

Monthly water situation report: Solent and South Downs Area

Summary - April 2026

Solent and South Downs (SSD) had below average rainfall in April, receiving 17% (9.4mm) of long term average (LTA) of 56.5mm. Monthly mean river flows for April ranged from notably low to above normal across SSD. End of month groundwater levels for April ranged from below normal to notably high. Soils across SSD ended the month drier than the LTA for April. End of month reservoir stocks were above average at Ardingly Reservoir (Ouse) and were below average at Arlington Reservoir (Cuckmere).

1.1 Rainfall

SSD had below average rainfall in April receiving only 17% (9.4mm) of LTA (56.5mm). Monthly total rainfall was within the notably low range for hydrological areas units in Hampshire, Isle of Wight, and West Sussex. Areal units in East Sussex received rainfall in the exceptionally low range.

The lowest monthly total rainfall was in the Pevensey Levels areal unit with 3mm, 6% of LTA (47.6mm). Exceptionally low rainfall was also received in the Cuckmere (7%, 3.5mm), Ouse (10%, 5mm) and Adur (10%, 7mm) areal units. Lymington areal unit received the highest monthly rainfall with 25% (14mm) of LTA (58.2mm). This was followed closely by the East Hampshire Chalk and Western Rother Greensand areal units which received 24% and 23% of their LTAs respectively.

Most of the month was dry except for 1 to 4 April and 11 to 17 April. Rain gauges in East Sussex, and along the southeast coast recorded more than 25 dry days. There were 22 dry days on average in April in SSD. The highest daily rainfall total, 9.0mm, was recorded on 11 April, at Cowes WTW RG (Isle of Wight).

April rainfall totals were the fourth lowest on record for the Cuckmere areal unit, and fifth lowest for the Pevensey Levels. In the East Sussex Chalk and Ouse areal units the rainfall totals were the sixth and seventh lowest on record, respectively. The March to April 2-month period has been the fourth driest on record for the Pevensey Levels areal unit and the sixth driest for the Cuckmere areal unit.

In contrast, the January to April 4-month period has been the seventh wettest on record for SSD as a whole. The 4-month totals were also the seventh highest on record for East Hampshire Chalk, Isle of Wight, Western Rother Greensand, Hampshire Tertiaries and Lymington areal units.

All these statistics are based on records going back to 1871.

1.2 Soil moisture deficit and recharge

Soil moisture deficits (SMDs) are greater than LTA for April. Soils across SSD ended the month drier than average for April due to the lack of rainfall.

1.3 River flows

Monthly mean river flows for April ranged from notably low to above normal across SSD.

Flows were notably low on the:

- River Lymington at Brockenhurst
- River Arun at Alfoldean

Flows were below normal on the:

- River Adur at Sakeham
- River Ouse at Goldbridge
- River Cuckmere at Cowbeech

Flows were normal on the:

- River Test at Chilbolton
- River Test at Broadlands
- River Meon at Misingford
- River Wallington at North Fareham
- River Rother at Iping Mill
- River Medina at Blackwater

Flows were above normal on the:

- River Itchen at Allbrook and Highbridge

The notably low monthly mean flows for the River Arun at Alfoldean ranked the third lowest for April since 1970. The monthly mean flows for April ranked the eight lowest for the River Lymington at Brockenhurst since 1960.

1.4 Groundwater levels

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

Groundwater levels were below normal at:

- Carisbrooke Castle (Isle of Wight)

Groundwater levels were normal at:

- Lopcombe Corner (Test Chalk)
- Harting Common (Western Rother Greensand)
- Beeding Hill (West Sussex Chalk)
- Houndean Bottom (East Sussex Chalk)

Groundwater levels were above normal at:

- Clanville Gate (Test Chalk)
- Preston Candover (East Hampshire Chalk)
- Youngwoods Copse (Isle of Wight)
- Catherington (East Hampshire Chalk)
- Chilgrove (West Sussex Chalk)

Groundwater levels were notably high at:

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

The notably high groundwater level at Cornish Farm was the fourth highest on record for April since 1981.

1.5 Reservoir stocks

End of month reservoir stocks were above average at Ardingly Reservoir (Ouse) and were below average at Arlington Reservoir (Cuckmere). Ardingly Reservoir was at 99.5% of total capacity (LTA 98%) and Arlington Reservoir was at 91.2% of total capacity (LTA 97.2%).

1.6 Environmental impact

No new licence restrictions were triggered during the month. At the start of April there were two licence restrictions in force, which remained in force throughout the month:

- Cessation of abstraction for one licence on the River Ouse
- Restriction on abstraction rates for one licence on the River Meon

We issued no new flood alerts or flood warnings in April.

At the start of April there were 7 groundwater alerts in force, all issued during the previous months. However, throughout April all alerts were removed as the situation improved. At the end of April, no groundwater flood alerts remained in force.

County	No. of individual areas	Area where groundwater flood alerts were issued	Removal Date
Hampshire	2	<ul style="list-style-type: none">• Bishops Sutton• Deane and Ashe in North Hampshire	01/04/2026
Sussex	1	<ul style="list-style-type: none">• West Dean, Singleton, Charlton, East Dean and Chilgrove	02/04/2026
Hampshire	3	<ul style="list-style-type: none">• Twyford and Hensting• Hursley• Villages surrounding Andover	07/04/2026

Author: HydrologySSD@environment-agency.gov.uk

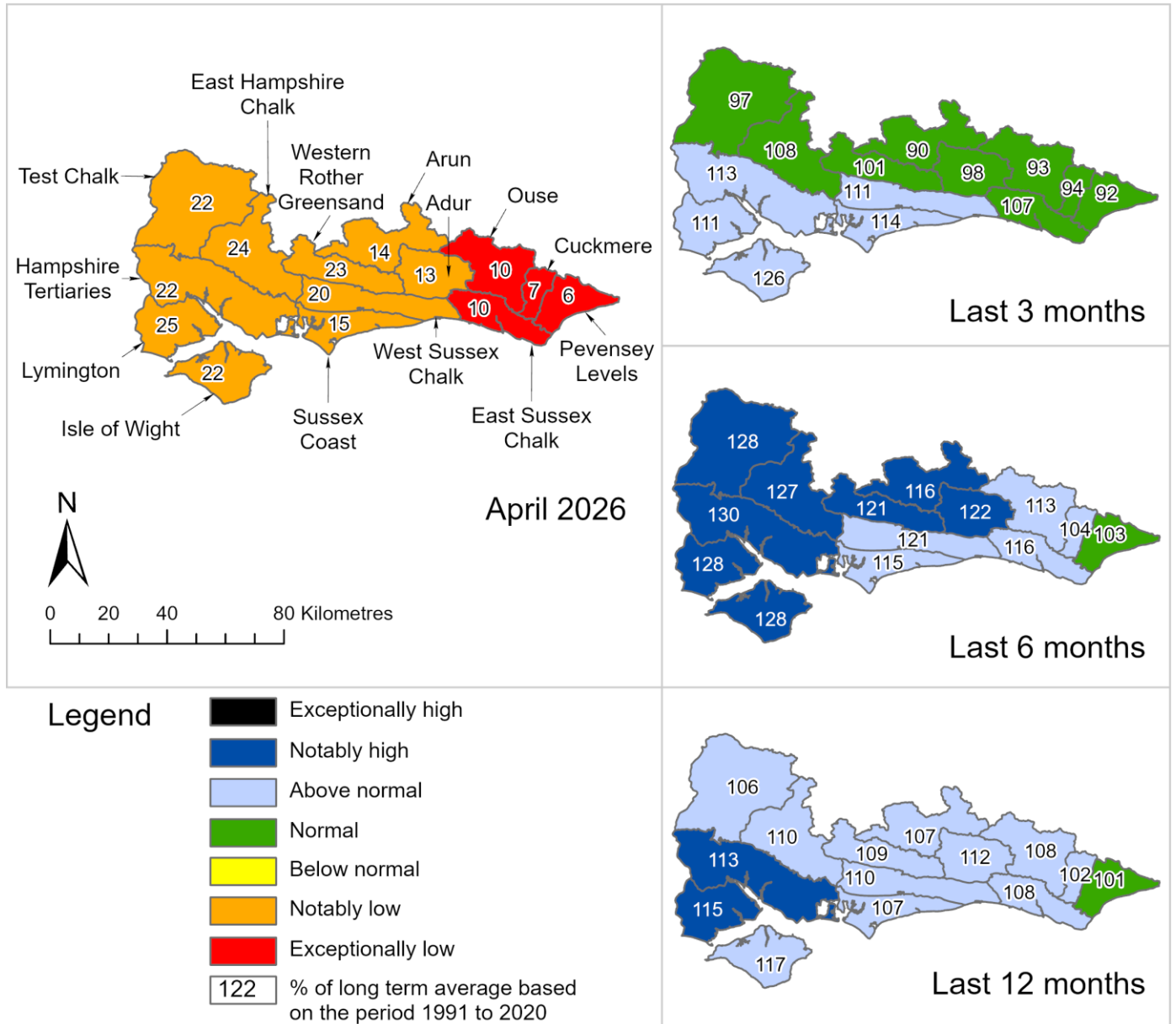
Contact Details: 03708 506506

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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 April 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.

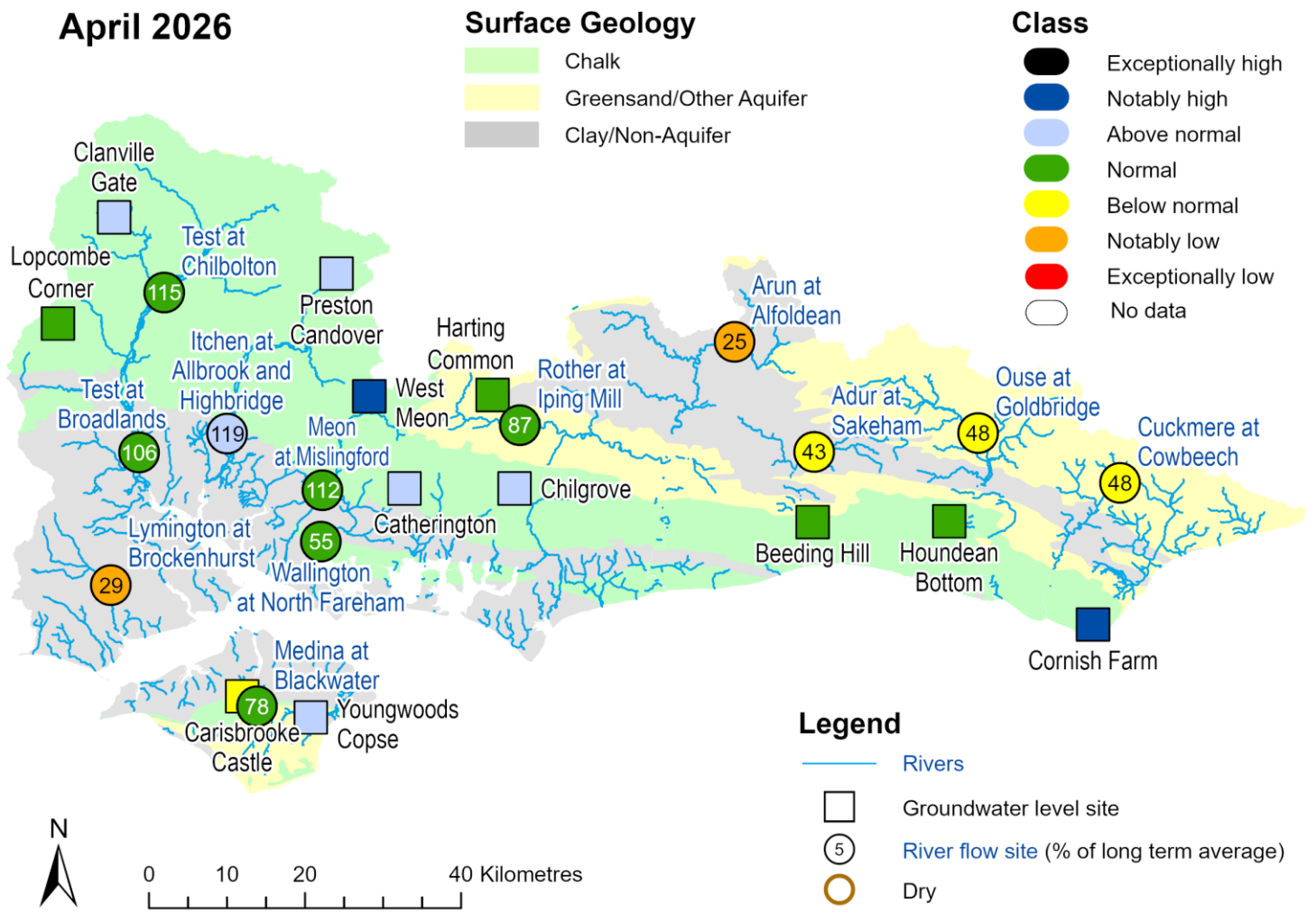


Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded 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 April 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic April monthly means. Table available in the appendices with detailed information.

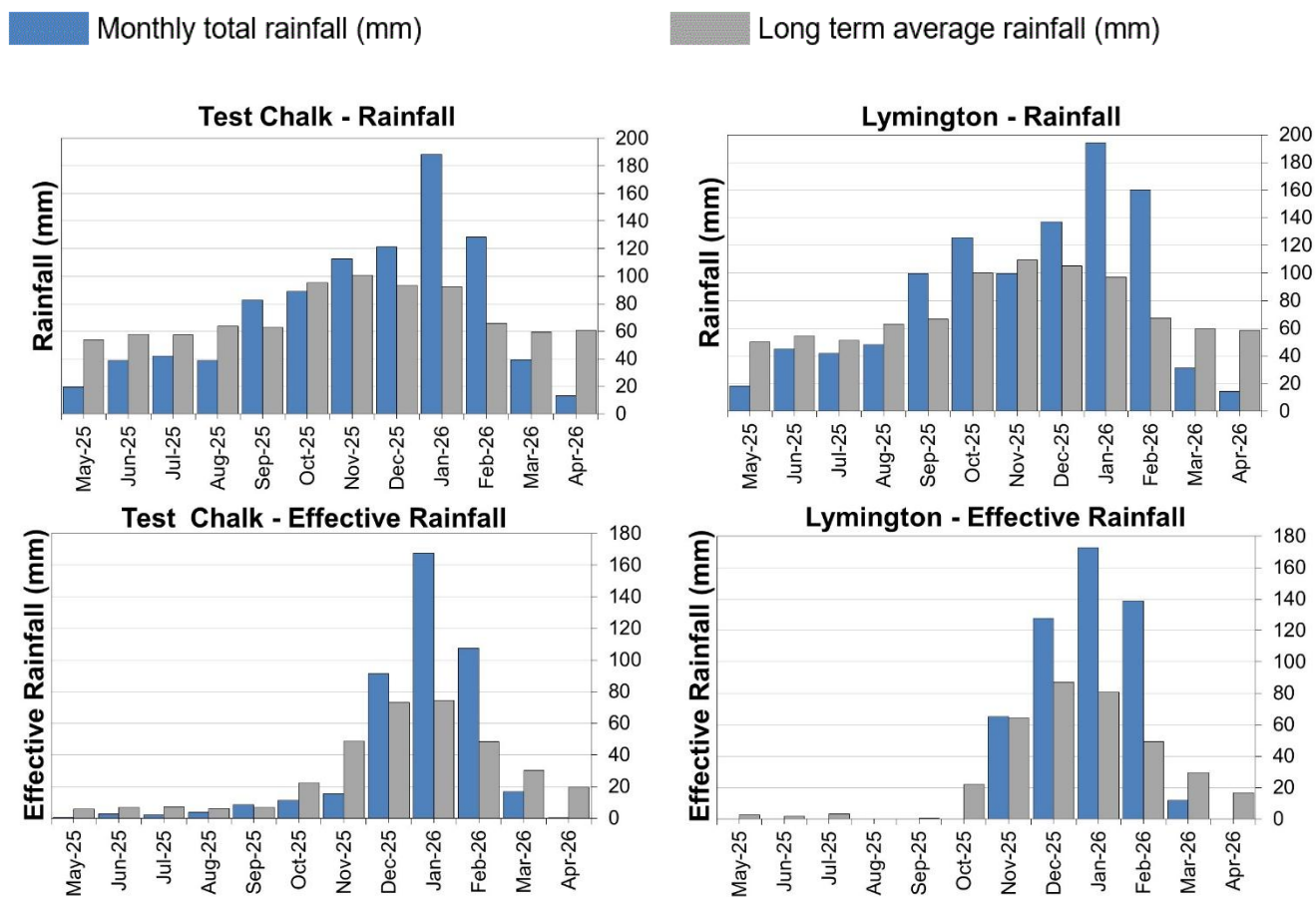


(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2026. Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2026.

4 West Hampshire

4.1 West Hampshire Rainfall and effective rainfall charts

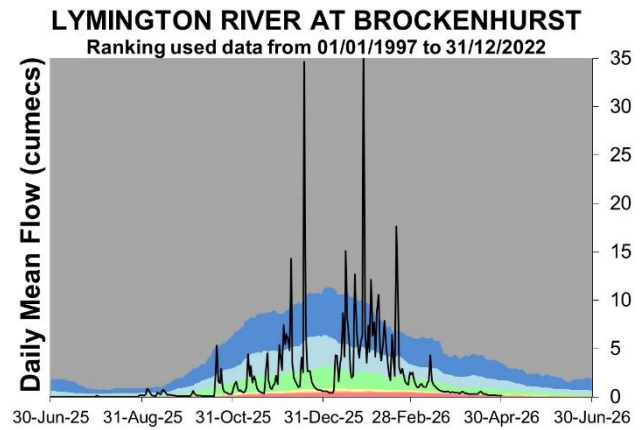
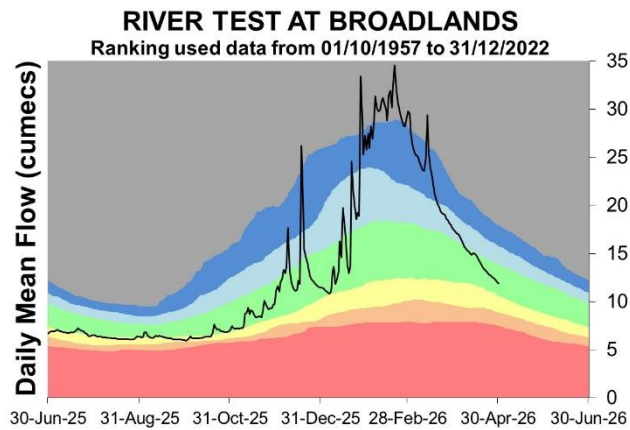
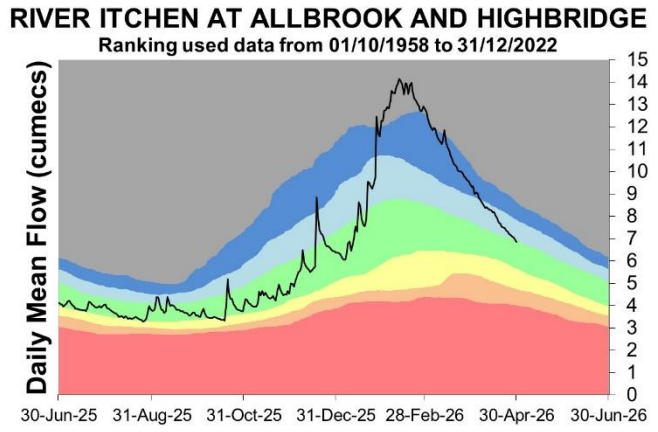
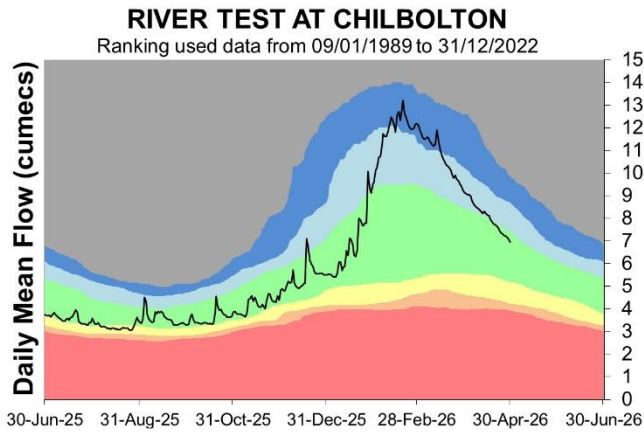
Figure 4.1: Monthly rainfall and effective rainfall totals for the past 12 months compared to the 1991 to 2020 long term average.



HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

4.2 West Hampshire River flow charts

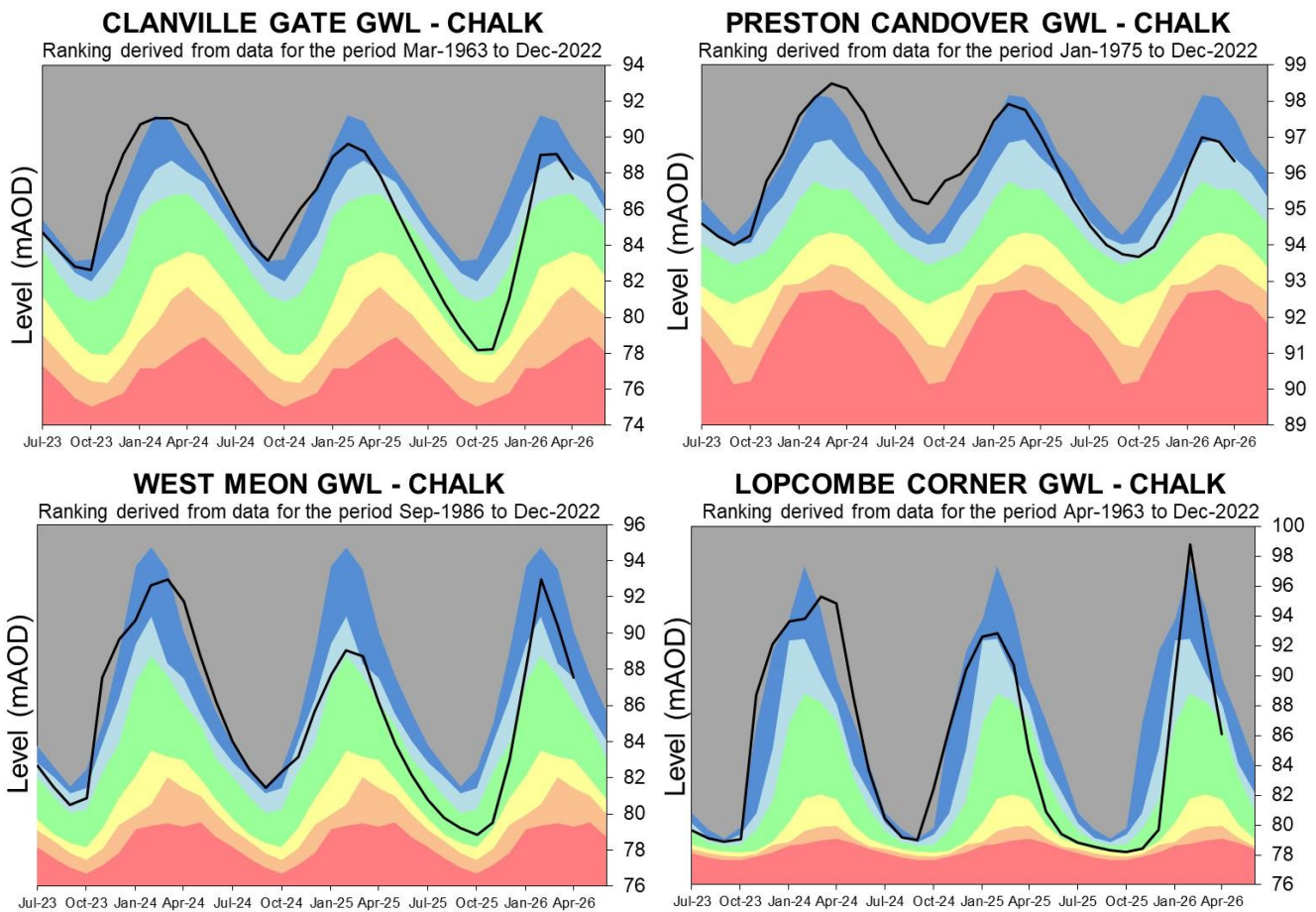
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



Source: Environment Agency, 2026.

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.

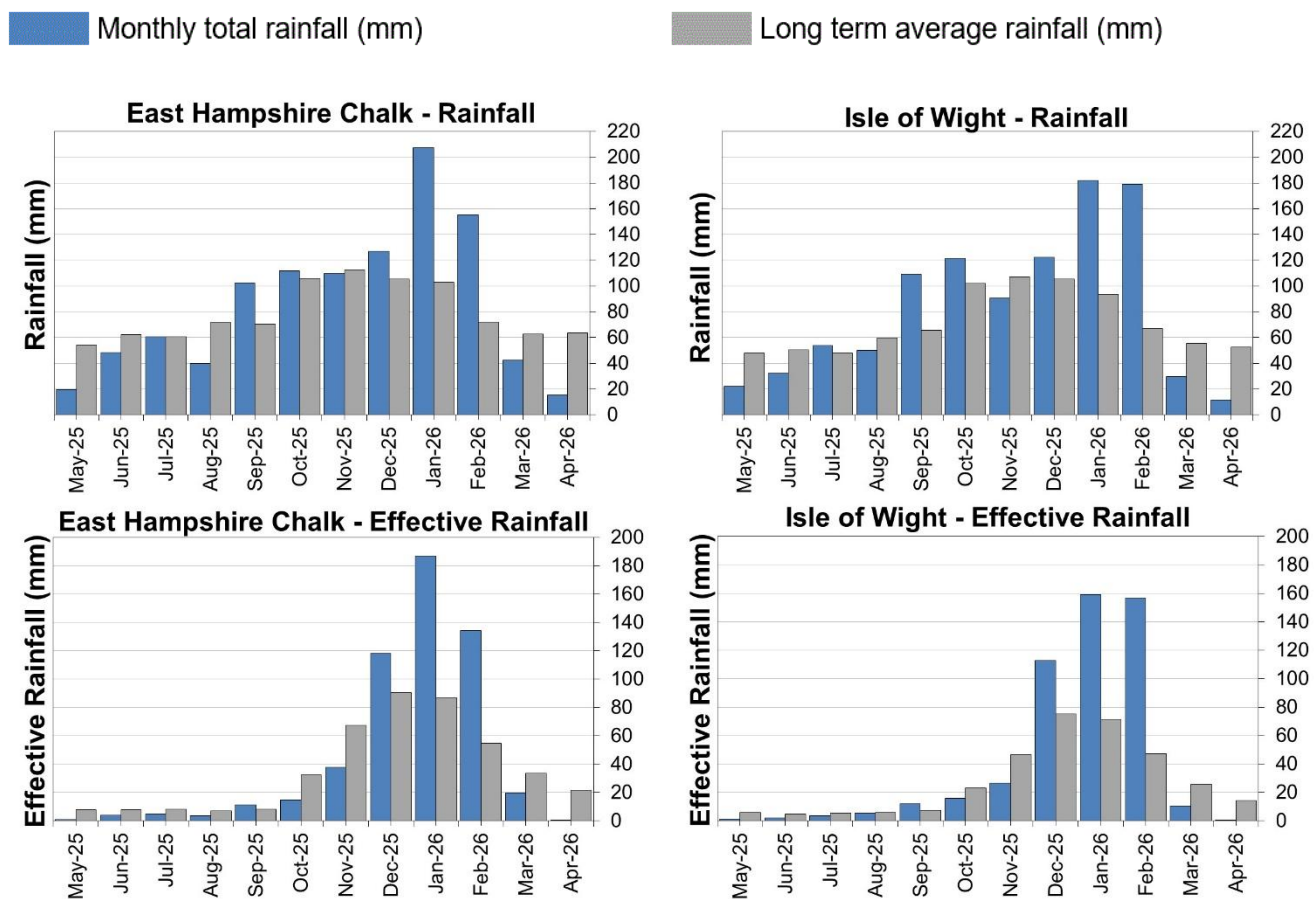


Source: Environment Agency, 2026.

5 East Hampshire and Isle of Wight

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

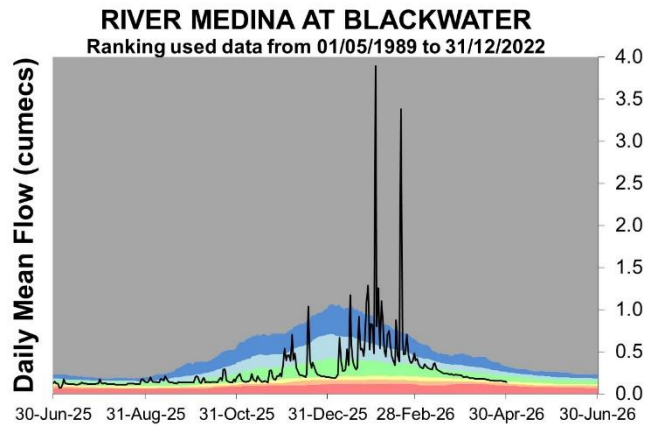
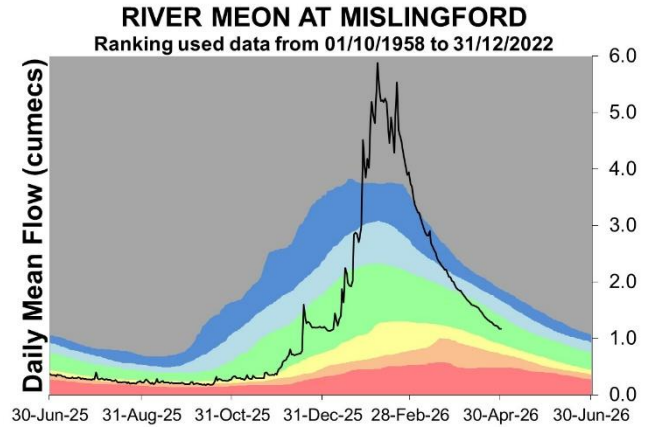
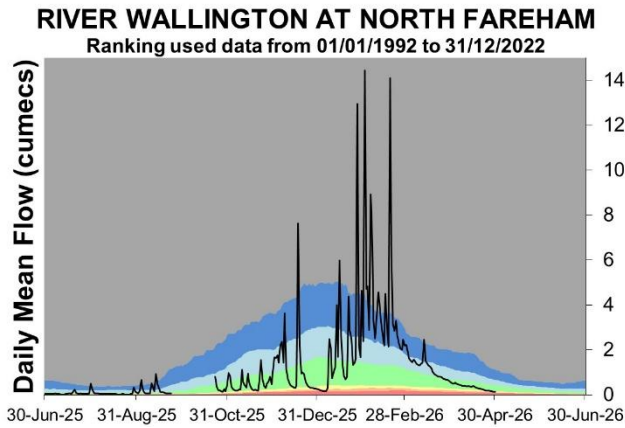
Figure 5.1: Monthly rainfall and effective rainfall totals for the past 12 months compared to the 1991 to 2020 long term average.



HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

5.2 East Hampshire and Isle of Wight River flow charts

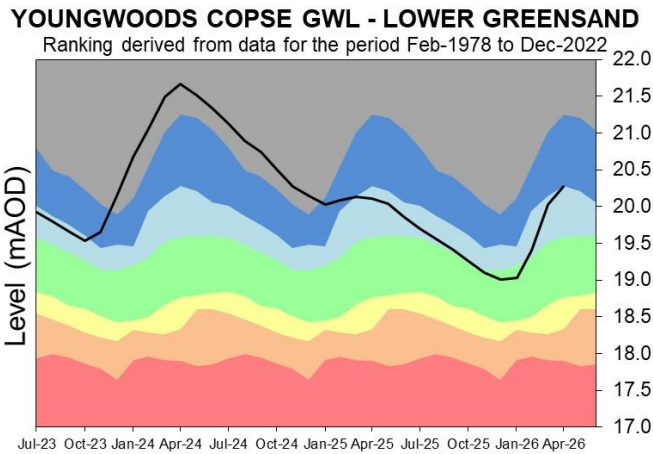
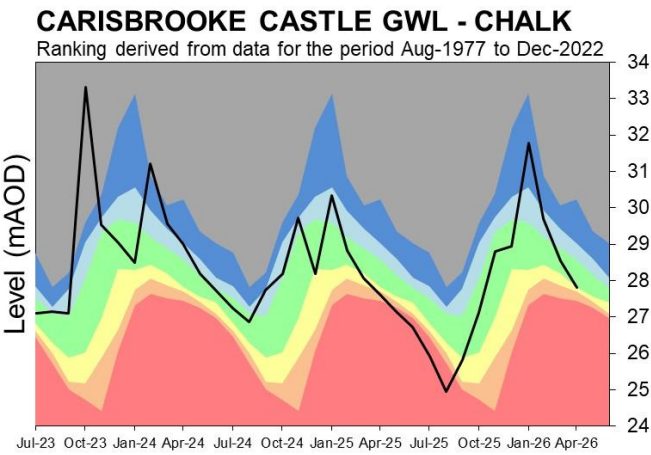
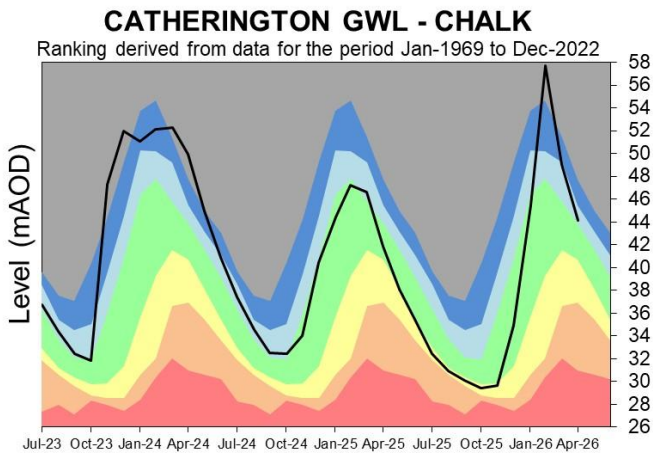
Figure 5.2 Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



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.

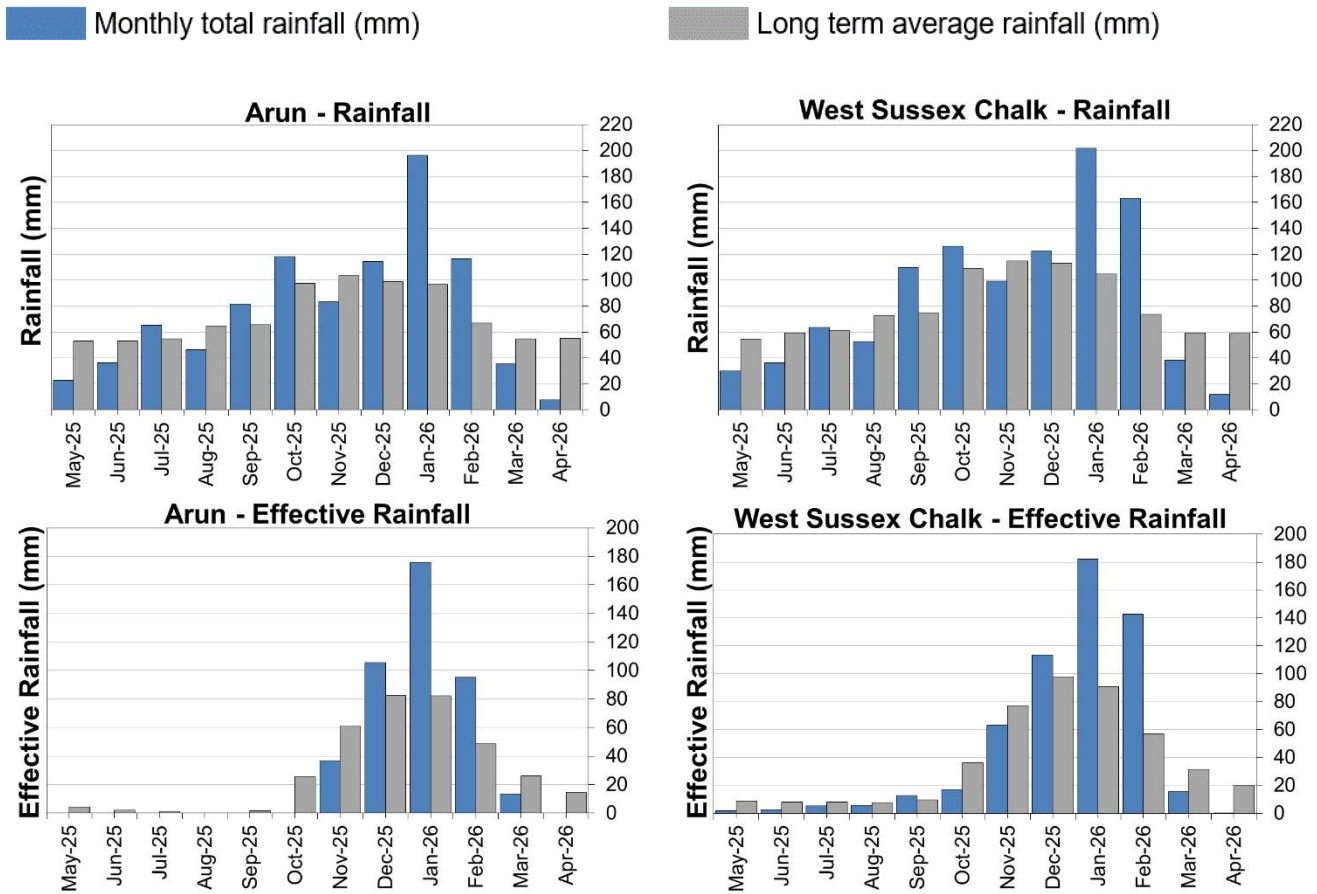


Source: Environment Agency, 2026.

6 West Sussex

6.1 West Sussex Rainfall and Effective Rainfall charts

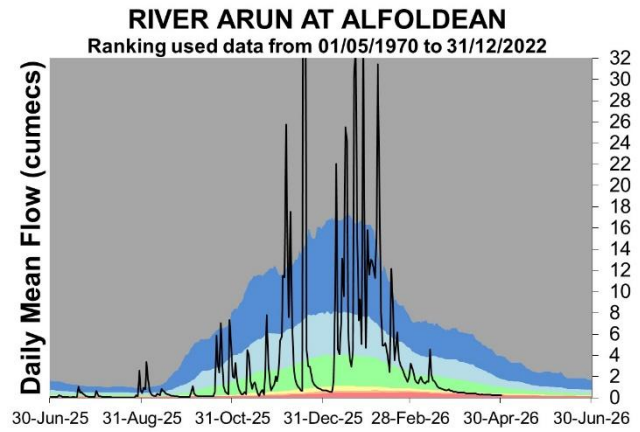
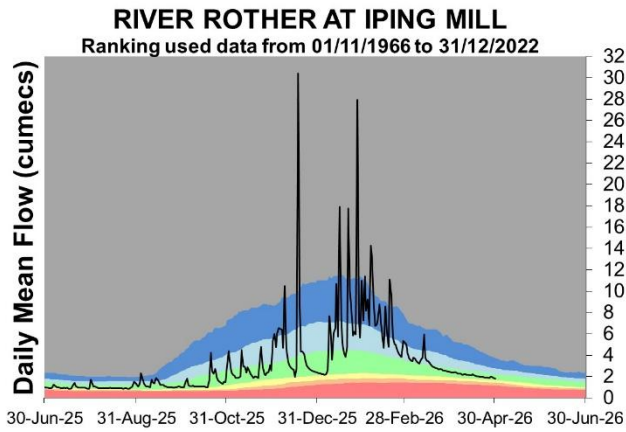
Figure 6.1: Monthly rainfall and effective rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average.



HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

6.2 West Sussex River flow charts

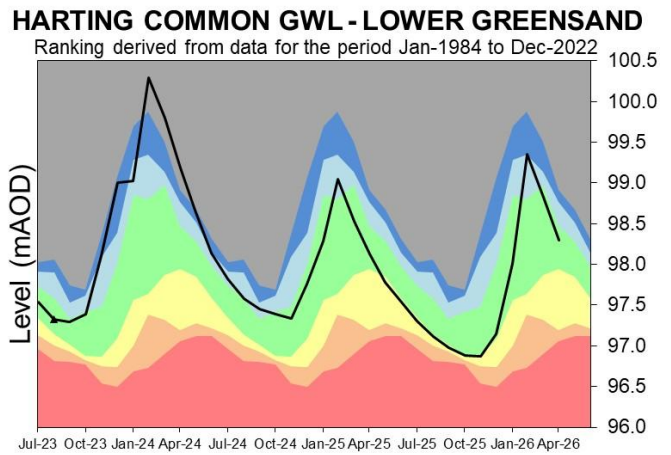
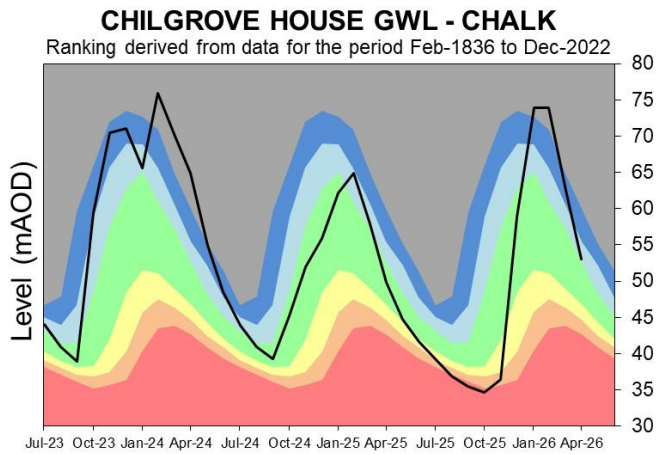
Figure 6.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



Source: Environment Agency, 2026.

6.3 West Sussex Groundwater level charts

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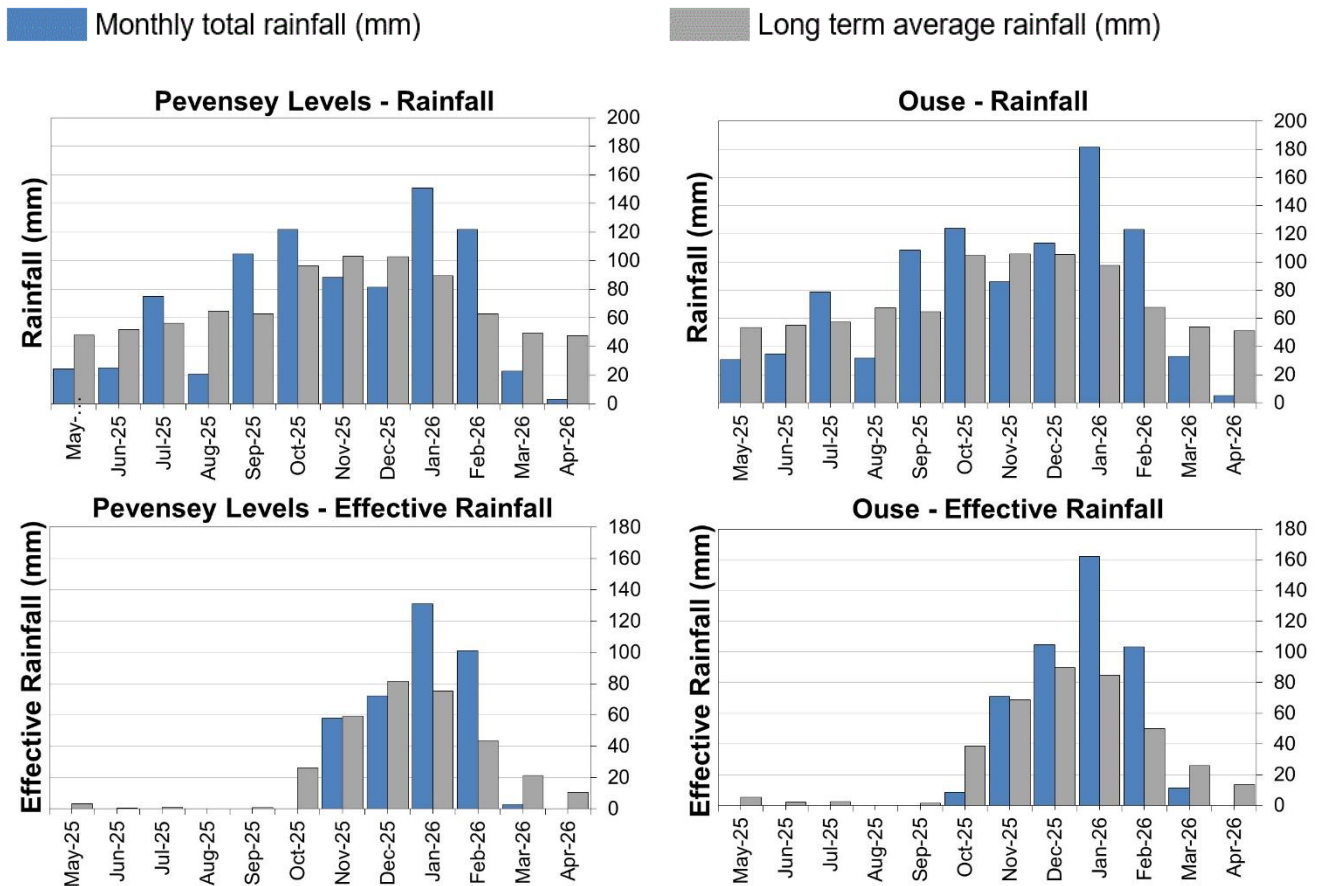


Source: Environment Agency, 2026.

7 East Sussex

7.1 East Sussex Rainfall and Effective Rainfall charts

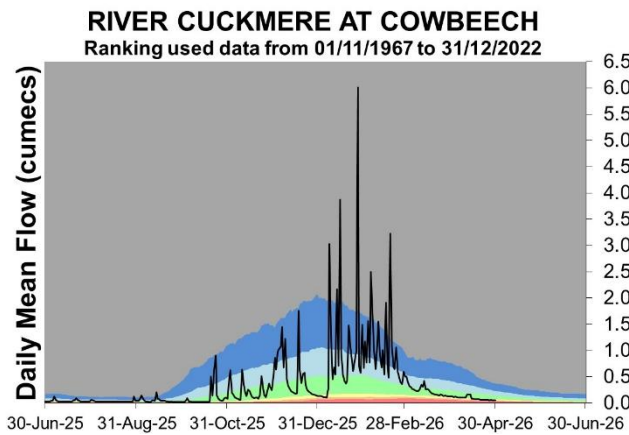
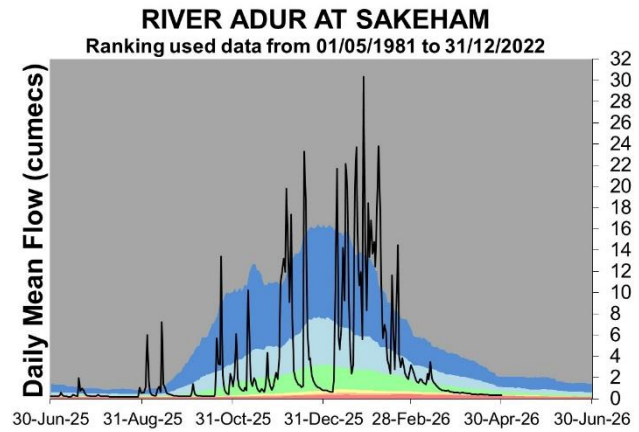
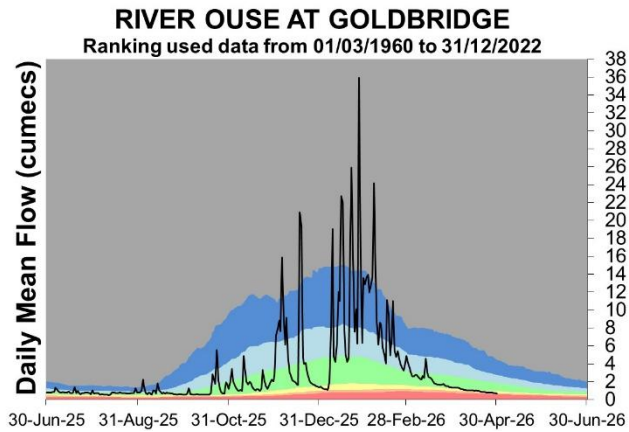
Figure 7.1: Monthly rainfall and effective rainfall totals for the past 12 months compared to the 1991 to 2020 long term average.



HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

7.2 East Sussex River flow charts

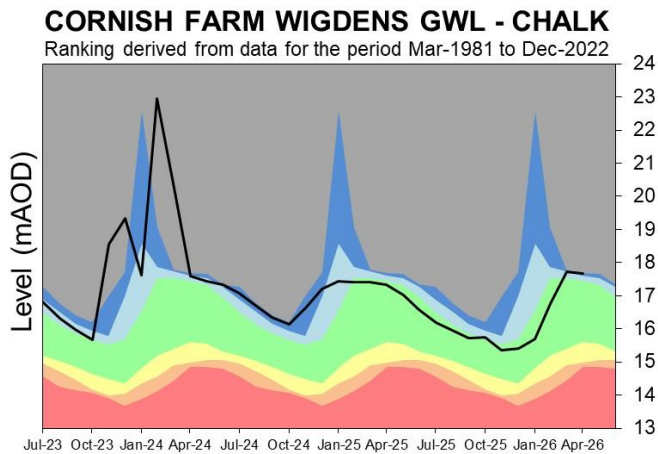
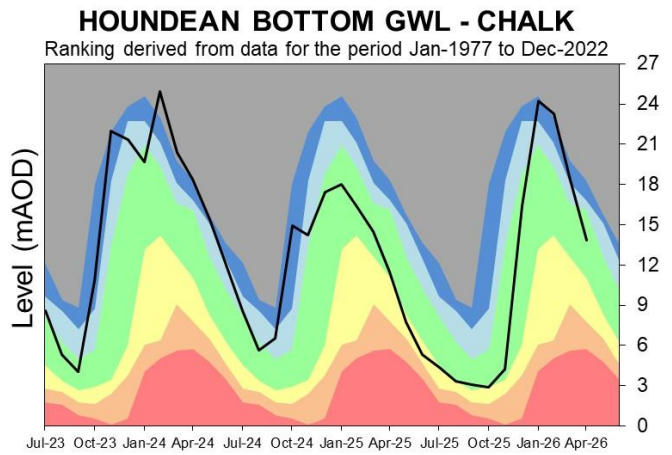
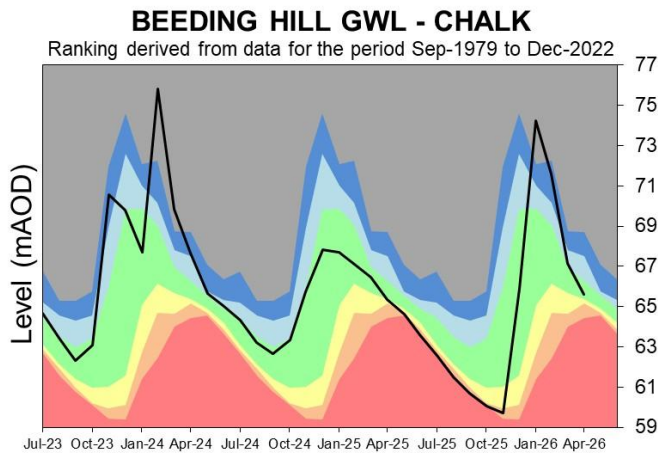
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Source: Environment Agency, 2026.

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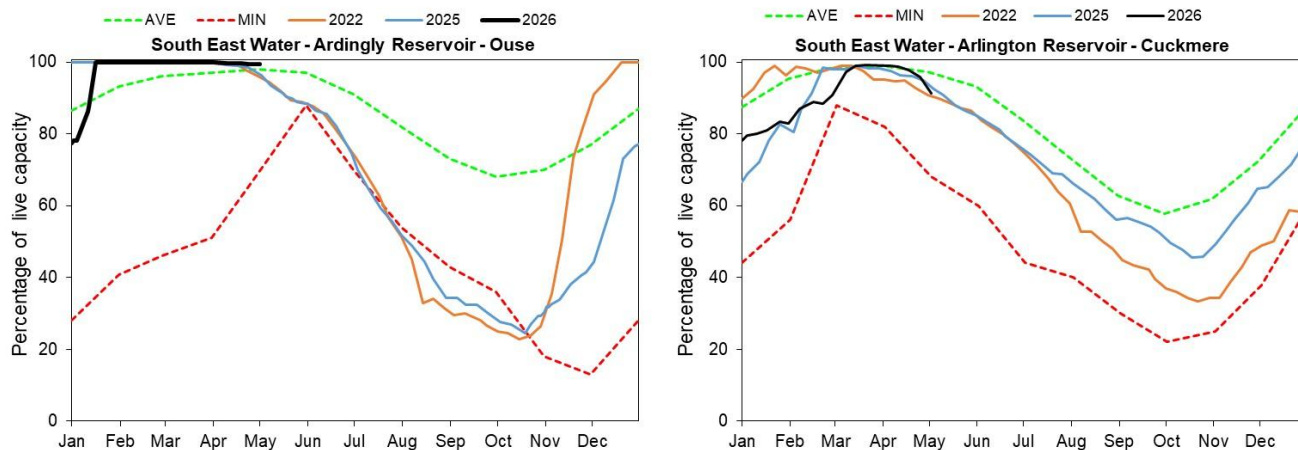
Figure 7.3: End of month groundwater levels at index groundwater level sites for major aquifers. 34 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.



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 1961 to 1990. 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

(Source: Met Office. Crown copyright, 2026).

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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 (mm) 30 day Total	Rainfall April as %LTA	Effective Rainfall (mm) 30 day Total	Effective Rainfall April as %LTA	Soil Moisture Deficit (SMD) Day 30	SMD End of April LTA
Test Chalk	13.2	22%	0.3	1%	69	26
East Hampshire Chalk	15.3	24%	0.3	2%	66	25
West Sussex Chalk	11.5	19%	0.2	1%	69	25
East Sussex Chalk	5.2	10%	0.0	0%	75	27
Isle of Wight	11.3	21%	0.2	1%	77	29
Western Rother Greensand	14.4	23%	0.4	2%	67	25
Hampshire Tertiaries	13.0	23%	0.0	0%	76	27
Lymington	14.3	25%	0.0	0%	75	26
Sussex Coast	7.4	15%	0.0	0%	77	29
Arun	7.6	14%	0.0	0%	74	26
Adur	6.9	13%	0.0	0%	73	26
Ouse	5.1	10%	0.0	0%	74	25
Cuckmere	3.5	7%	0.0	0%	75	26
Pevensey Levels	2.9	6%	0.0	0%	77	27
SSD Average	9.4	17%	0.1	1%	73	26

10.2 Seasonal summary table of rainfall and effective rainfall

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

Hydrological Area	Seasonal Rainfall (mm) Total	Seasonal Rainfall as % LTA	Seasonal Effective Rainfall (mm) Total	Seasonal Effective Rainfall as % LTA
Test Chalk	13.2	22%	0.3	2%
East Hampshire Chalk	15.3	24%	0.3	1%
West Sussex Chalk	11.5	19%	0.2	1%
East Sussex Chalk	5.2	10%	0.0	0%
Isle of Wight	11.3	21%	0.2	1%
Western Rother Greensand	14.4	23%	0.4	2%
Hampshire Tertiaries	13.0	23%	0.0	0%
Lymington	14.3	25%	0.0	0%
Sussex Coast	7.4	15%	0.0	0%
Arun	7.6	14%	0.0	0%
Adur	6.9	13%	0.0	0%
Ouse	5.1	10%	0.0	0%
Cuckmere	3.5	7%	0.0	0%
Pevensey Levels	2.9	6%	0.0	0%
SSD Average	9.4	17%	0.1	1%

10.3 Rainfall banding table

Hydrological area	April 2026 band	February 2026 to April 2026 cumulative band	November 2025 to April 2026 cumulative band	May 2025 to April 2026 cumulative band
Test Chalk	Notably low	Normal	Notably high	Above normal
East Hampshire Chalk	Notably low	Normal	Notably high	Above normal
West Sussex Chalk	Notably low	Above normal	Above normal	Above normal
East Sussex Chalk	Exceptionally low	Normal	Above normal	Above normal
Isle of Wight	Notably low	Above normal	Notably high	Above normal
Western Rother Greensand	Notably low	Normal	Notably high	Above normal
Hampshire Tertiaries	Notably low	Above normal	Notably high	Notably high
Lymington	Notably low	Above normal	Notably high	Notably high
Sussex Coast	Notably low	Above normal	Above normal	Above normal
Arun	Notably low	Normal	Notably high	Above normal
Adur	Notably low	Normal	Notably high	Above normal
Ouse	Exceptionally low	Normal	Above normal	Above normal
Cuckmere	Exceptionally low	Normal	Above normal	Above normal
Pevensy Levels	Exceptionally low	Normal	Normal	Normal

10.4 River flows table

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

10.5 Groundwater table

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

10.6 Abstraction licence flow constraints

Number of flow constraints in force between 1 to 6 April 2026	Number of flow constraints in force between 7 to 13 April 2026	Number of flow constraints in force between 14 to 20 April 2026	Number of flow constraints in force between 21 to 27 April 2026	Number of flow constraints in force between 28 to 30 April 2026
2	2	2	2	2

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