Monthly water situation report: Solent and South Downs Area

Summary - June 2026

Solent and South Downs (SSD) had below average rainfall in June, receiving 136% (75mm) of long term average (LTA) of 56mm. Monthly mean river flows for June ranged from below normal to above normal across SSD. End of month groundwater levels for June ranged from below normal to notably high. Soils across SSD ended the month drier than the LTA for June. End of month reservoir stocks were below average at Ardingly Reservoir (Ouse) and at Arlington Reservoir (Cuckmere).

1.1 Rainfall

SSD had above average rainfall in June receiving 136% (75mm) of LTA (56mm). The lowest monthly total rainfall was in the Test Chalk areal unit with 66mm, 114% of LTA (58mm). The Sussex Coast followed close behind with 118% (60mm) of LTA (51mm). The highest monthly total rainfall was received by the Arun areal unit with 158% (84mm) of LTA (53mm). The second highest was received by the adjacent Western Rother Greensand unit with 155% (93mm) of LTA (60mm).

June was a month of two halves. Rainfall was concentrated into the first half while the second half had dry and hot conditions which built to a sweeping heatwave across the UK. On average 93% of the total June rainfall was recorded between 1 and 11 June. All top 5 highest daily totals were recorded on 1 June. The highest daily total of 54 mm was recorded at World End (Hampshire Tertiaries). This represented 45% of the total June rainfall for the gauge. The second and third highest totals, 40mm and 38mm respectively, were recorded at Petersfield RG and Princes Marsh RG both in the Western Rother Greensand unit.

By exception on 26 June while the rest of SSD had no rain the raingauges on the eastern side of SSD (Ouse, Cuckmere, and Pevensey Levels units) recorded about 20% of their total monthly rainfall. These units had only recorded around 60% of their total rainfall during the 1 - 11 June period.

Based on long-term records, June rainfall was not noteworthy.

1.2 Soil moisture deficit and recharge

Soil moisture deficits (SMDs) are greater than LTA for June. Soils across SSD ended the month drier than average for June.

1.3 River flows

Monthly mean river flows for June ranged from below normal to above normal across SSD.

Flows were below normal on the:

- River Test at Broadlands

Flows were normal on the:

- River Lymington at Brockenhurst
- River Test at Chilbolton
- River Itchen at Allbrook and Highbridge
- River Meon at Mislingford
- River Arun at Alfoldean
- River Ouse at Goldbridge
- River Cuckmere at Cowbeech
- River Medina at Blackwater

Flows were above normal on the:

- River Wallington at North Fareham
- River Rother at Iping Mill
- River Adur at Sakeham

The monthly mean flows for June ranked the seventh highest for the River Wallington at North Fareham since 1976.

1.4 Groundwater levels

End of month groundwater levels for June ranged from below normal to notably high.

Groundwater levels were below normal at:

- Carisbrooke Castle (Isle of Wight)
- Beeding Hill (West Sussex Chalk)
- Houndean Bottom (East Sussex Chalk)

Groundwater levels were normal at:

- Lopcombe Corner (Test Chalk)
- Clanville Gate (Test Chalk)
- Harting Common (Western Rother Greensand)
- Catherington (East Hampshire Chalk)
- Chilgrove (West Sussex Chalk)

- West Meon (East Hampshire Chalk)
- Cornish Farm (East Sussex Chalk)

Groundwater levels were above normal at:

- Preston Candover (East Hampshire Chalk)

Groundwater levels were notably high at:

- Youngwoods Copse (Isle of Wight)

The groundwater level at Carisbrooke Castle was the seventh lowest on record for June since 1977. At Houndean Bottom (East Sussex Chalk) the recorded level was the eighth lowest on record for June since 1977. And at Harting Common (Western Rother Greensand) end of month levels were the ninth lowest on record for June since 1984.

In contrast the notably high groundwater level at Youngwoods Copse on the Isle of Wight was the ninth highest on record (1978). The groundwater levels at Youngwoods Copse reflect those of the Lower Greensand and this geology on the IOW has a delayed response to recharge.

1.5 Reservoir stocks

End of month reservoir stocks were below average at both Ardingly Reservoir (Ouse) and Arlington Reservoir (Cuckmere). Ardingly Reservoir was at 86% of total capacity (LTA 91.0%) and Arlington Reservoir (Cuckmere) was at 78.9% of total capacity (LTA 83.4%).

1.6 Environmental impact

In June there were two licence restrictions in force throughout the month:

• Restriction on abstraction rates for one Public Water Supply (PWS) licence on the Cuckmere (Cuckmere & Pevensey Levels)

• Restriction on abstraction rates for one licence on the River Meon (East Hampshire) which reduced to cessation later in the month.

In the third week of the month two new restrictions were in place one on the Walkford Brook (New Forest) and the other on the Western Rother (Arun & Western Streams). Five further restrictions came into force on the fourth week;

- one on the River Lod (Arun & Western Streams)

- two on the River Medina (Isle of Wight)
- two more on the Walkford Brook (New Forest)
- the PWS Media-Yar transfer scheme also came into operation on 23 June.

By then end of the month restrictions were also in place for an additional licence on the River Arun (Arun & Western Stream) and one on the River Lymington (New Forest).

Therefore, at the end of the month there were 2 PWS restriction/low flow alleviation schemes in place and ten non-PWS licences with restrictions in force.

No flood alerts or flood warnings were issued in June.

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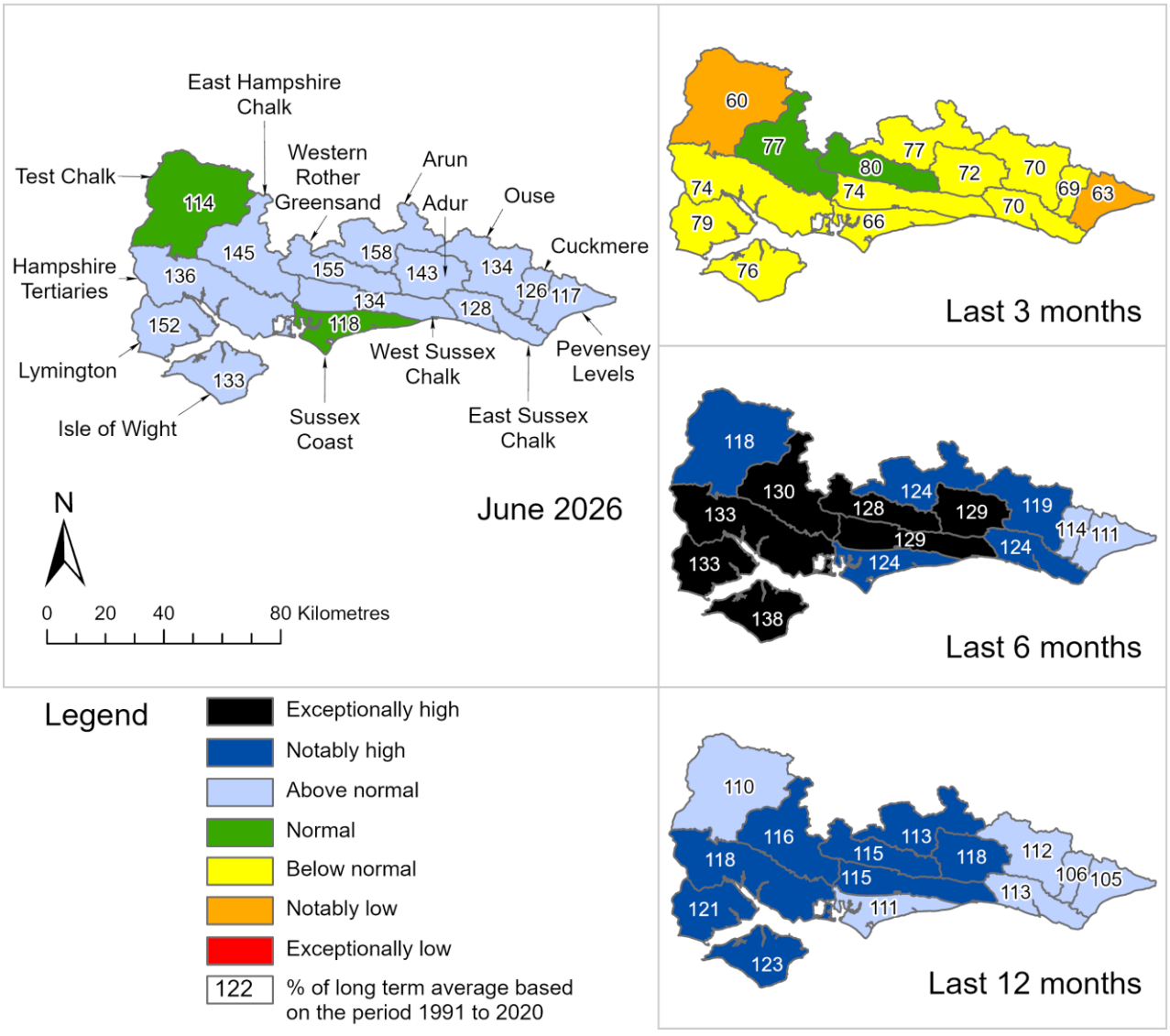
Contact Details: 03708 506506

2. Rainfall

2.1 Rainfall map

Figure 2.1: Total rainfall for hydrological areas for the current month (up to 30 June 2026), 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.

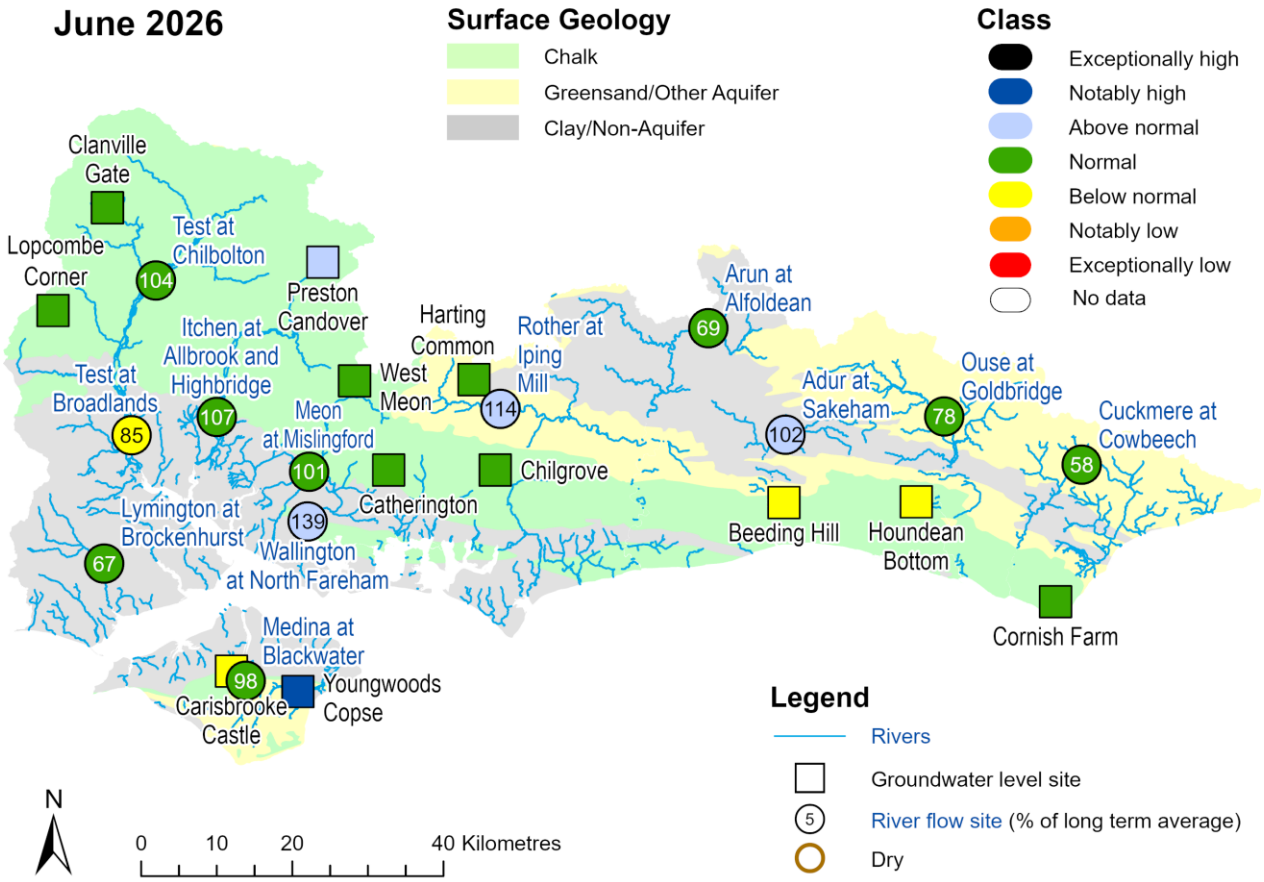


Rainfall data for January 2025 onwards, extracted from Environment Agency (EA) 1km gridded rainfall dataset derived from EA intensity rain gauges. (Source: EA. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

3 River flows and Groundwater levels

3.1 River flows and Groundwater level map

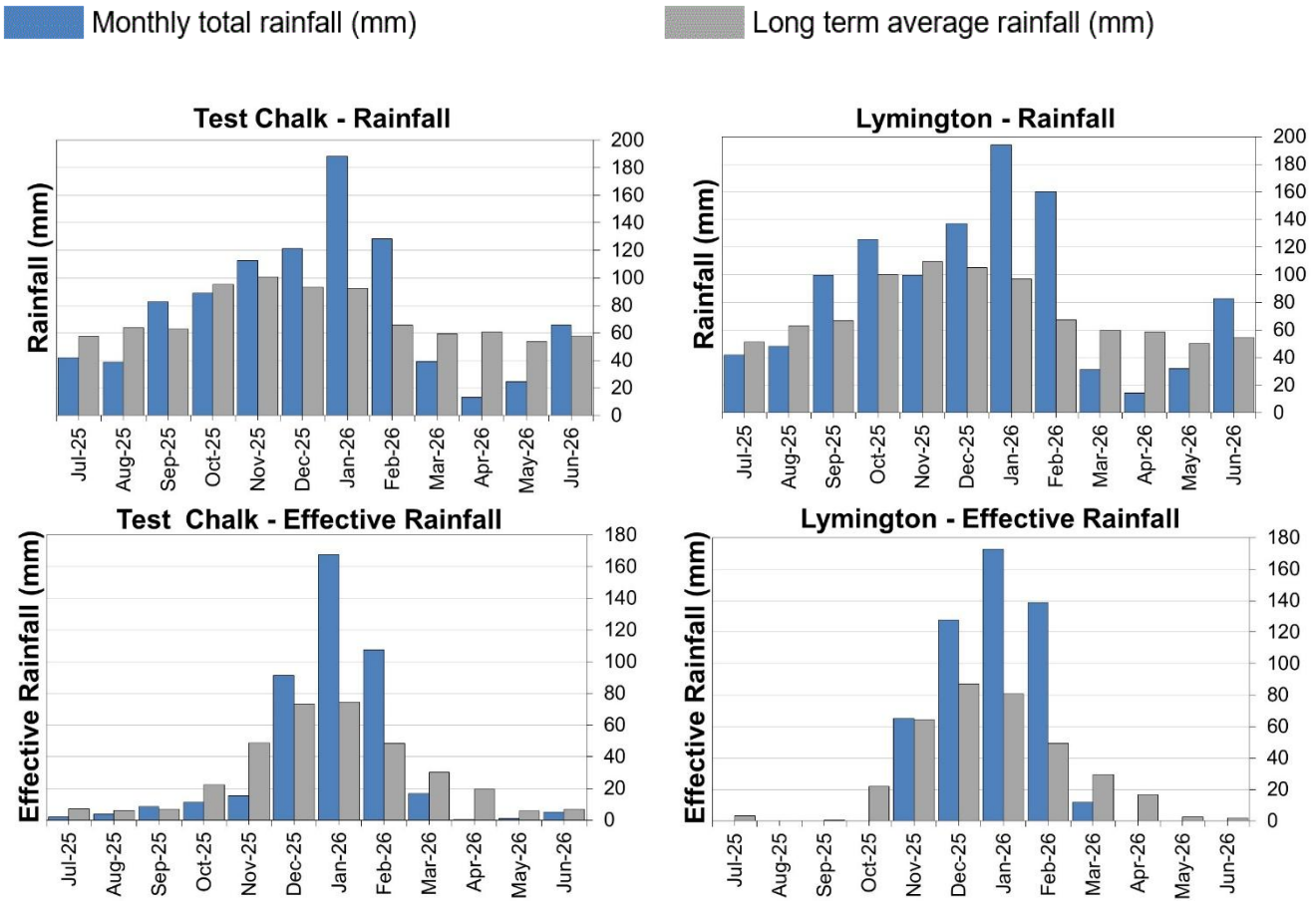
Figure 3.1: Monthly mean river flow and groundwater levels at our indicator sites for June 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic June monthly means. Table available in the appendices with detailed information.



4 West Hampshire

4.1 West Hampshire Rainfall and effective rainfall charts

Figure 4.1: Monthly rainfall and effective rainfall totals for the past 12 months compared to the 1991 to 2020 long term average.



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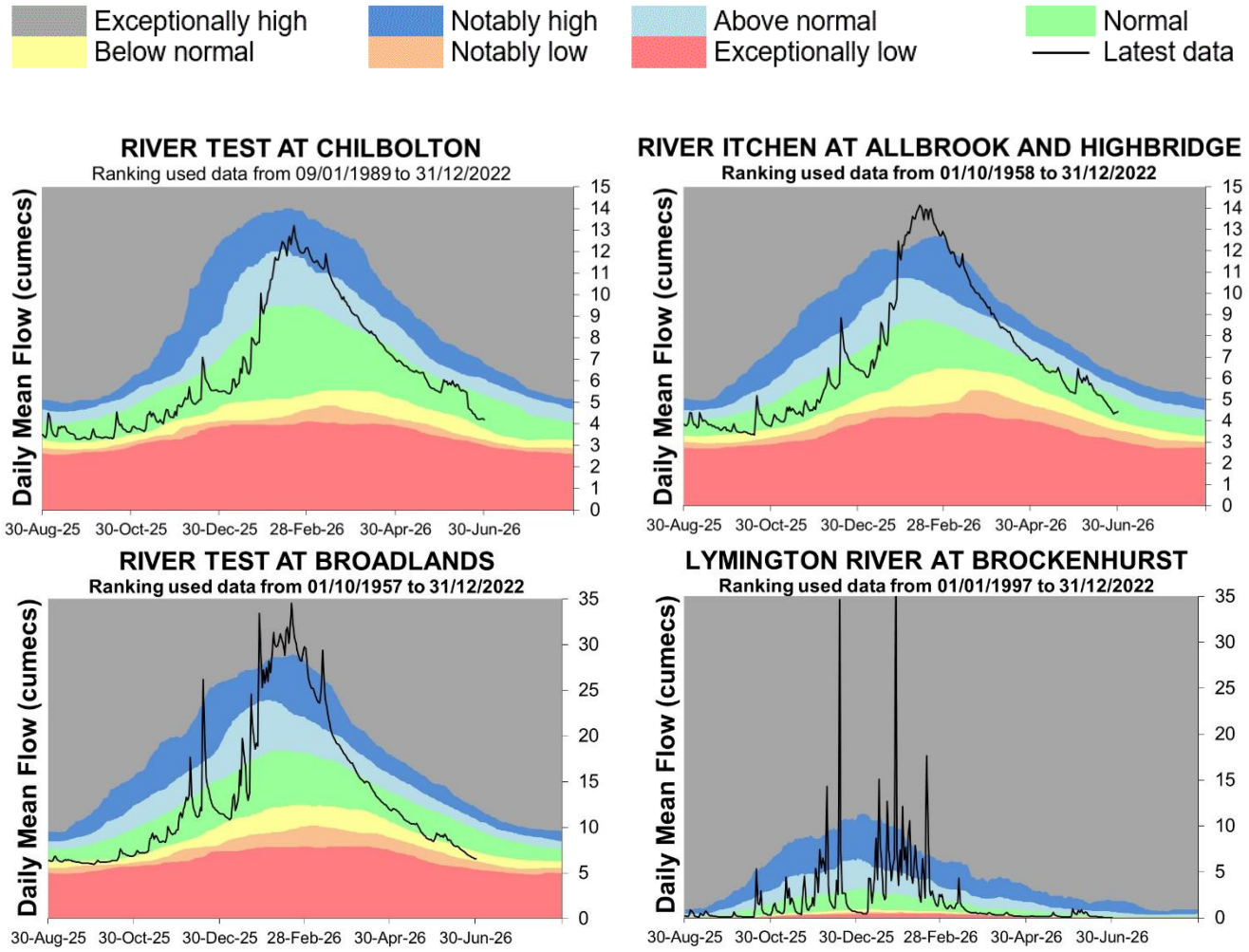
Effective rainfall data (Source: EA Soil Moisture Model 2026).

4.2 West Hampshire 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, and long term maximum and minimum flows.

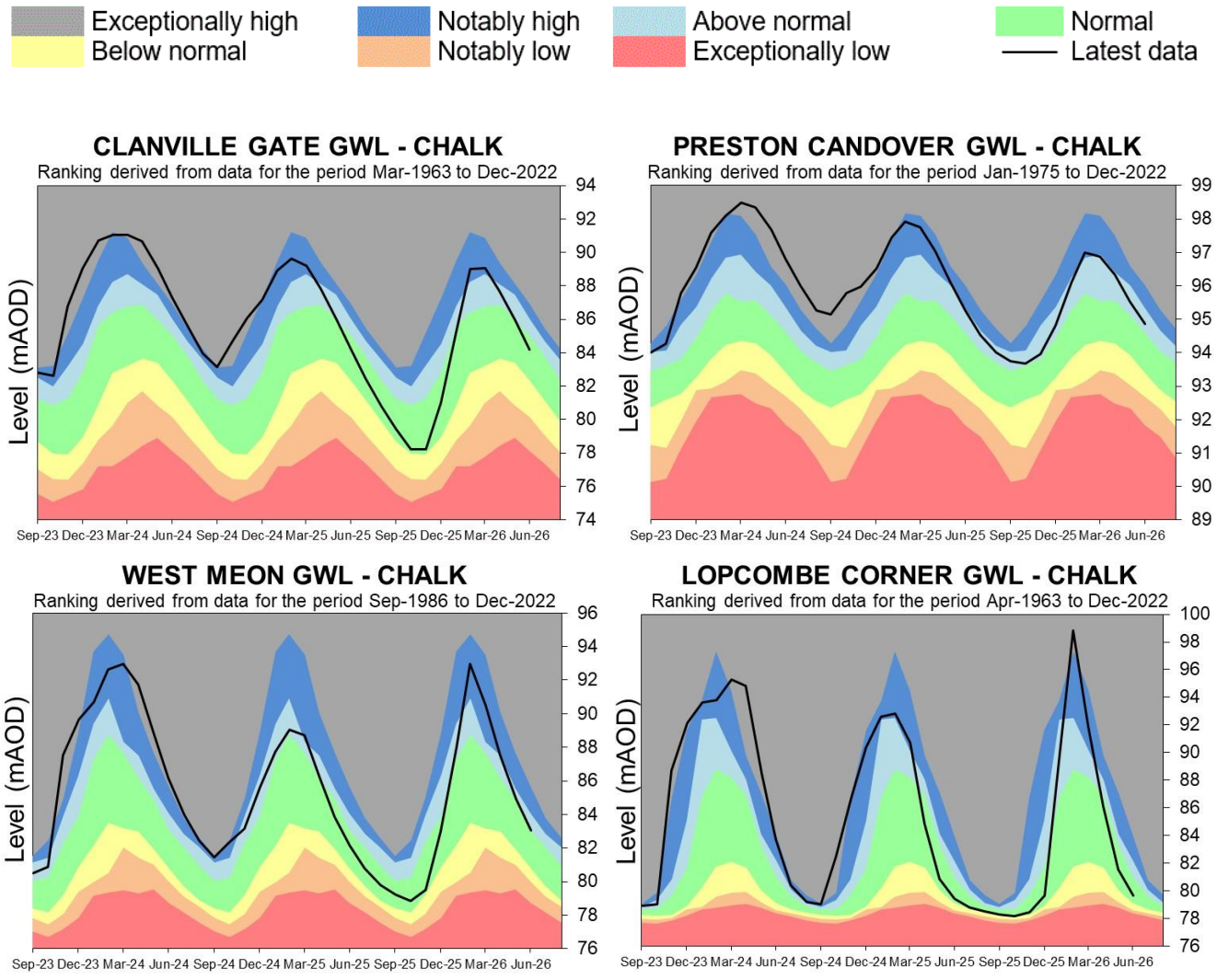


Source: Environment Agency, 2026.

*Dips and peaks in May and June 2026 data due to scheduled river weed cut coinciding with heavy rainfall

4.3 West Hampshire Groundwater level charts

Figure 4.3: 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 and long term maximum and minimum levels.

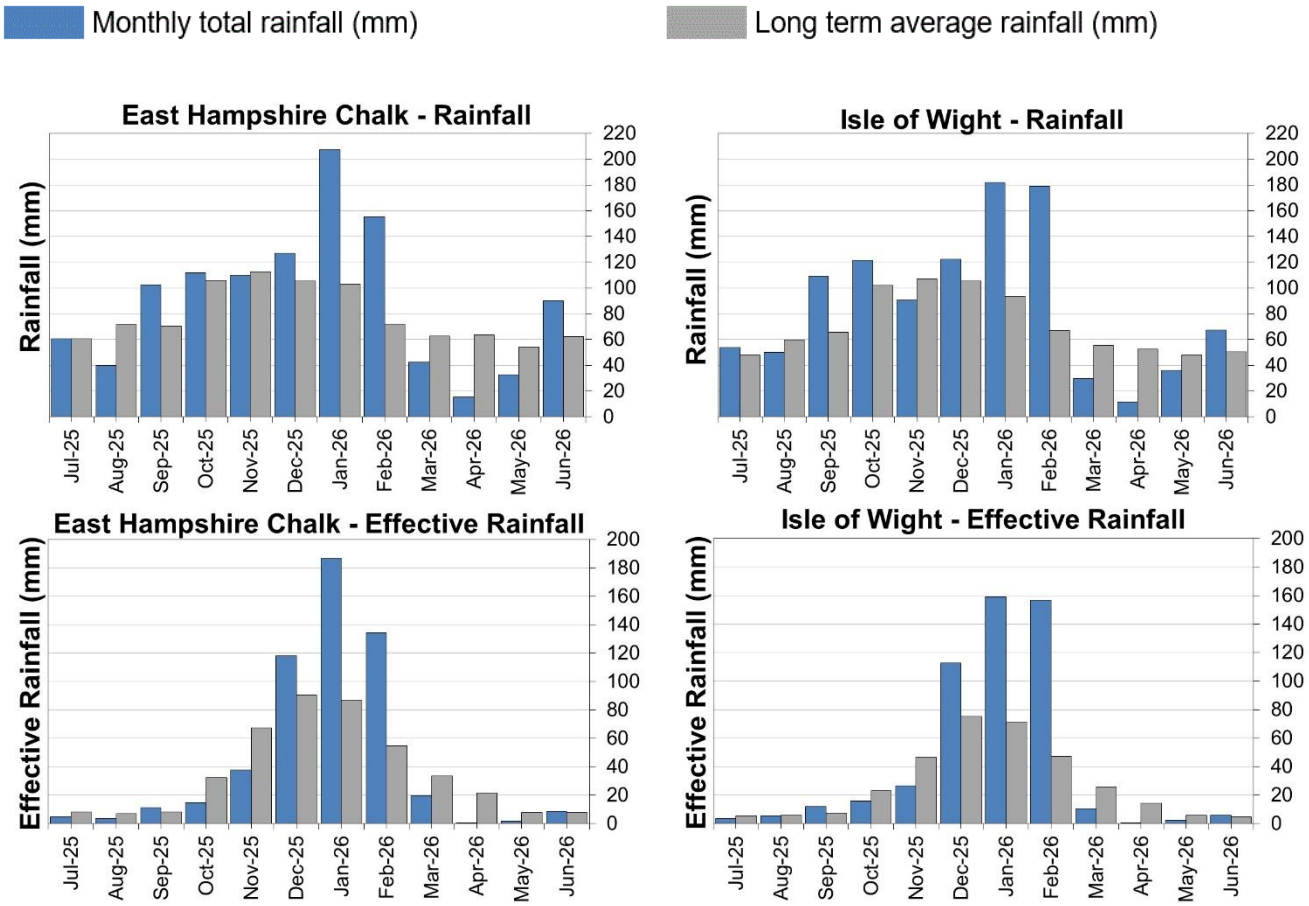


Source: Environment Agency, 2026.

5 East Hampshire and Isle of Wight

5.1 East Hampshire and Isle of Wight Rainfall and Effective rainfall charts

Figure 5.1: Monthly rainfall and effective rainfall totals for the past 12 months compared to the 1991 to 2020 long term average.

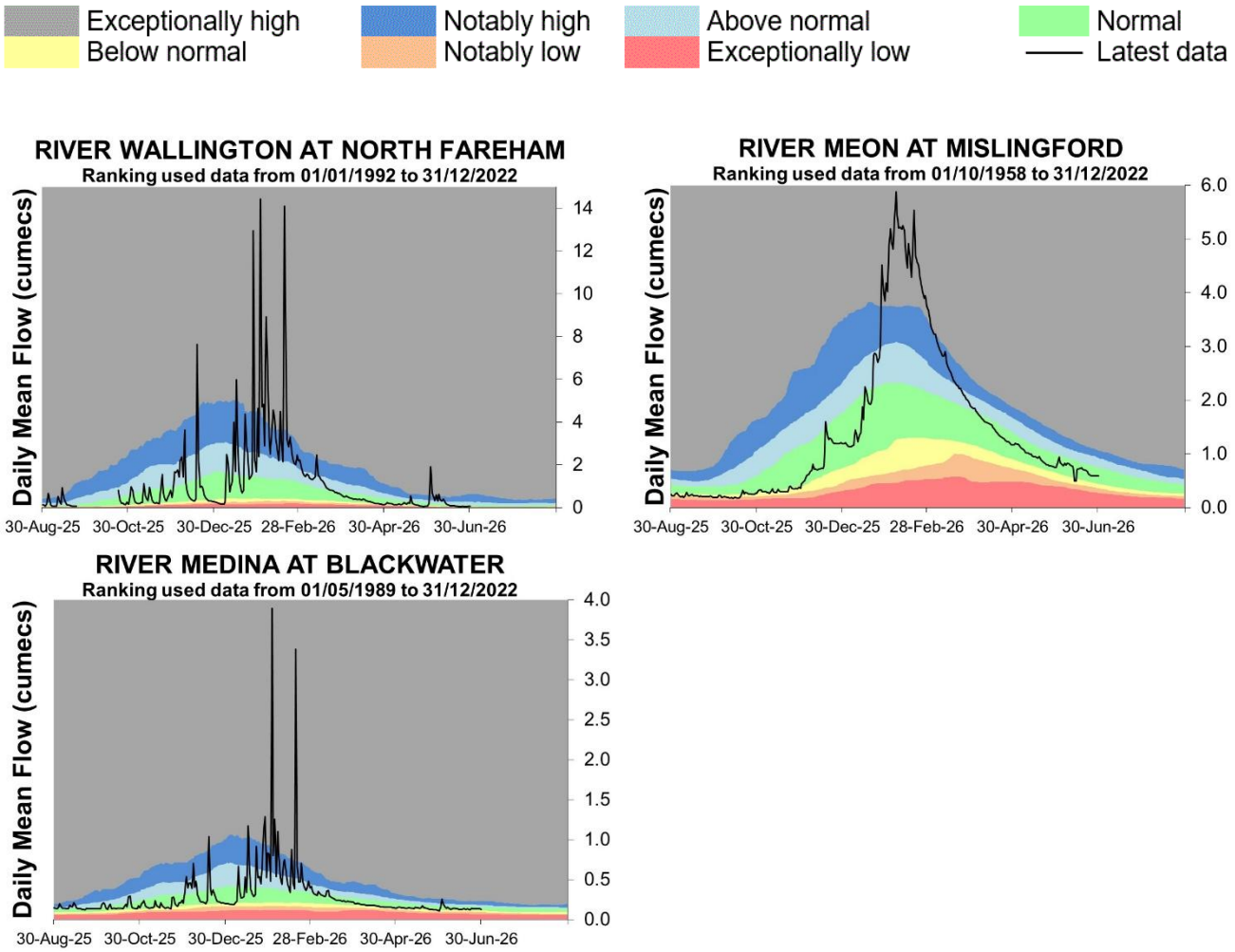


Rainfall data for January 2025 onwards, extracted from Environment Agency (EA) 1km gridded rainfall dataset derived from EA intensity rain gauges. (Source: EA. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

Effective rainfall data (Source: EA Soil Moisture Model 2026).

5.2 East Hampshire and Isle of Wight River flow charts

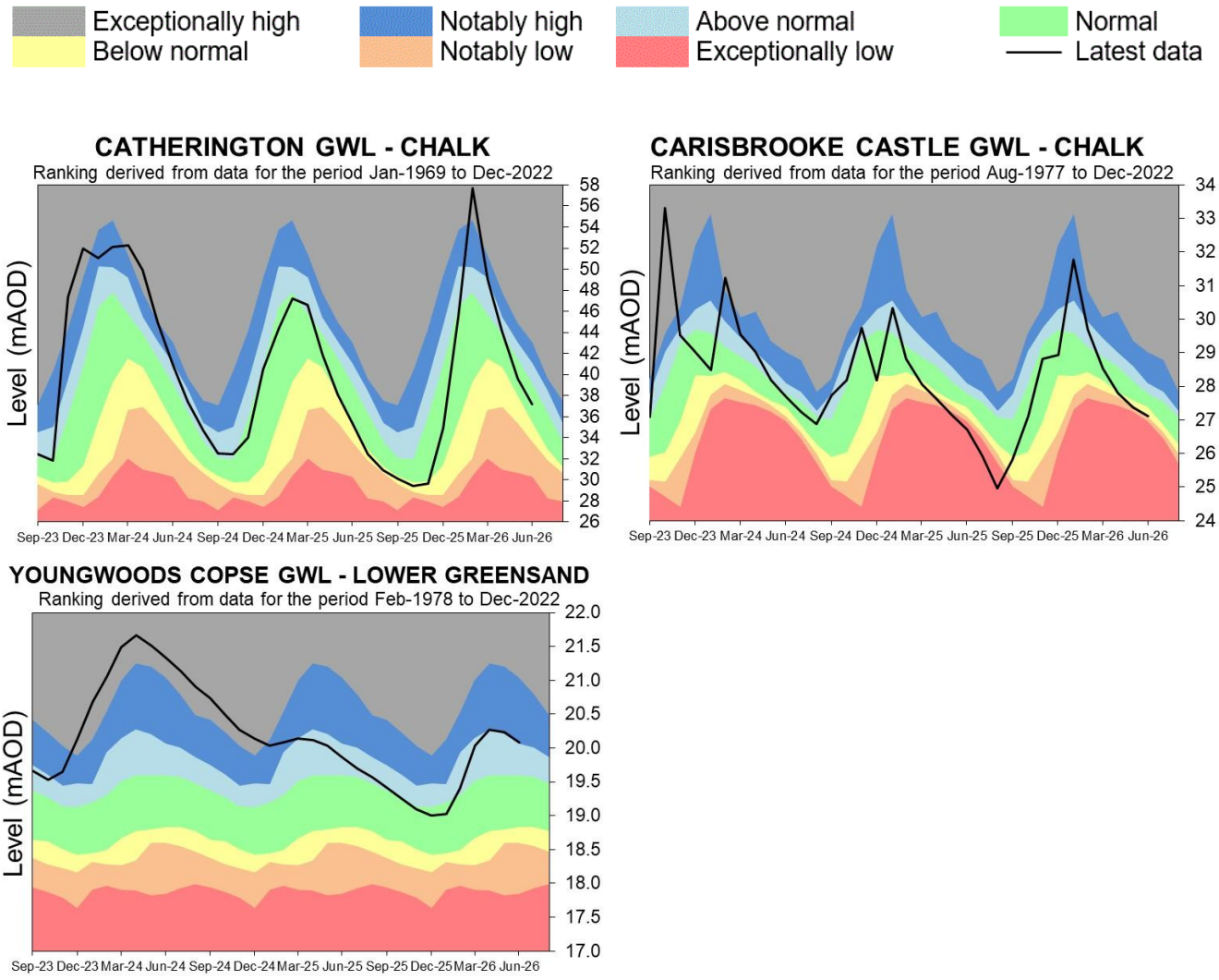
Figure 5.2 Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



Source: Environment Agency, 2026.

5.3 East Hampshire and Isle of Wight Groundwater level charts

Figure 5.3: 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 and long term maximum and minimum levels.

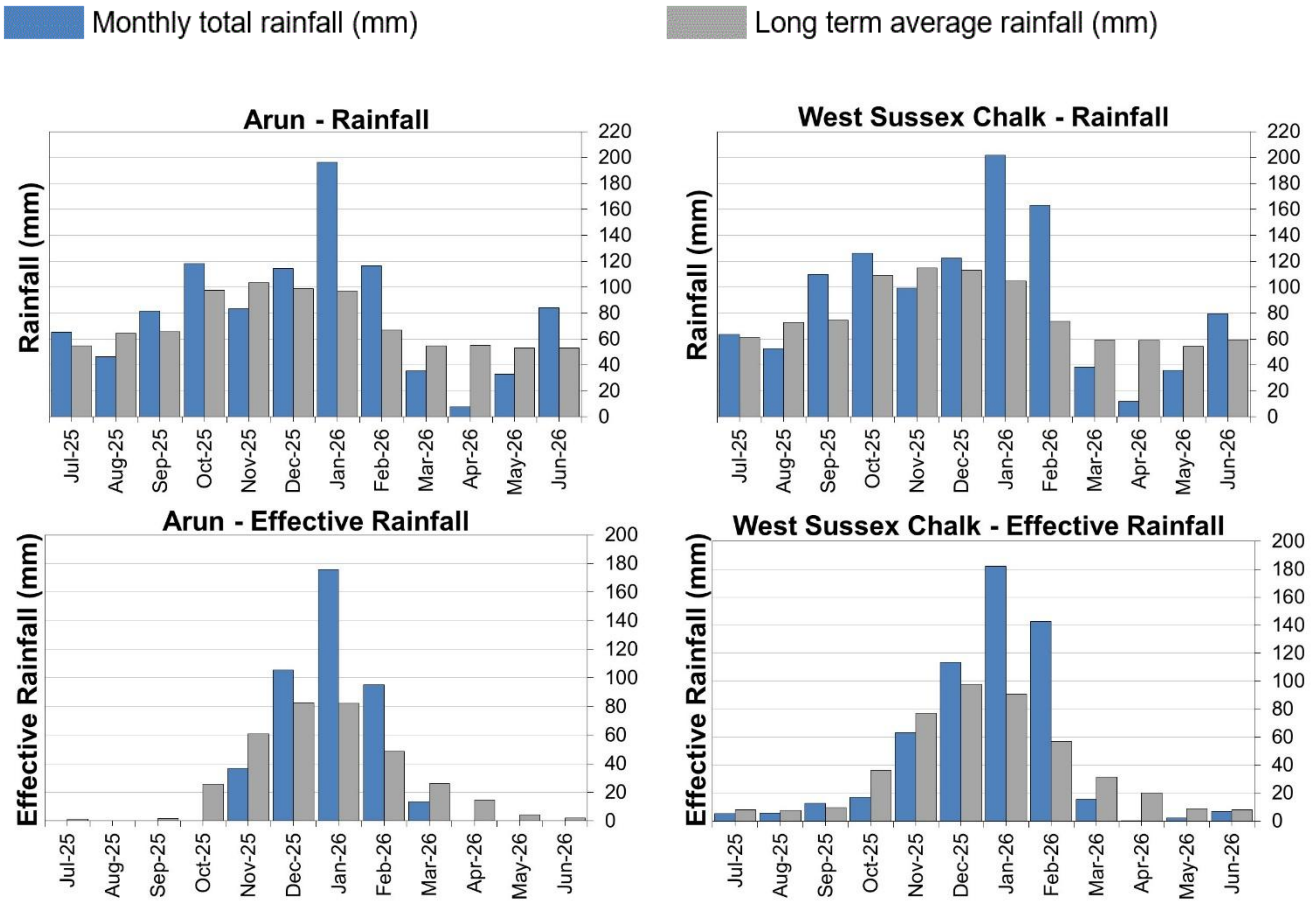


Source: Environment Agency, 2026.

6 West Sussex

6.1 West Sussex Rainfall and Effective Rainfall charts

Figure 6.1: Monthly rainfall and effective rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average.

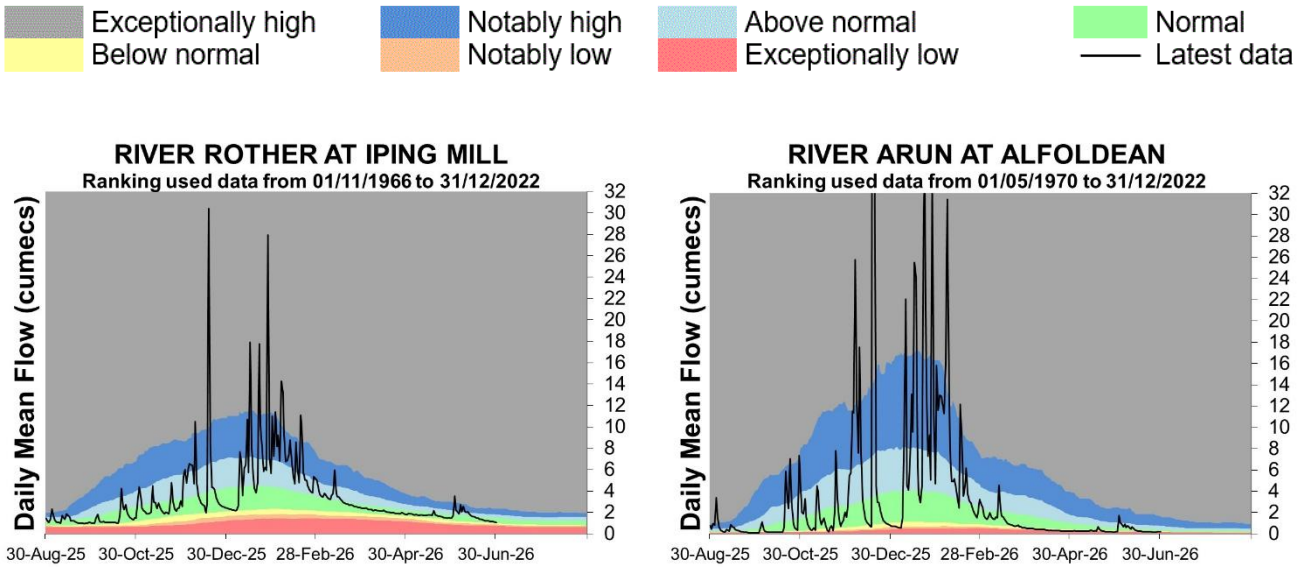


Rainfall data for January 2025 onwards, extracted from Environment Agency (EA) 1km gridded rainfall dataset derived from EA intensity rain gauges. (Source: EA. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

Effective rainfall data (Source: EA Soil Moisture Model 2026).

6.2 West Sussex River flow charts

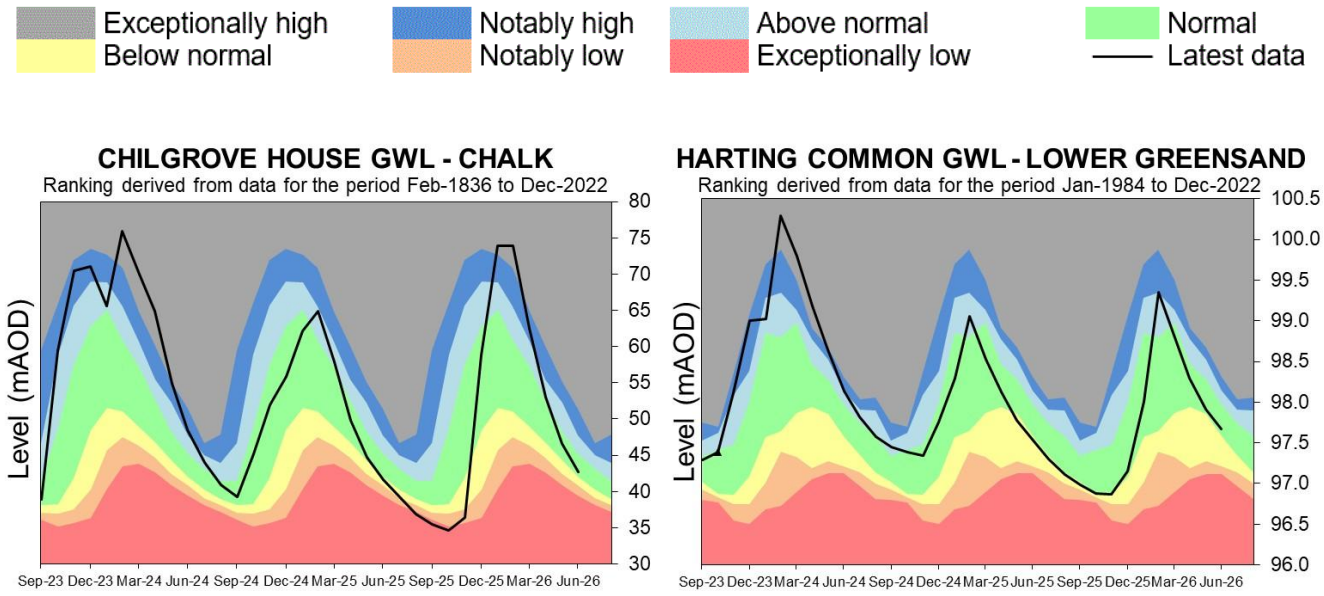
Figure 6.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



Source: Environment Agency, 2026.

6.3 West Sussex Groundwater level charts

Figure 6.3: 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 and long term maximum and minimum levels.

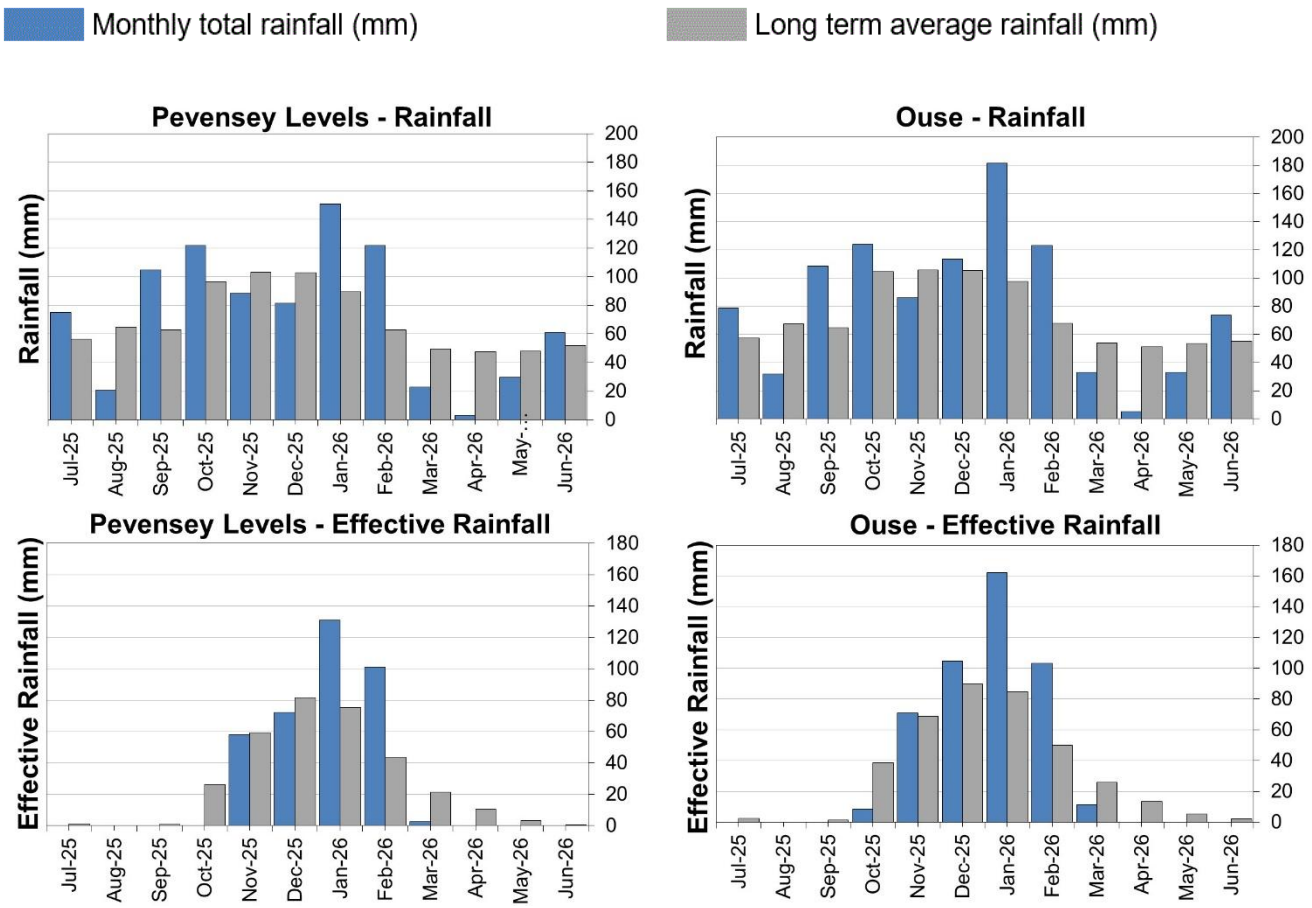


Source: Environment Agency, 2026.

7 East Sussex

7.1 East Sussex Rainfall and Effective Rainfall charts

Figure 7.1: Monthly rainfall and effective rainfall totals for the past 12 months compared to the 1991 to 2020 long term average.

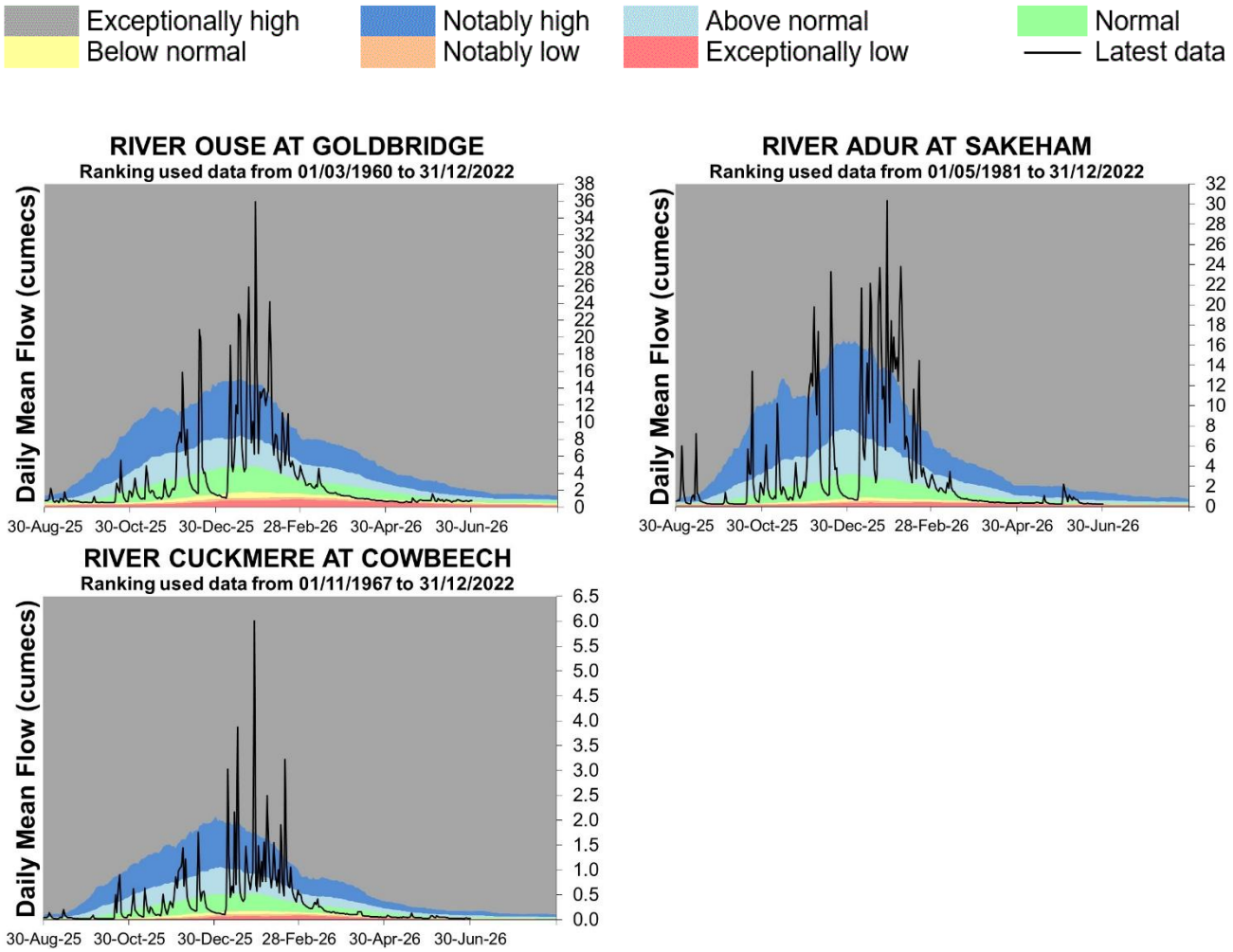


Rainfall data for January 2025 onwards, extracted from Environment Agency (EA) 1km gridded rainfall dataset derived from EA intensity rain gauges. (Source: EA. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

Effective rainfall data (Source: EA Soil Moisture Model 2026).

7.2 East Sussex River flow charts

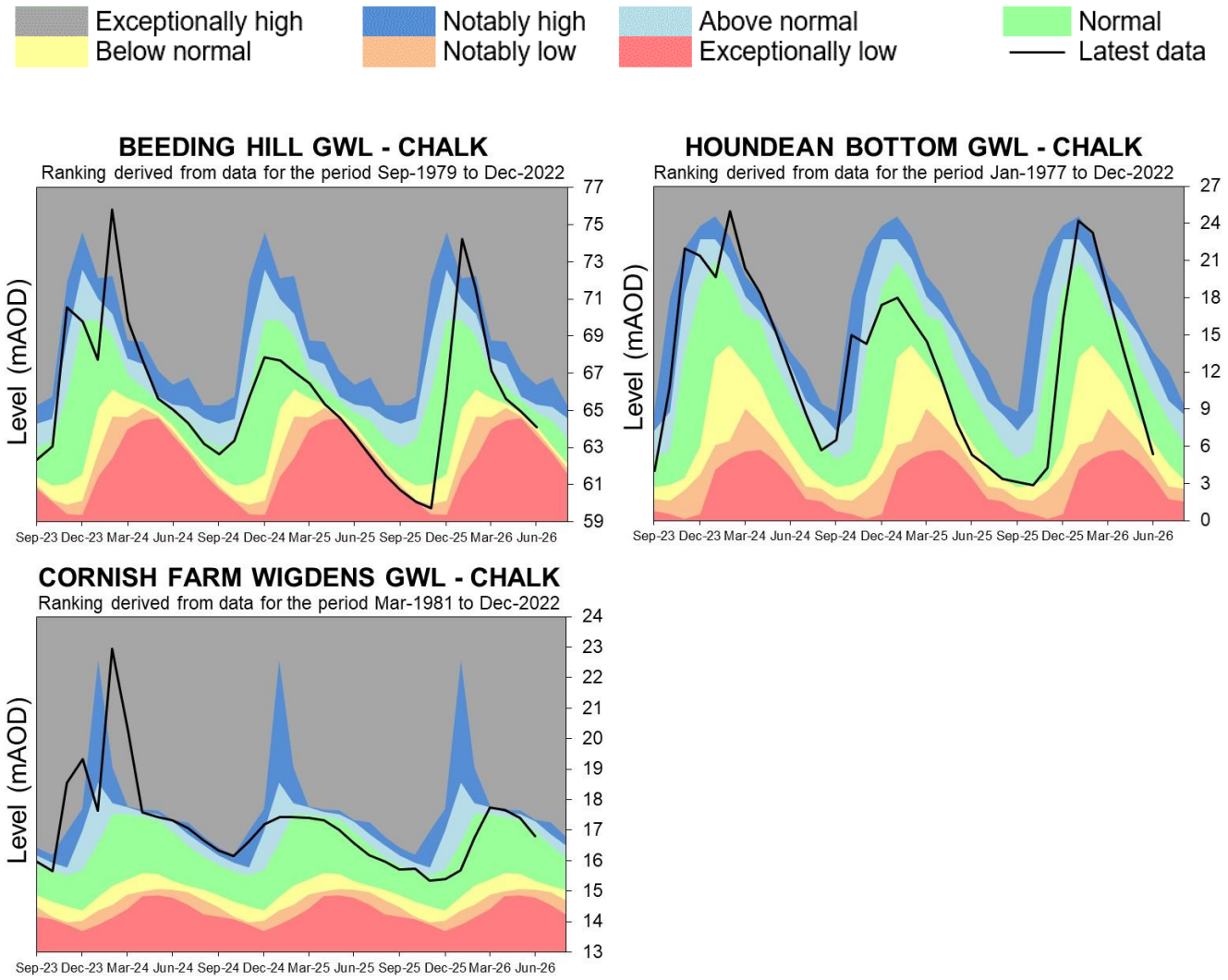
Figure 7.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



Source: Environment Agency, 2026.

7.3 East Sussex Groundwater level charts

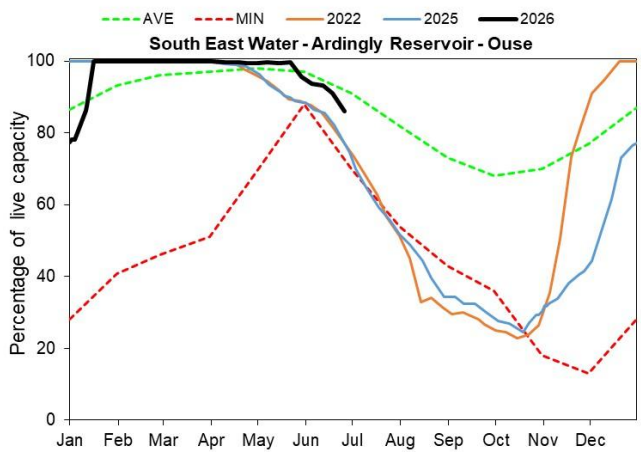
Figure 7.3: End of month groundwater levels at index groundwater level sites for major aquifers. 34 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.

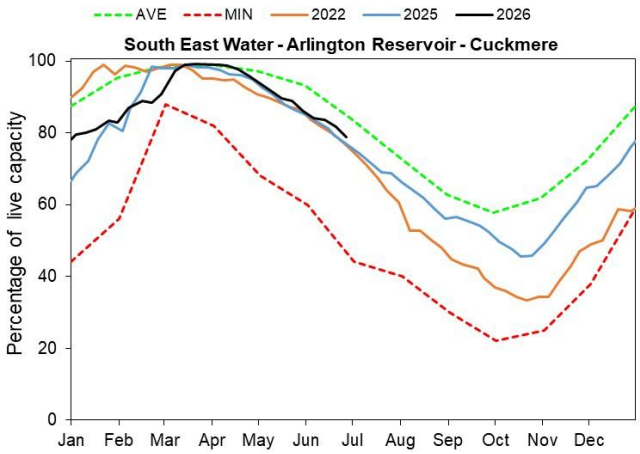


Source: Environment Agency, 2026.

8 Reservoir stocks

Figure 8.1: End of month reservoir stocks compared to long term maximum, minimum and average stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.





(Source: water companies).

9 Glossary

9.1 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).

9.2 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 Appendices

10.1 Rainfall, effective rainfall and soil moisture deficit table

Figure 10.1: This is areal rainfall, effective rainfall (percolation or runoff) and soil moisture deficit for the hydrological areas across the SSD. There may be significant variation within each area which must be considered when interpreting these data. When additional meteorological data is available estimates are revised which will affect the period totals in section 10.2

Hydrological area	Rainfall total (mm) June	Rainfall June as %LTA	Effective rainfall total (mm) June	Effective rainfall June as %LTA	Soil moisture deficit (SMD) June	SMD End of June LTA
Test Chalk	66	113	5	72	129	70
East Hampshire Chalk	90	146	9	109	111	69
West Sussex Chalk	80	134	7	86	111	69
East Sussex Chalk	71	128	5	100	123	73
Isle of Wight	67	133	6	119	126	76
Western Rother Greensand	93	155	9	113	105	69
Hampshire Tertiaries	77	136	0	0	115	72
Lymington	83	152	0	0	112	68
Sussex Coast	60	118	0	0	130	76
Arun	84	157	0	0	109	68
Adur	75	142	0	0	109	67
Ouse	74	134	0	0	113	67
Cuckmere	70	127	0	0	114	67
Pevensey Levels	61	118	0	0	126	72
SSD Average	75	136	3	74	117	70

Rainfall data for January 2025 onwards, extracted from Environment Agency (EA) 1km gridded rainfall dataset derived from EA intensity rain gauges. (Source: EA. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

Effective rainfall data (Source: EA Soil Moisture Model 2026).

10.2 Seasonal summary table of rainfall and effective rainfall

Summer season: 01/04/2026 to 30/09/2026

Hydrological area	Seasonal rainfall total (mm) April 2026 to June 2026	Seasonal rainfall as % LTA	Seasonal effective rainfall total (mm) April 2026 to June 2026	Seasonal effective rainfall as % LTA
Test Chalk	103	60	6	20
East Hampshire Chalk	138	77	11	29
West Sussex Chalk	127	74	9	25
East Sussex Chalk	110	70	9	31
Isle of Wight	115	76	8	33
Western Rother Greensand	144	80	11	28
Hampshire Tertiaries	122	74	0	0
Lymington	129	79	0	0
Sussex Coast	96	66	0	0
Arun	124	77	0	0
Adur	115	72	0	0
Ouse	112	70	0	0
Cuckmere	106	69	0	0
Pevensey Levels	94	64	0	0
SSD Average	117	72	4	16

Rainfall data for January 2025 onwards, extracted from Environment Agency (EA) 1km gridded rainfall dataset derived from EA intensity rain gauges. (Source: EA. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).
Effective rainfall data (Source: EA Soil Moisture Model 2026).

10.3 Rainfall banding table

Hydrological area	June 2026 band	April 2026 to June 2026 cumulative band	January 2026 to June 2026 cumulative band	July 2025 to June 2026 cumulative band
Test Chalk	Above normal	Below normal	Exceptionally high	Notably high
East Hampshire Chalk	Above normal	Below normal	Exceptionally high	Notably high
West Sussex Chalk	Above normal	Notably low	Above normal	Above normal
East Sussex Chalk	Above normal	Below normal	Exceptionally high	Notably high
Isle of Wight	Above normal	Below normal	Exceptionally high	Notably high
Western Rother Greensand	Above normal	Below normal	Notably high	Above normal
Hampshire Tertiaries	Normal	Below normal	Notably high	Above normal
Lymington	Above normal	Below normal	Exceptionally high	Notably high
Sussex Coast	Above normal	Below normal	Above normal	Above normal
Arun	Above normal	Normal	Exceptionally high	Notably high
Adur	Normal	Notably low	Notably high	Above normal
Ouse	Above normal	Below normal	Notably high	Above normal
Cuckmere	Above normal	Normal	Exceptionally high	Notably high
Pevensey Levels	Above normal	Below normal	Notably high	Notably high

10.4 River flows table

Site name	River	Catchment	June 2026 band	May 2026 band
Alfoldean Gs	Arun	Arun	Normal	Notably low
Allbrook Gs+ Highbridge	Itchen (so)	Itchen	Normal	Normal
Blackwater	Medina	Isle of Wight	Normal	Below normal
Broadlands	Test	Test Lower	Below normal	Normal
Brockenhurst GS	Lymington	New Forest	Normal	Exceptionally low
Chilbolton GS	Test	Test Upper	Normal	Normal
Cowbeech Gs	Cuckmere	Cuckmere	Normal	Below normal
Goldbridge Gs	Ouse [so]	Ouse Sussex	Normal	Notably low
Iping Mill Gs	Rother	West Rother	Above normal	Normal
Mislingford GS	Meon	Meon	Normal	Normal
North Fareham GS	Wallington	Wallington	Above normal	Below normal
Sakeham GS	Adur	Adur	Above normal	Below normal

10.5 Groundwater table

Site name	Aquifer	End of June 2026 band	End of May 2026 band
Carisbrooke Castle	Isle Of Wight Central Downs Chalk	Below normal	Notably low
Youngwoods Copse	Isle of Wight Lower Greensand	Notably high	Notably high
Clanville Gate Gwl	River Test Chalk	Normal	Normal
Lopcombe Corner Gwl	River Test Chalk	Normal	Normal
Preston Candover	River Itchen Chalk	Above normal	Above normal
West Meon Hut Gwl	River Itchen Chalk	Normal	Above normal
Catherington	River Meon Chalk	Normal	Normal
Chilgrove House Gwl	Chichester-Worthing-Portsdown Chalk	Normal	Normal
Beeding Hill Gwl	Brighton Chalk Block	Below normal	Normal
Houndean Bottom Gwl	Brighton Chalk Block	Below normal	Normal
Harting Common Down	Western Rother Lower Greensand	Normal	Normal
Cornish Wigdens Gwtr	Eastbourne Chalk Block	Normal	Above normal

10.6 Abstraction licence flow constraints

Number of flow constraints in force between 1 to 8 June 2026	Number of flow constraints in force between 9 to 15 June 2026	Number of flow constraints in force between 16 to 22 June 2026	Number of flow constraints in force between 23 to 29 June 2026	Number of flow constraints in force on 30 June 2026
2	2	4	10	12

10.7 Solent and South Downs Areal Rainfall Units Map

10.8 SSD Areal Rainfall Monthly Long Term Averages

Hydrological area	Jan LTA mm	Feb LTA mm	Mar LTA mm	Apr LTA mm	May LTA mm	Jun LTA mm	Jul LTA mm	Aug LTA mm	Sep LTA mm	Oct LTA mm	Nov LTA mm	Dec LTA mm
Test Chalk	92.6	65.7	59.4	60.5	53.7	57.8	57.5	63.8	62.8	95.3	100.9	93.1
East Hampshire Chalk	102.7	72.1	62.7	63.5	54.4	62.1	60.5	71.4	70.2	105.8	112.8	105.3
West Sussex Chalk	104.6	73.7	59.5	59.1	54.4	59.4	60.9	73.0	74.4	108.8	114.8	113.2
East Sussex Chalk	96.4	66.9	53.8	49.9	51.2	55.6	57.3	67.6	65.3	101.2	110.6	106.9
Isle of Wight	93.5	66.9	55.4	52.6	47.9	50.6	47.8	59.7	65.9	102.2	107.4	105.6
Western Rother Greensand	110.6	77.5	61.9	64.1	56.4	59.6	57.9	73.1	73.7	111.7	118.1	115.1
Hampshire Tertiaries	95.4	66.7	58.1	57.8	49.8	56.3	51.2	64.7	65.2	97.3	105.1	99.4
Lymington	96.7	67.4	59.6	58.2	50.1	54.5	51.2	62.9	66.6	100.1	109.5	105.3
Sussex Coast	86.8	59.1	48.5	49.6	45.3	50.6	48.8	59.3	59.9	89.3	95.3	93.3
Arun	96.8	67.1	54.7	55.3	53.2	53.3	54.7	64.6	65.8	97.7	103.4	98.9
Adur	94.7	65.6	52.7	52.8	53.5	52.5	53.8	65.1	63.5	99.4	102.9	100.2
Ouse	97.7	67.7	53.9	51.2	53.4	54.9	57.5	67.4	64.7	104.6	105.9	105.4
Cuckmere	94.4	65.8	51.0	49.0	50.5	55.8	56.8	68.7	65.4	101.9	106.8	105.5
Pevensey Levels	89.5	62.7	49.5	47.6	48.1	51.8	56.3	64.6	62.9	96.3	103.0	102.9
SSD Average	96.8	67.7	56.9	56.5	52.0	56.0	55.3	66.0	66.2	100.5	106.6	102.4