

Monthly water situation report: Wessex Area

1 Summary - June 2025

June was a fourth consecutive dry month in Wessex. An average of 46mm, 76% of the long term average (LTA) fell across Wessex, largely during the first couple of weeks. When considered alongside the preceding 3 months, this has been the fourth driest 4 month period (March to June) since records began in 1871. Soil moisture deficit (SMD) initially fell in June due to rain between 1 and 14 June. SMD then rose during the drier latter half of the month. Monthly mean flows recorded across Wessex were largely below normal or notably low. The majority of groundwater sites, including most sites monitoring the Chalk aquifer, reported below normal or notably low levels at the end of June. The only exceptions were Didmarton monitoring the inferior Oolite which recorded normal levels and Oakley Industrial Estate monitoring the Chalk which recorded exceptionally low levels. Overall reservoir levels for Wessex Water were approximately 71% capacity at the end of June while for Bristol Water, levels were approximately 66% capacity at the end of the month.

1.1 Rainfall

An average of 46mm of rain fell across Wessex in June (76% of the LTA). This is the fourth consecutive relatively dry month, resulting in the driest 4 month period (March to June) since 1976 and the fourth driest 4 month period since records began in 1871. For the Little Avon hydrological area in the north of Wessex, this was the driest 4 month period (March to June) on record. Approximately 90% of rain during June fell during the first couple of weeks between 1 and 14 June. The lowest relative rainfall was recorded in the Parrett (62% of the LTA). The highest relative rainfall was recorded in the West Somerset Streams to the north west and Poole Harbour and Purbeck to the south east of Wessex (98% of the LTA). In June, all hydrological areas in Wessex received normal rainfall. No hydrological area in Wessex received above the LTA for rainfall in June.

Over the past 3 months, most hydrological areas have received between notably and exceptionally low rainfall. The exception areas in west Dorset and west Somerset largely received below normal rainfall. The West Somerset Streams was the only hydrological area to receive normal rainfall over the past 3 months. Over the past 6 months, most hydrological areas to the north of Wessex received below normal rainfall while most areas to the south received normal rainfall. Over the past 12 months, most hydrological areas in Wessex received normal rainfall while a few areas to the south and east received above normal rainfall.

1.2 Soil moisture

SMD in Wessex initially decreased due to rainfall in the first couple of weeks of June. Over the following drier weeks, SMD increased until the end of the month. The rain early in June kept SMD below the historic maximum throughout June. Across most hydrological areas in Wessex, SMD was in the range of 101mm to 130mm at the end of June. There were a couple of exceptions to the north west which recorded SMD between 71mm and 100mm and several exceptions to the south east which recorded SMD between 131mm and 160mm. For most of the north of Wessex, SMD at the end of June was between 26mm to 50mm greater than the LTA. For most areas in the south of Wessex, SMD was between 51 to 75mm greater than the LTA.

1.3 River flows

In June, the majority of flow sites in Wessex reported either below normal or notably low monthly mean flows. The exceptions were 3 sites to the south and west of Wessex which reported normal monthly mean flows and the Bristol Frome at Frenchay which reported exceptionally low flows and its lowest June monthly mean flow on record. Most sites monitoring flows on or downstream of the Chalk aquifer recorded below normal monthly mean flows. The exceptions were the Wylfe at South Newton and the Dorset Stour at Throop which both recorded notably low monthly mean flows and the Piddle at Baggs Mill which recorded normal flows. Relative flows were slightly higher across most sites in the south of Wessex as they were supported by baseflow from the Chalk aquifer. For most flow sites in Wessex, daily mean flows increased marginally early in the month in response to the rain between 1 and 14 June and then fell for the remaining weeks.

1.4 Groundwater levels

Following 4 consecutive dry months, the majority of groundwater sites in Wessex, including most sites monitoring the Chalk aquifer, ended June reporting either below normal or notably low levels. Oakley Industrial Estate (monitoring the Chalk) was the only site to report exceptionally low levels at the end of June. Didmarton (monitoring the inferior Oolite) in the north of Wessex was the only site to report normal levels at the end of the month. For all monitoring sites, groundwater levels decreased throughout most of June.

1.5 Reservoir stocks

Both Wessex Water and Bristol Water reservoir levels continued to decrease throughout June. The combined levels at the end of June for Wessex Water were approximately 71% capacity while for Bristol Water, combined levels were approximately 66% capacity. For both water companies this is notably lower than reservoir levels recorded this time last year. For Wessex Water, reservoir levels at the end of June are slightly higher than this time of year in 1995 while for Bristol Water, levels are lower than at the end of June 1995.

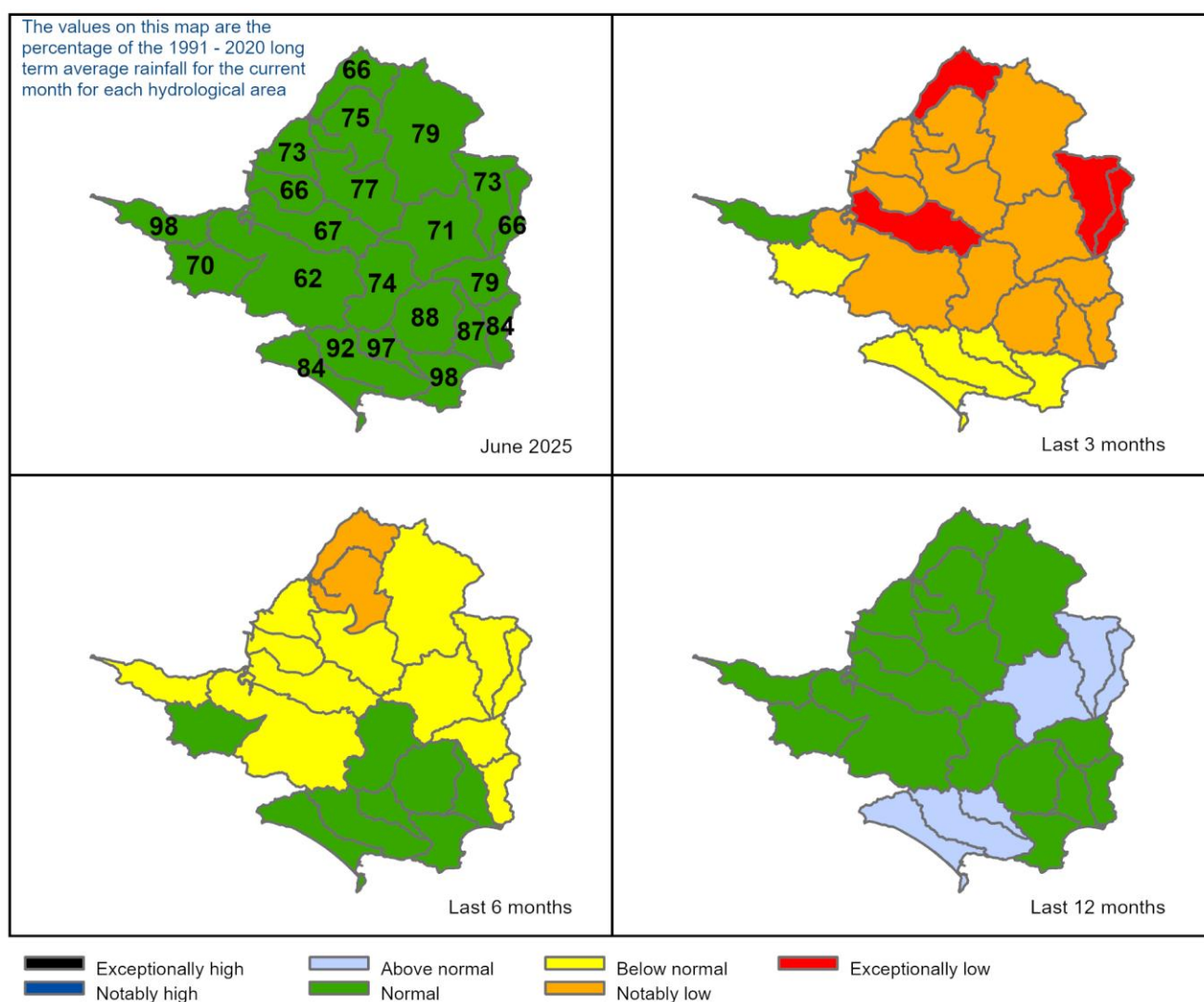
Author: Wessex Hydrology, hydrology.wessex@environment-agency.gov.uk

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2 Rainfall

2.1 Rainfall map

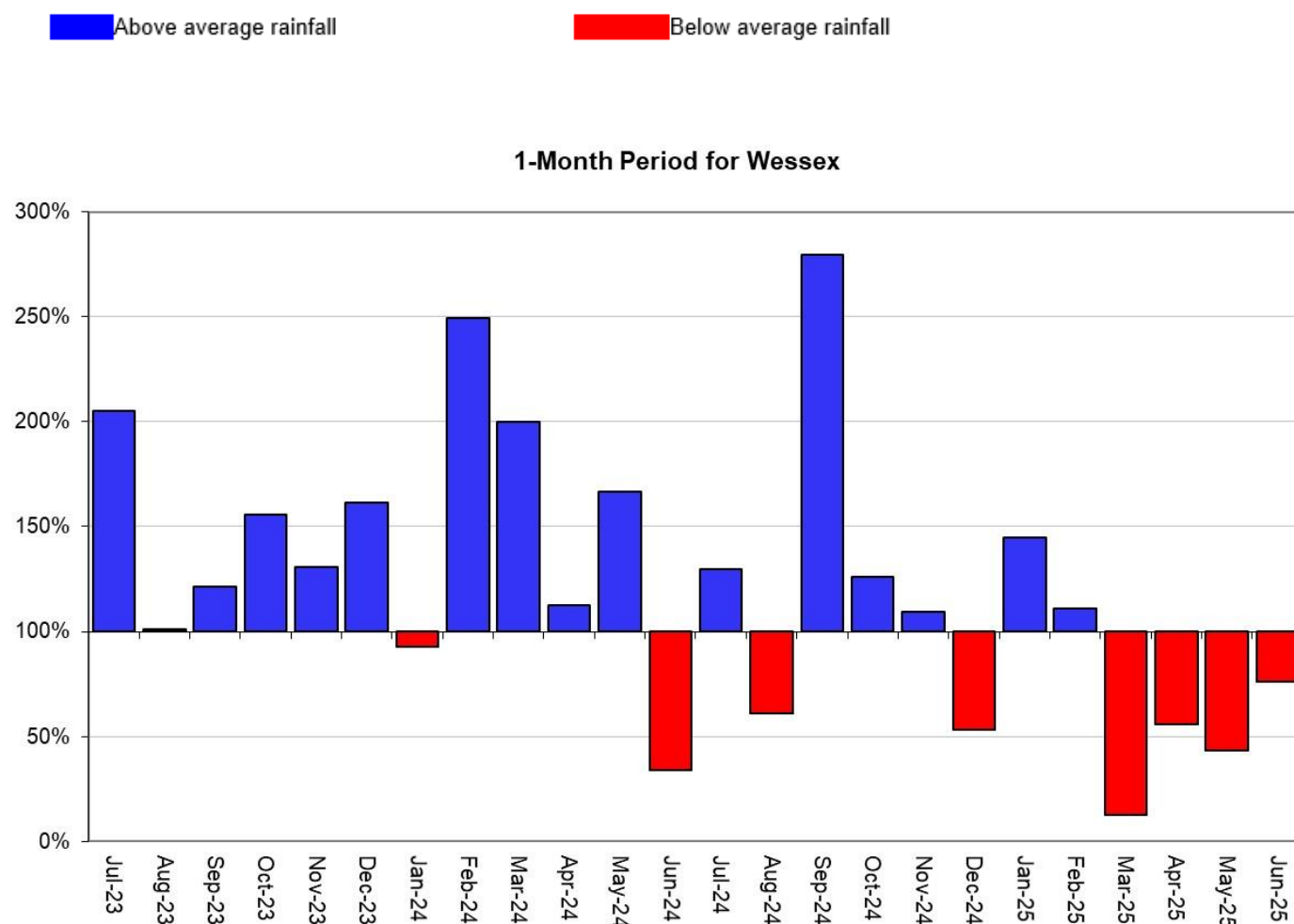
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 30 June 2025), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals between 1991 and 2020. Table available in the appendices with detailed information.



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.

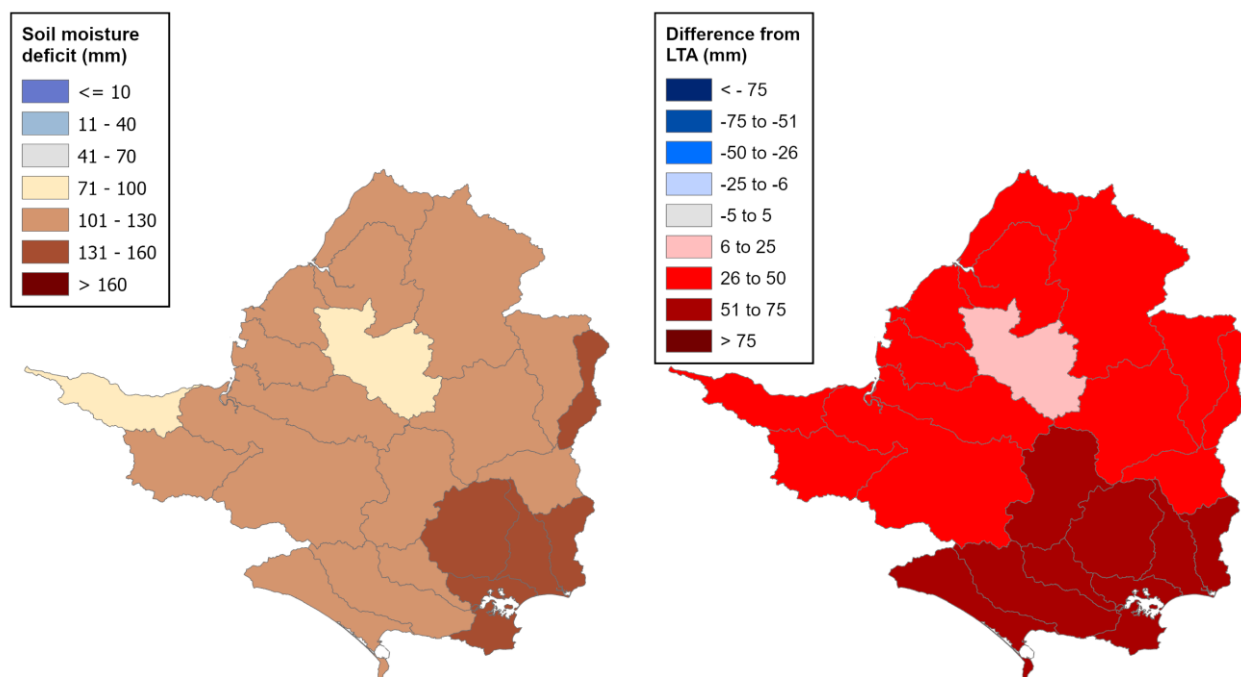


Rainfall data for October 2023 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2025). Rainfall data prior to October 2023, extracted from Met Office HadUK 1km gridded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

3 Soil moisture deficit

3.1 Soil moisture deficit map

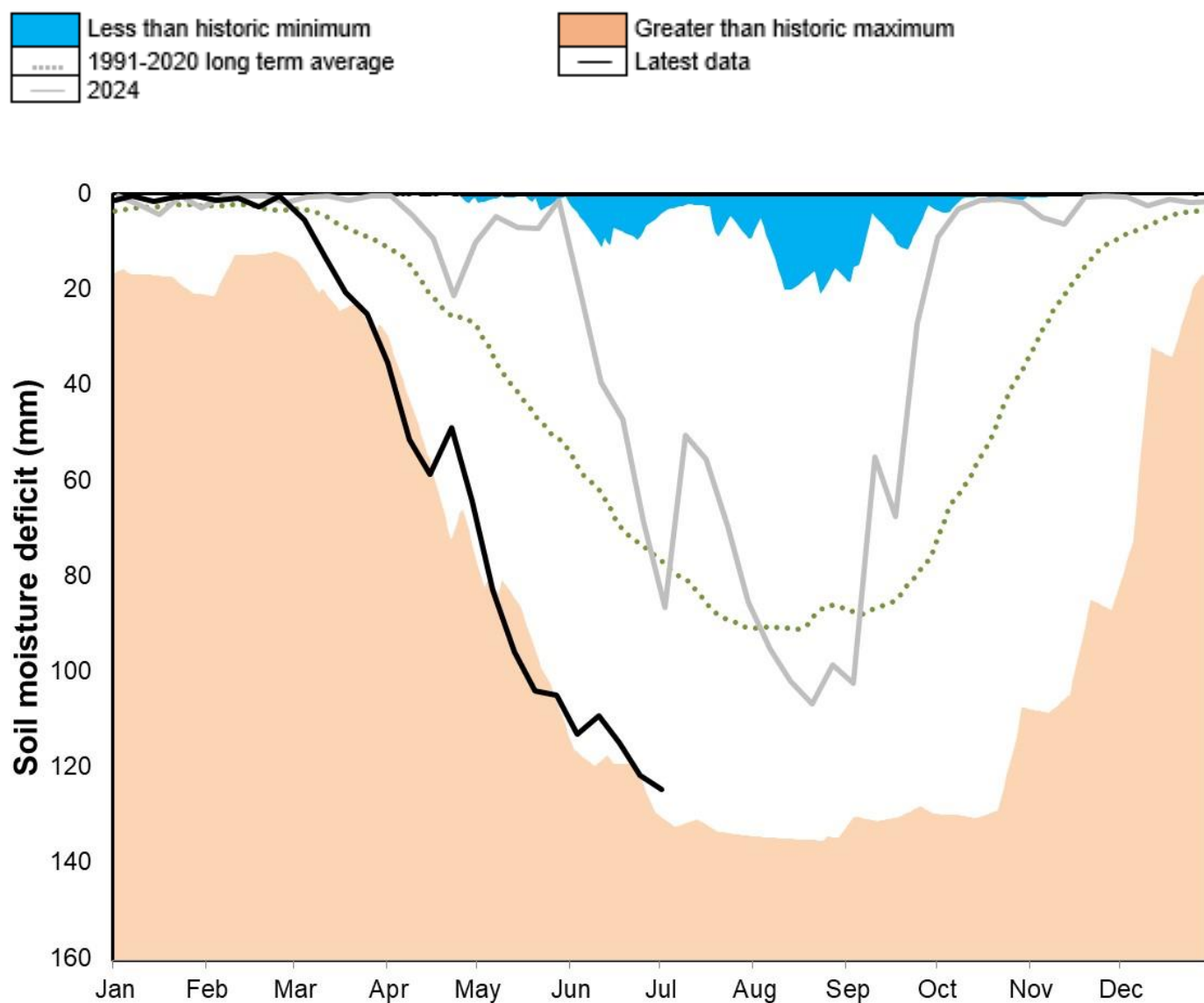
Figure 3.1: Soil moisture deficits for weeks ending 30 June 2025. Shows the difference (mm) of the actual soil moisture deficit from the 1991 to 2020 long term average soil moisture deficits. MORECS data for real land use.



(Source: Met Office. Crown copyright, 2025). All rights reserved. Environment Agency, 100024198, 2025.

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.



(Source: Met Office. Crown copyright, 2025). All rights reserved. Environment Agency, 100024198, 2025

4 River flows

4.1 River flows map

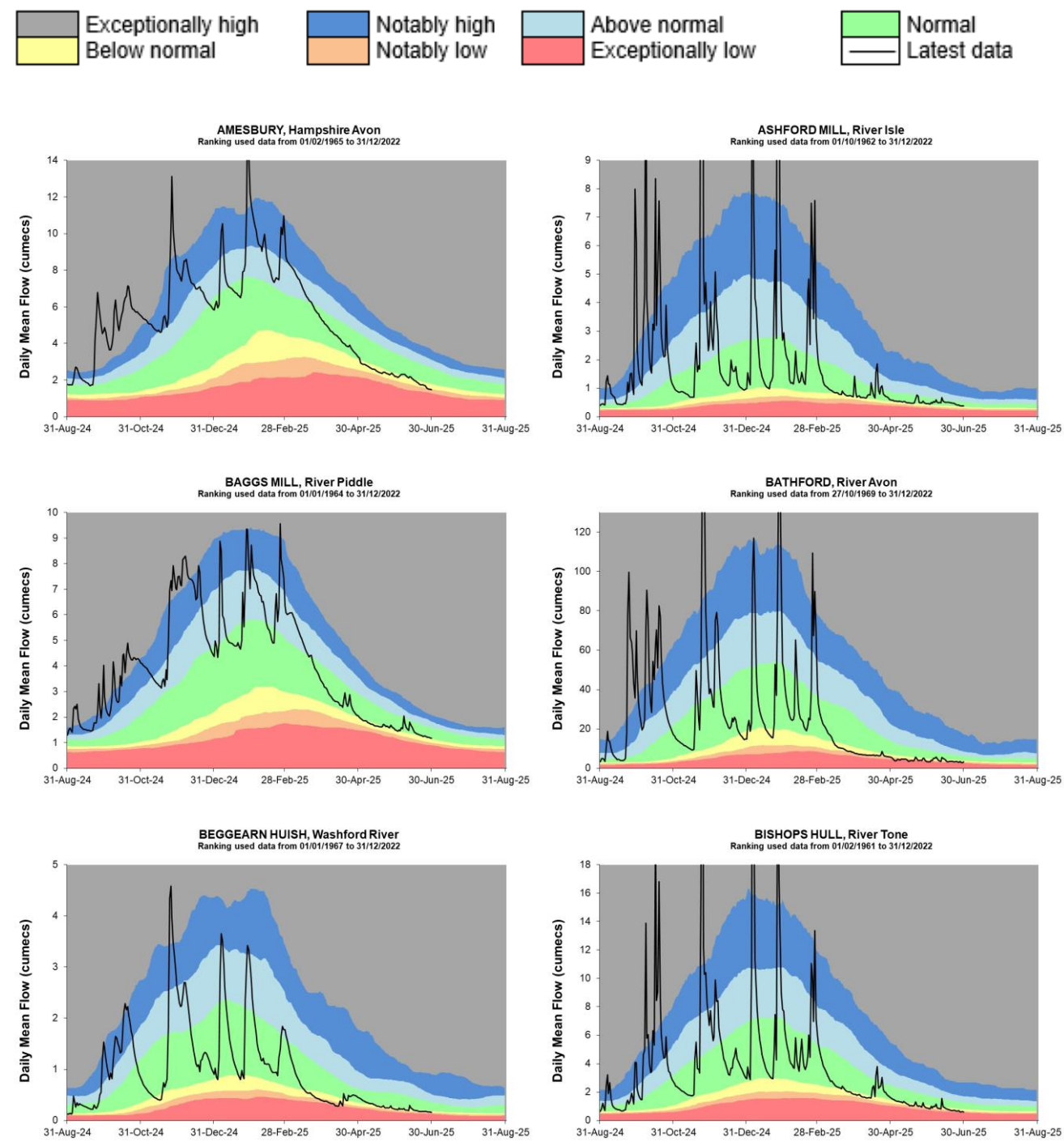
Figure 4.1: Monthly mean river flow for indicator sites for June 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic June monthly means Table available in the appendices with detailed information.



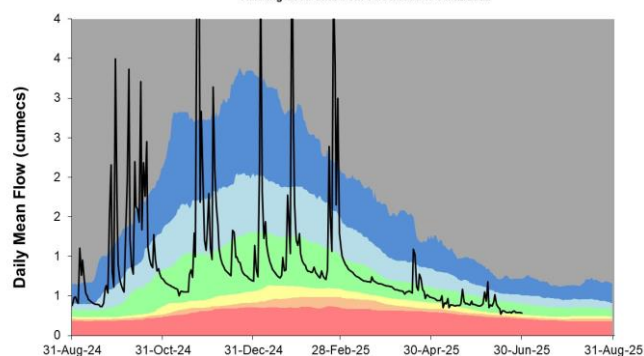
(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2025. The Dorset Stour at Throop and Bristol Avon at Great Somerford should be treated with caution due to data issues.

4.2 River flow charts

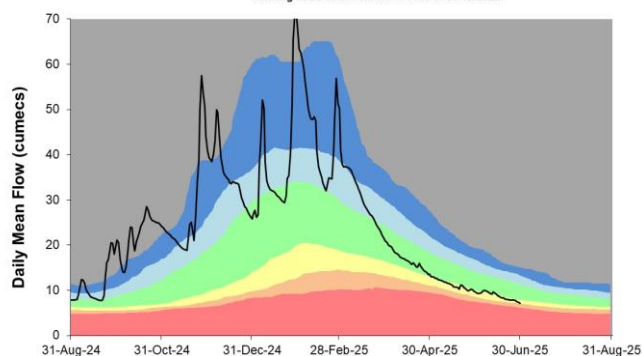
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows.



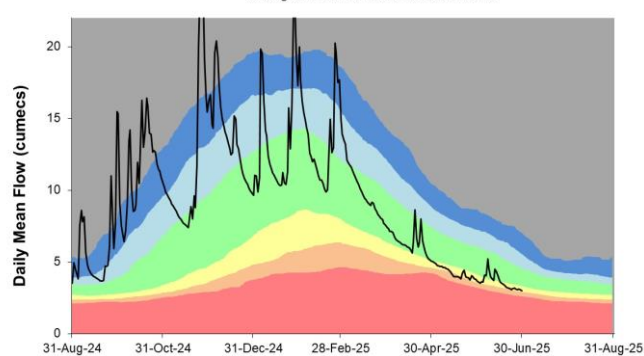
BRIDPORTEAST BRIDGE, River Asker
Ranking used data from 01/03/1996 to 31/12/2022



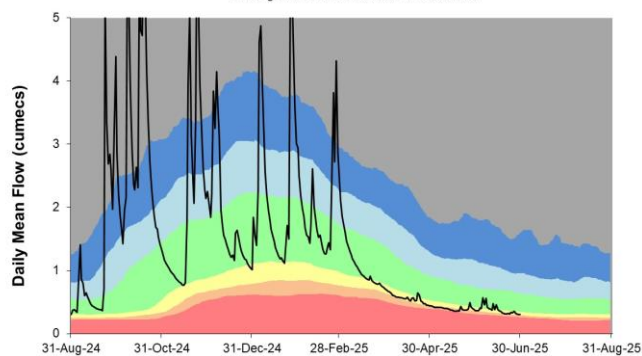
EAST MILLS COMBINED, Hampshire Avon
Ranking used data from 01/11/1965 to 31/12/2022



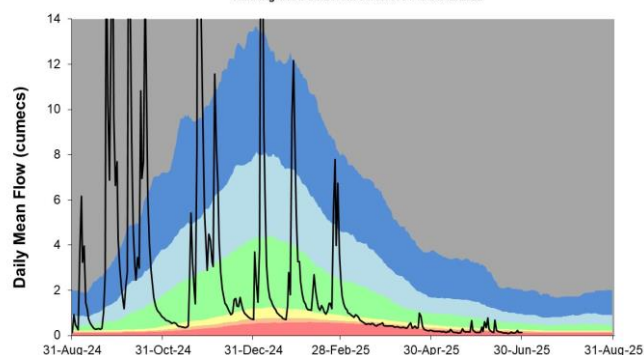
EAST STOKE COMBINED, Dorset Frome
Ranking used data from 01/10/1965 to 31/12/2022



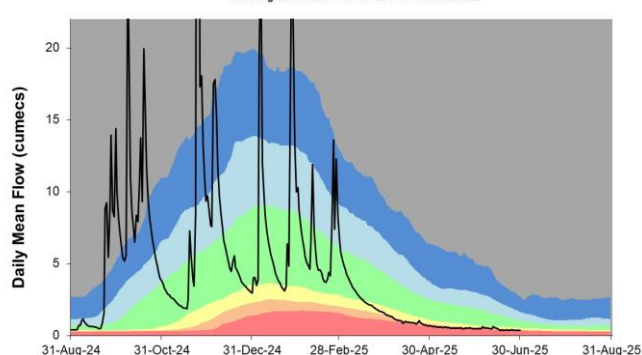
FENNY CASTLE, River Sheppey
Ranking used data from 01/01/1964 to 31/12/2022



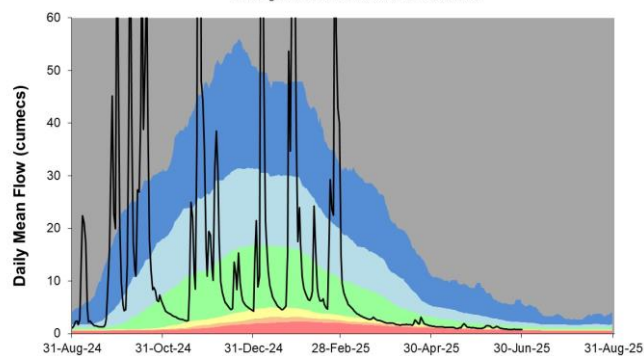
FRENCHAY, Bristol Frome
Ranking used data from 01/09/1961 to 31/12/2022



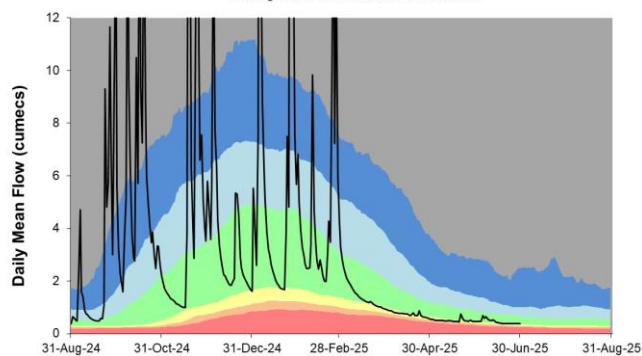
GREAT SOMERFORD, River Avon
Ranking used data from 16/12/1963 to 31/12/2022

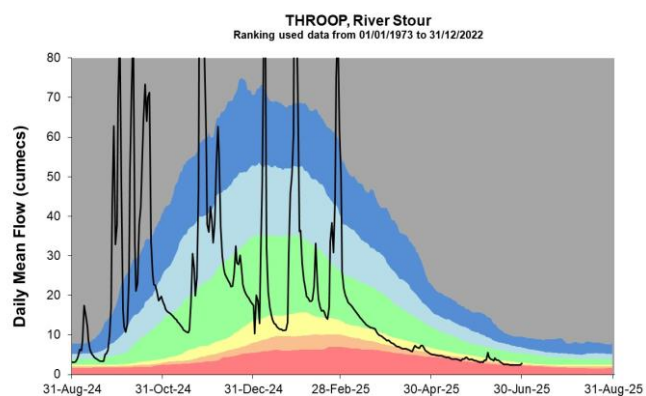
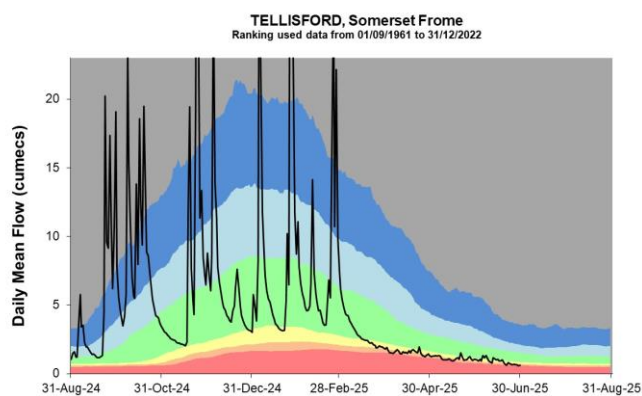
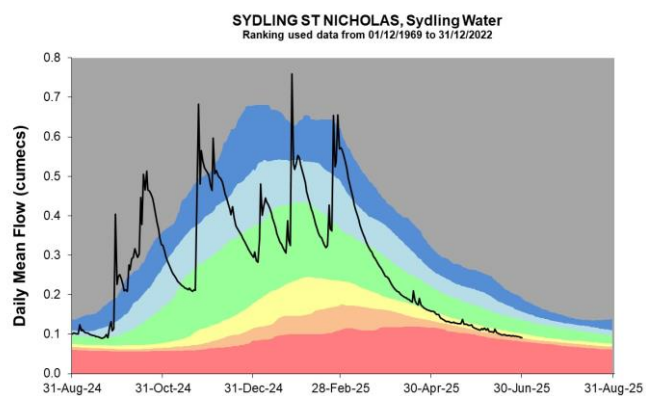
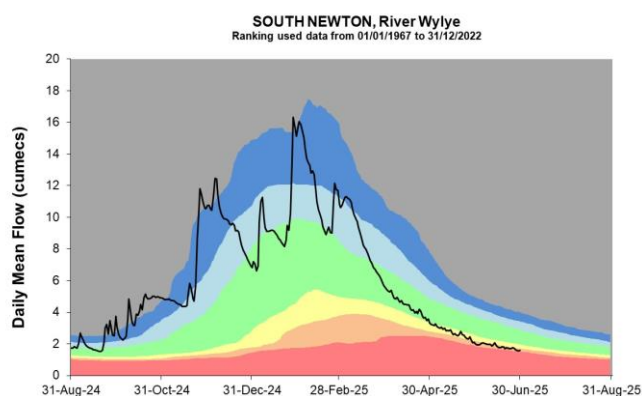
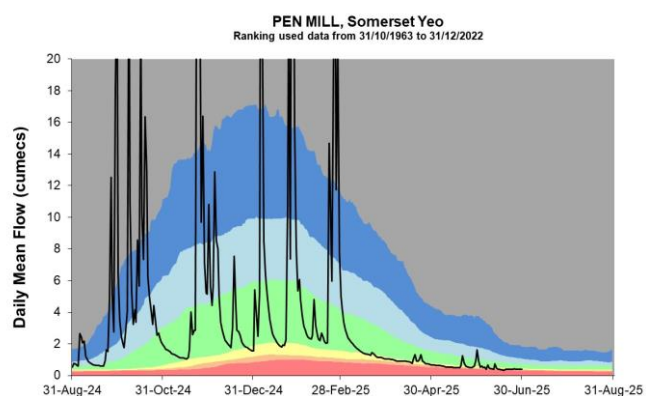


HAMMOON, River Stour
Ranking used data from 01/03/1968 to 31/12/2022



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



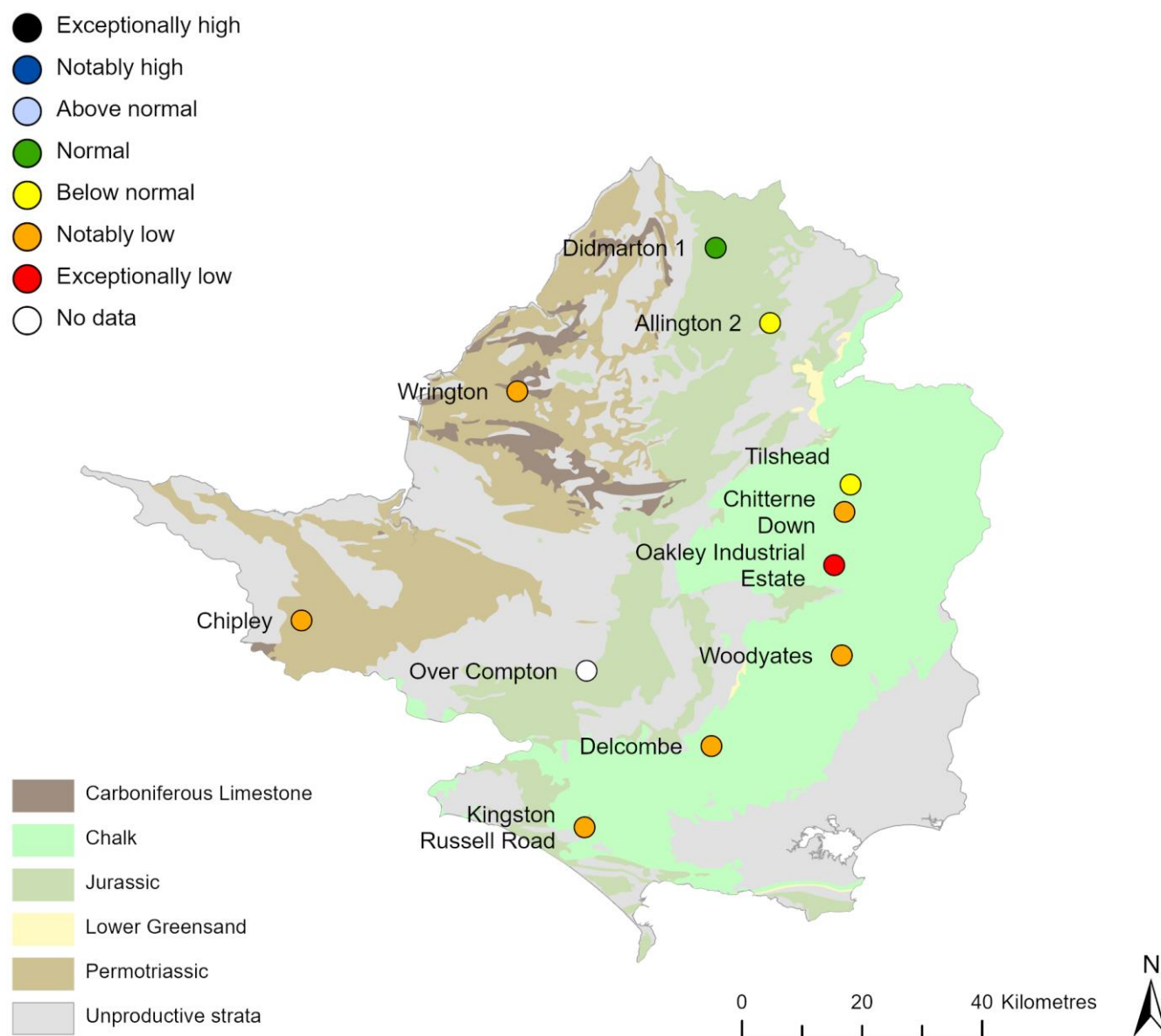


Source: Environment Agency, 2025. The Dorset Stour at Throop and Bristol Avon at Great Somerford should be treated with caution due to data issues.

5 Groundwater levels

5.1 Groundwater levels map

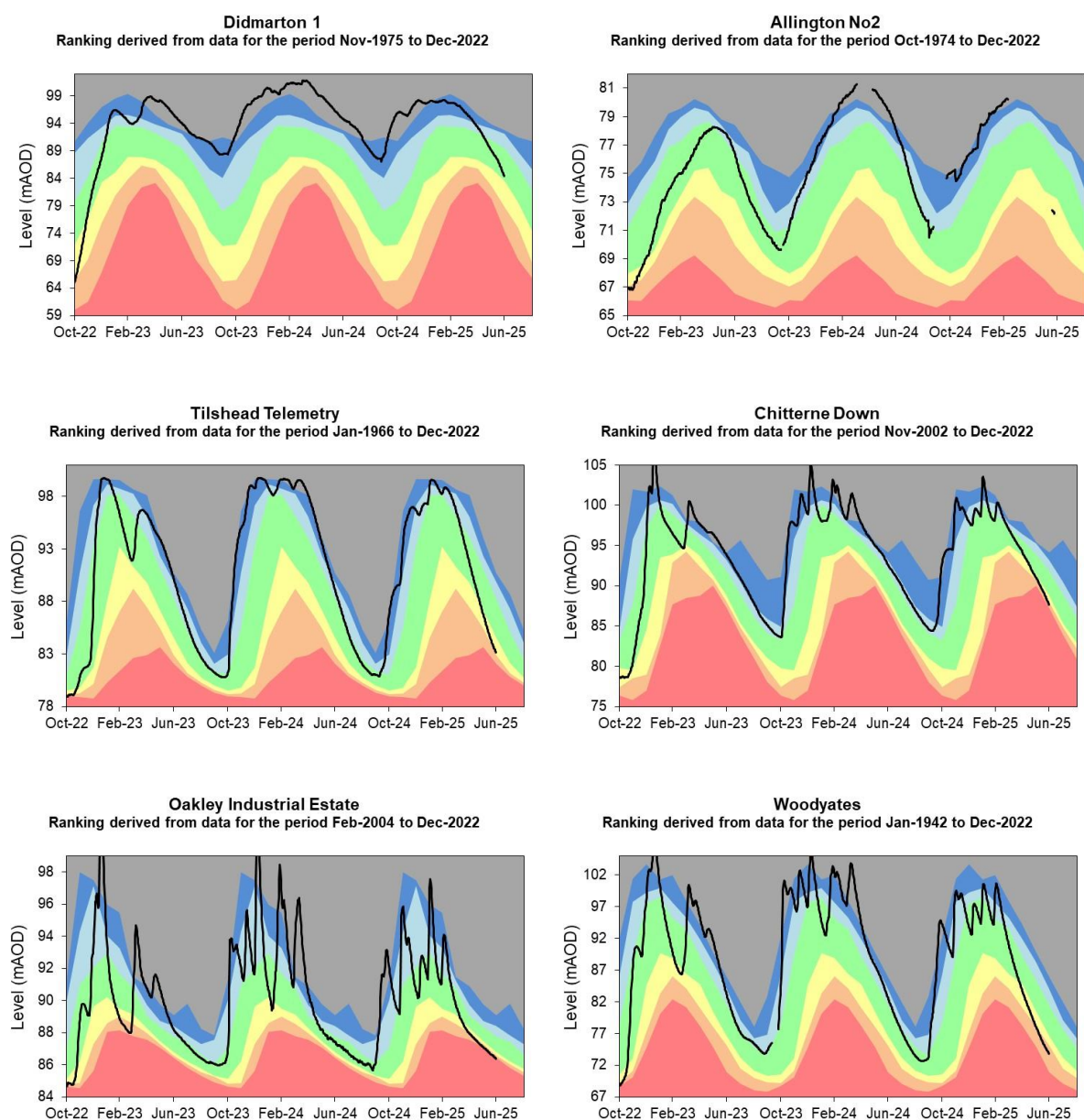
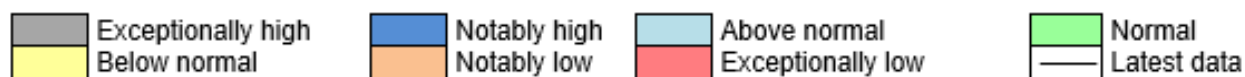
Figure 5.1: Groundwater levels for indicator sites at the end of June 2025, classed relative to an analysis of respective historic June levels. Table available in the appendices with detailed information.

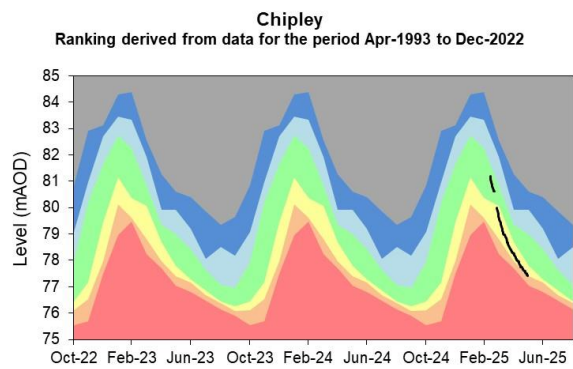
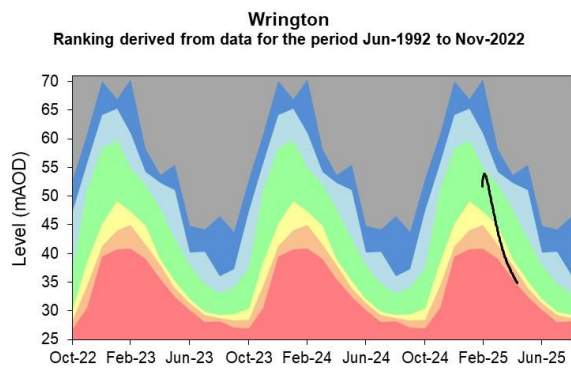
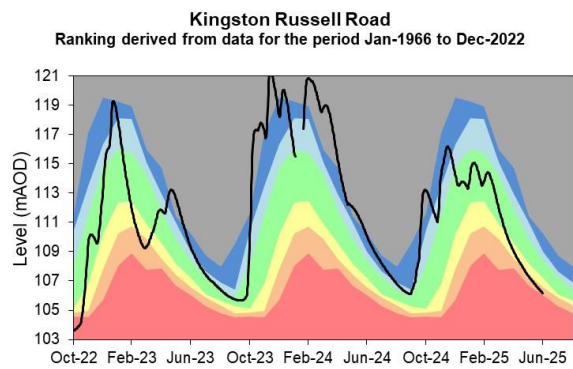
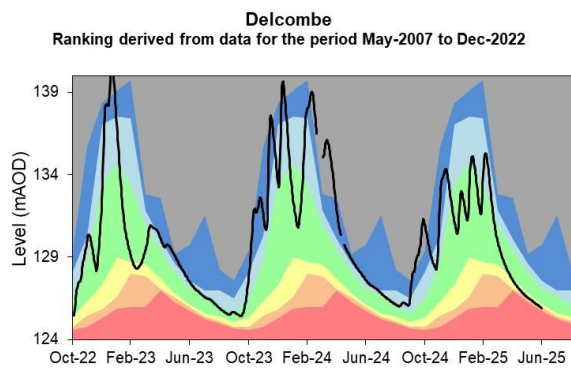


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5.2 Groundwater level charts

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.

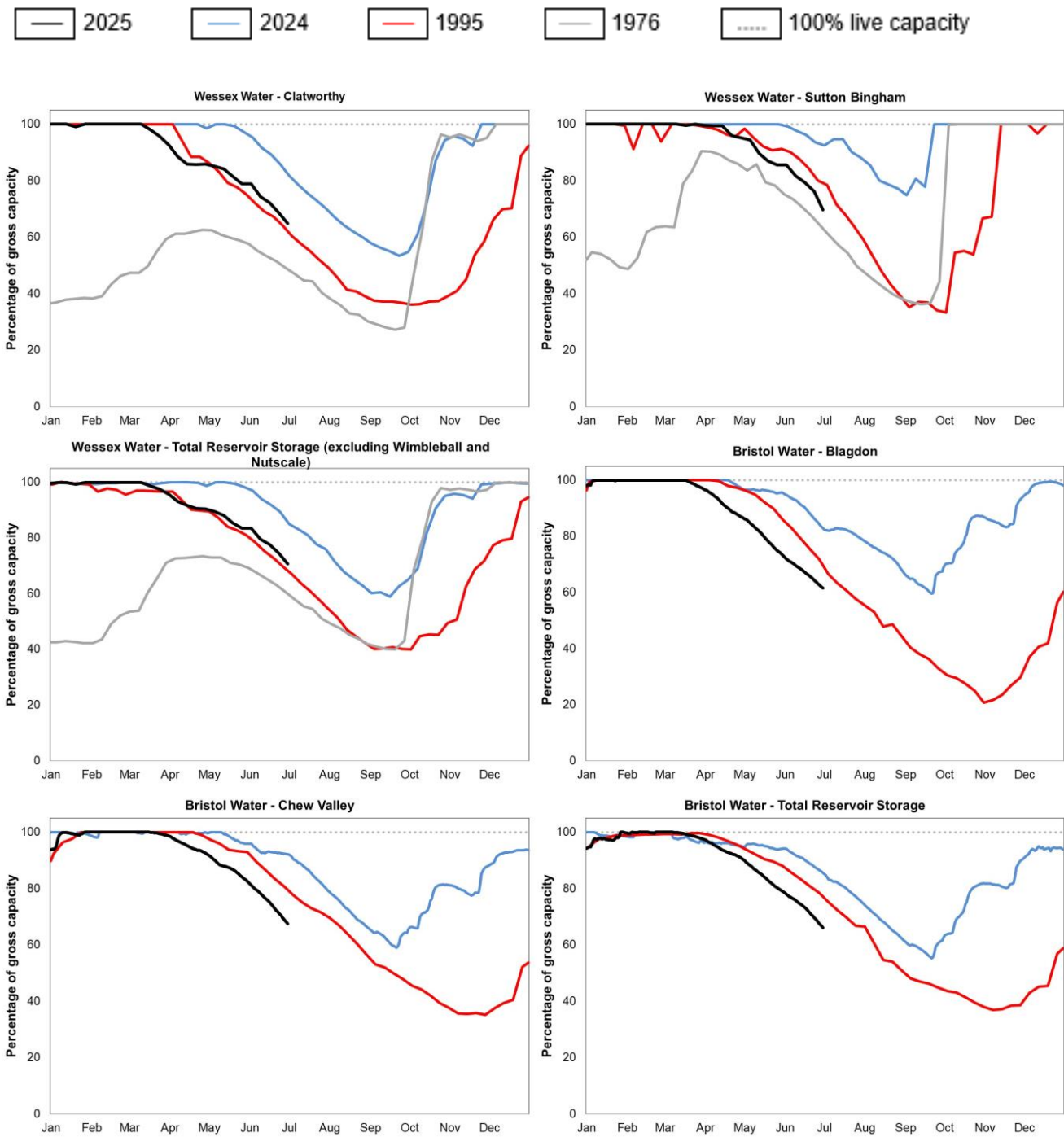




Source: Environment Agency, 2025.

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 June

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

7.2 Flood warnings

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

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

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

8 Stream support

8.1 Sites providing stream support

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

Catchment	River	Stream support site	Gauging station	End of June status
Bristol Avon	Chalfield Brook	South Wraxall	Great Chalfield (Wessex Water)	On
Bristol Avon	Chalfield Brook	Little Chalfield	Great Chalfield (Wessex Water)	Off
Bristol Avon	Charlton Stream	Charlton	Crabb Mill	Off
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	Off
Piddle	Piddle	Morningwell	South House & Little Puddle	On
Piddle	Piddle	Briantspuddle	Briantspuddle	On
Dorset Stour	Crichel Stream	Long Crichel	No Gauge	Off
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	Wylfe	Brixton Deverill	Brixton Deverill & Heytesbury	On
Hampshire Avon	Wylfe	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 June.

Catchment	Number of licences at restrict at the end of June 2025	Number of licences at cease at the end of June 2025
Bristol Avon	0	2
Dorset	2	1
Hampshire Avon	2	4
Somerset	1	6

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.



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11 Appendices

11.1 Rainfall table

Hydrological area	Jun 2025 rainfall % of long term average 1991 to 2020	Jun 2025 band	Apr 2025 to June cumulative band	Jan 2025 to June cumulative band	Jul 2024 to June cumulative band
Axe	66	Normal	Notably low	Below normal	Normal
Brue	67	Normal	Exceptionally low	Below normal	Normal
Little Avon	66	Normal	Exceptionally low	Notably low	Normal
Lower Bristol Avon And Bristol Frome	75	Normal	Notably low	Notably low	Normal
Lower Dorset Stour And River Crane	87	Normal	Notably low	Normal	Normal
Lower Hampshire Avon	84	Normal	Notably low	Below normal	Normal
Mendips And River Chew	77	Normal	Notably low	Below normal	Normal
Middle And Upper Bristol Avon	79	Normal	Notably low	Below normal	Normal

Middle Dorset Stour	88	Normal	Notably low	Normal	Normal
Middle Hampshire Avon	79	Normal	Notably low	Below normal	Normal
Parrett	62	Normal	Notably low	Below normal	Normal
Poole Harbour And Purbeck	98	Normal	Below normal	Normal	Normal
River Bourne	66	Normal	Exceptionally low	Below normal	Above normal
River Frome	92	Normal	Below normal	Normal	Above normal
River Piddle	97	Normal	Below normal	Normal	Above normal
Tone	70	Normal	Below normal	Normal	Normal
Upper Dorset Stour	74	Normal	Notably low	Normal	Normal
Upper Hampshire Avon	73	Normal	Exceptionally low	Below normal	Above normal
West Dorset Streams	84	Normal	Below normal	Normal	Above normal
West Somerset Streams	98	Normal	Normal	Below normal	Normal
Wylfe And Nadder	71	Normal	Notably low	Below normal	Above normal

Yeo And Kenn	73	Normal	Notably low	Below normal	Normal
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11.2 River flows table

Site name	River	Catchment	Jun 2025 band	May 2025 band
Amesbury	Upper Hampshire Avon	Hampshire Avon	Below normal	Below normal
Ashford Mill	Isle	Parrett	Normal	Below normal
Baggs Mill	Piddle	Piddle	Normal	Below normal
Bathford	Bristol Avon	Bristol Avon	Notably low	Notably low
Beggearn Huish	Washford	Washford River	Below normal	Below normal
Bishops Hull	Tone	Tone	Notably low	Below normal
Bridport East Bridge	Asker	Asker	Normal	Below normal
Fenny Castle	Sheppey	Brue	Below normal	Notably low
East Mills Combined	Middle Hampshire Avon	Hampshire Avon	Below normal	Below normal
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	Exceptionally low

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

11.3 Groundwater table

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

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