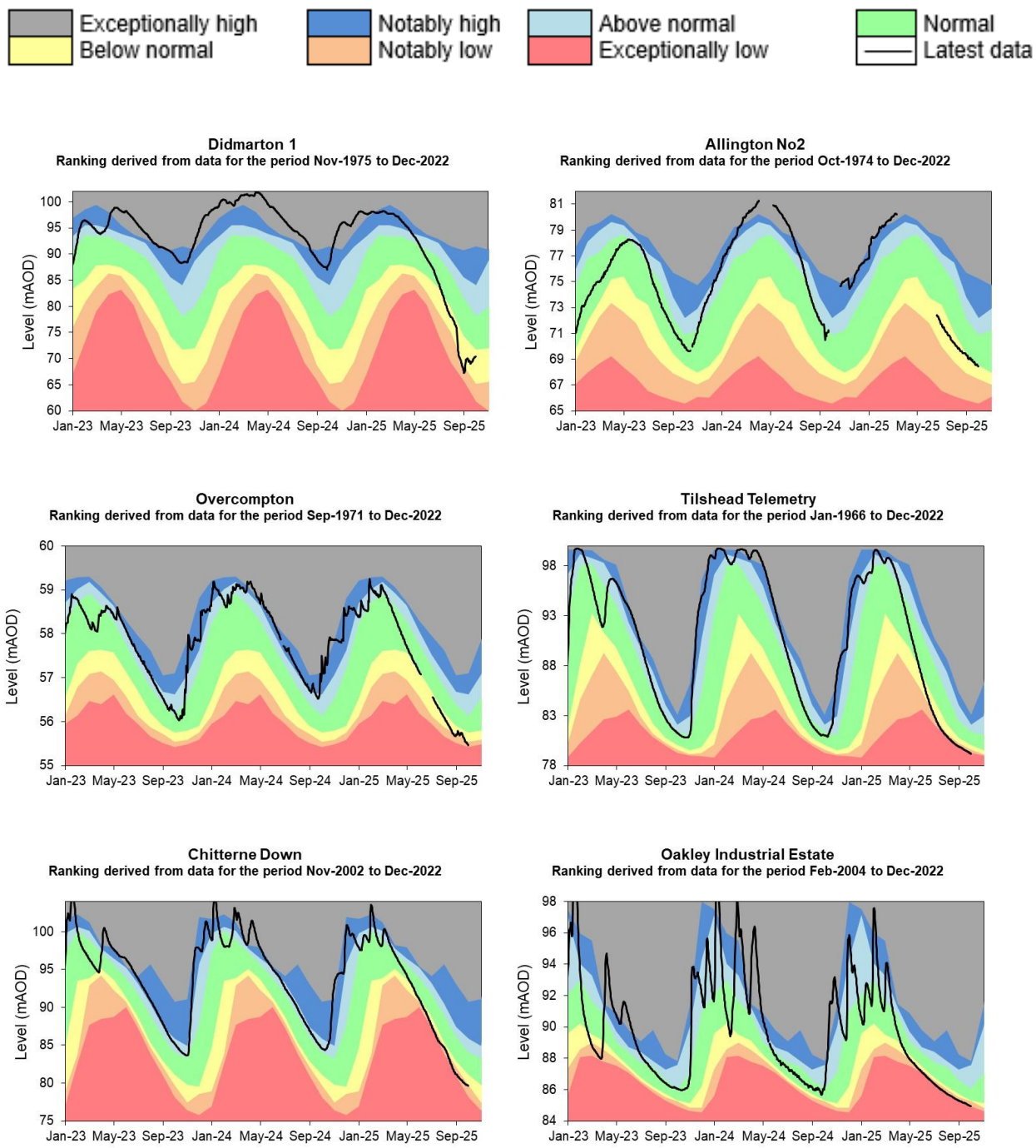
Figure 5.1: Groundwater levels for indicator sites at the end of September 2025, classed relative to an analysis of respective historic September levels. Table available in the appendices with detailed information.

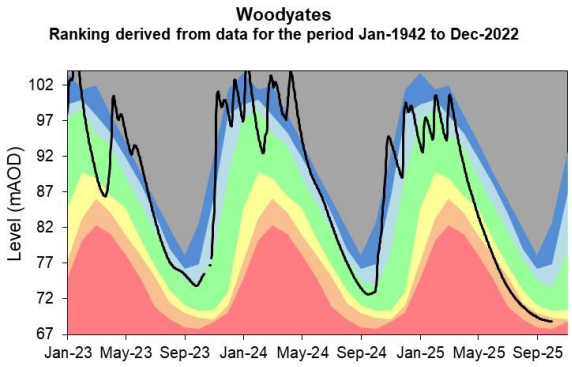


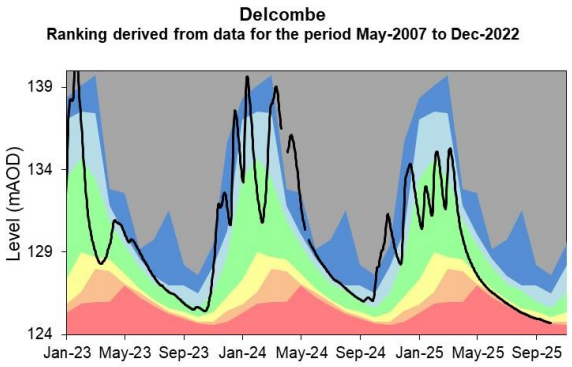
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2025.

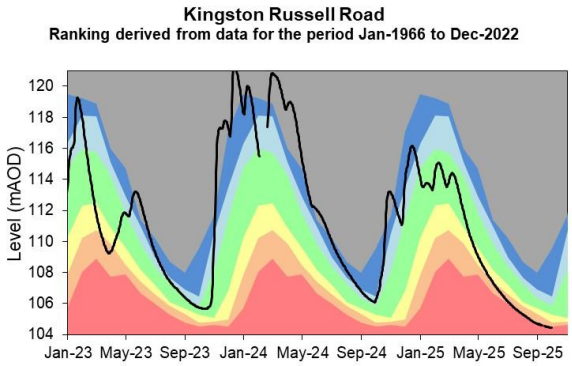
5.2 Groundwater level charts

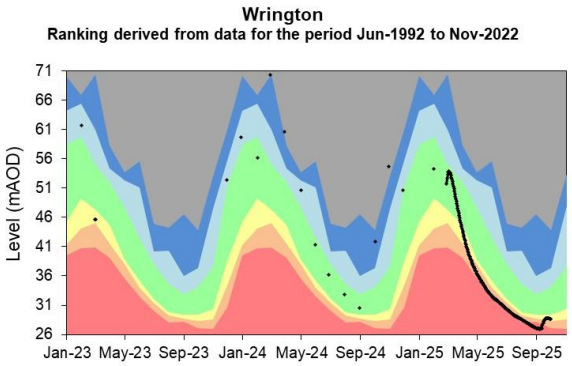
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 34 months compared to an analysis of historic end of month levels.

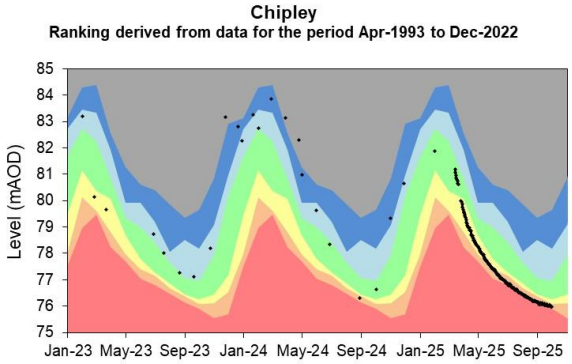








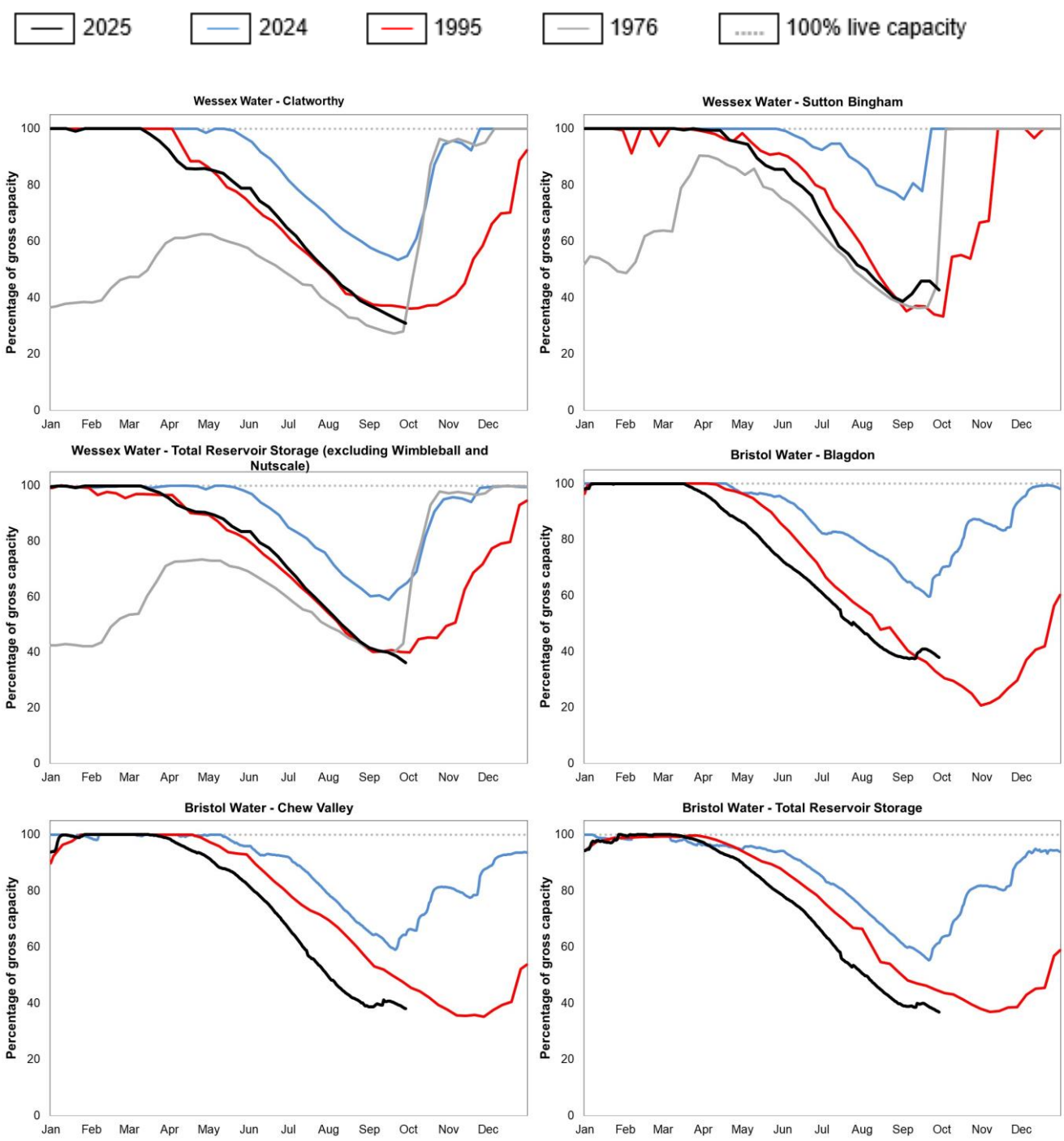




Source: Environment Agency, 2025.

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 September

Area	Number of fluvial flood alerts in September	Number of coastal flood alerts in September	Number of groundwater flood alerts in September
North Wessex	0	8	0
South Wessex	0	8	0

7.2 Flood warnings

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

Area	Number of fluvial flood warnings in September	Number of coastal flood warnings in September	Number of groundwater flood warnings in September
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 September

Area	Number of fluvial severe flood warnings in September	Number of coastal severe flood warnings in September	Number of groundwater severe flood warnings in September
North Wessex	0	0	0
South Wessex	0	0	0

8 Stream support

8.1 Sites providing stream support

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

Catchment	River	Stream support site	Gauging station	End of September 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	Off
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 September.

Catchment	Number of licences at restrict at the end of September	Number of licences at cease at the end of September
Bristol Avon	1	0
Dorset	3	5
Hampshire Avon	1	6
Somerset	1	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	Sep 2025 rainfall % of long term average 1991 to 2020	Sep 2025 band	Jul 2025 to September cumulative band	Apr 2025 to September cumulative band	Oct 2024 to September cumulative band
Axe	161	Above Normal	Below normal	Notably low	Below normal
Brue	147	Above Normal	Below normal	Exceptionally low	Below normal
Little Avon	192	Notably High	Normal	Notably low	Below normal
Lower Bristol Avon And Bristol Frome	193	Notably High	Normal	Below normal	Below normal
Lower Dorset Stour And River Crane	124	Above Normal	Normal	Notably low	Below normal
Lower Hampshire Avon	128	Above Normal	Normal	Below normal	Below normal
Mendips And River Chew	153	Above Normal	Below normal	Notably low	Below normal
Middle And Upper Bristol Avon	142	Above Normal	Below normal	Exceptionally low	Below normal

Middle Dorset Stour	128	Above Normal	Below normal	Below normal	Normal
Middle Hampshire Avon	124	Above Normal	Below normal	Notably low	Below normal
Parrett	137	Above Normal	Below normal	Notably low	Below normal
Poole Harbour And Purbeck	125	Above Normal	Normal	Below normal	Normal
River Bourne	127	Normal	Below normal	Notably low	Below normal
River Frome	130	Normal	Normal	Below normal	Normal
River Piddle	123	Normal	Below normal	Below normal	Normal
Tone	137	Above Normal	Below normal	Below normal	Normal
Upper Dorset Stour	128	Normal	Below normal	Notably low	Below normal
Upper Hampshire Avon	130	Normal	Below normal	Exceptionally low	Below normal
West Dorset Streams	150	Above Normal	Normal	Normal	Normal
West Somerset Streams	133	Normal	Below normal	Below normal	Below normal

Wylye And Nadder	132	Normal	Below normal	Exceptionally low	Below normal
Yeo And Kenn	173	Above Normal	Normal	Notably low	Below normal

11.2 River flows table

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

Hammoon	Middle Stour	Dorset Stour	Normal	Notably low
Knapp Mill	Lower Hampshire Avon	Hampshire Avon	Exceptionally low	Notably low
Lovington	Upper Brue	Brue	Normal	Notably low
Pen Mill	Yeo	Parrett	Normal	Below normal
South Newton	River Wylye	Hampshire Avon	Below normal	Exceptionally low
Sydling St Nicholas	Sydling Water	Dorset Frome	Below normal	Notably low
Tellisford	Somerset Frome	Bristol Avon	Normal	Notably low
Throop	Lower Stour	Dorset Stour	Normal	Notably low

11.3 Groundwater table

Site name	Aquifer	End of Sep 2025 band	End of Aug 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	Below normal	Notably low
Kingston Russell Road	Dorset Frome Chalk	Exceptionally low	Exceptionally low
Overcompton	Somerset Yeo Bridport Sand	Notably low	Notably low
Tilshead	Upper Hampshire Avon Chalk	Exceptionally low	Exceptionally low
Woodyates	Dorset Stour Chalk	Notably low	Notably low
Oakley Industrial Estate	Upper Hampshire Avon Chalk	Notably low	Exceptionally low

Chipley	Somerset Tone Otter Sandstone	Notably low	Exceptionally low
Wrington	North Somerset Carboniferous Limestone	Below normal	Exceptionally low