

Monthly water situation report: Kent and South London Area

1 Summary - May 2026

The Kent, South London and East Sussex (KSLES) area received 46% of the long-term average (LTA) rainfall in May, with effective rainfall reaching just 10% of the LTA. Rainfall was predominantly below normal across the area, with notably low rainfall recorded in the west of the catchment. Soil Moisture Deficits (SMDs) increased to 99mm during May. Monthly mean river flows (MMFs) either decreased or stayed the same at key flow indicator sites in May. River flows varied across the area, ranging from exceptionally low to normal. Groundwater levels across KSLES continued to decline at all indicator sites. Reservoir storage levels also decreased during May, ranging from notably low to normal.

1.1 Rainfall

During May, the KSLES area received 46% of the LTA rainfall for the time of year, based on a whole-area average. Rainfall received in the KSLES area ranged from notably low in 4 out of 14 catchments in the west to below normal in the remaining 10 catchments in the east. The percentage of LTA rainfall received ranged from 37% in the South London catchment in the west of the patch, to 55% in the in the east. The highest daily rainfall total of 15.4mm was observed on day 18 of the month at Mayfield TBR in the Eastern Rother area.

In May, the top 5 highest rainfall days were 18, 13, 2, 6, and 14 May. There were 8 dry days in May that recorded rainfall less than 0.2mm. The middle of the month saw scattered showers, while the beginning and end of the month were predominantly dry. A heatwave occurred late in the month, with temperatures reaching above 30 degrees Celsius. Overall, March, April, and May were the fourth driest three-month period on record since records began in 1871.

1.2 Soil moisture deficit and recharge

SMDs across the KSLES area increased slightly during May, recording a deficit of 99mm, with the LTA being 64 millimetres. This reflects the exceptionally low rainfall experienced throughout the month. Effective rainfall recorded in May was 10% of the LTA.

Although soil moisture deficits increased during May, the rise was less pronounced than in April. The limited rainfall received during the month likely helped to slow the rate of soil drying very slightly, as reflected in the effective rainfall reaching 10% of the LTA, compared to negligible effective rainfall in April.

1.3 River flows

MMF's across the catchment are predominantly below normal to notably low, with several sites in the central and western areas, including the East Stour and South Willsborough, the Mole at Dorking and the Eden at Vexour/Penshurst, recording notably low flows. Exceptionally low flows are observed at the Ravensbourne at Catford. In parts of the north and east, sites such as the Darent at Hawley, Wandle at Connolly's Mill and Dour at crabble Mill show normal flows. This pattern reflects both geology and recent dry conditions, with reduced flows seen not only in clay catchments but also extending into Greensand and some chalk-fed rivers following the recent lack of rainfall.

1.4 Groundwater levels

Groundwater levels across the KSLES area have continued to fall steadily at all seven groundwater level sites. Levels across the catchment ranged from normal to above normal. Groundwater levels in the Chalk aquifer sites at Little Bucket remained above normal, while levels at Wolverton fell from above normal to the normal range this month. Chipstead, Sweeps Lane, Riddles Lane and Fleete Reservoir remained normal. In the Lower Greensand aquifer, levels at Riverhead remained in the normal range. The fall in groundwater levels is consistent with the lack of effective rainfall over the last three-month period and the SMDs registered by the end of May.

1.5 Reservoir stocks

In the month of May, all 5 reservoirs saw a decrease in water levels. By the end of May, the reservoirs held the following live storage capacities and LTA class:

Bewl –91% Normal

Darwell –65% Notably low

Bough Beech – 89% Normal

Powdermill – 71% Notably low

Weir Wood – 98% Normal

1.6 Environmental impact

Hands-off flow (HoF) restrictions were widespread across the Medway and Stour catchments, triggered in early and late April respectively, and persisted throughout May in line with flows. As flows declined further in late May, additional lower-threshold restrictions were triggered in the Medway catchment and remained in place for the rest of the month. Warnings were also issued to abstractors in the Rother catchment during the last week of May, indicating a risk of restrictions in the coming weeks.

There were no fluvial or groundwater flooding alerts or warnings issued during May.

Author: Groundwater and Hydrology Team, ksl.gwh@environment-agency.gov.uk

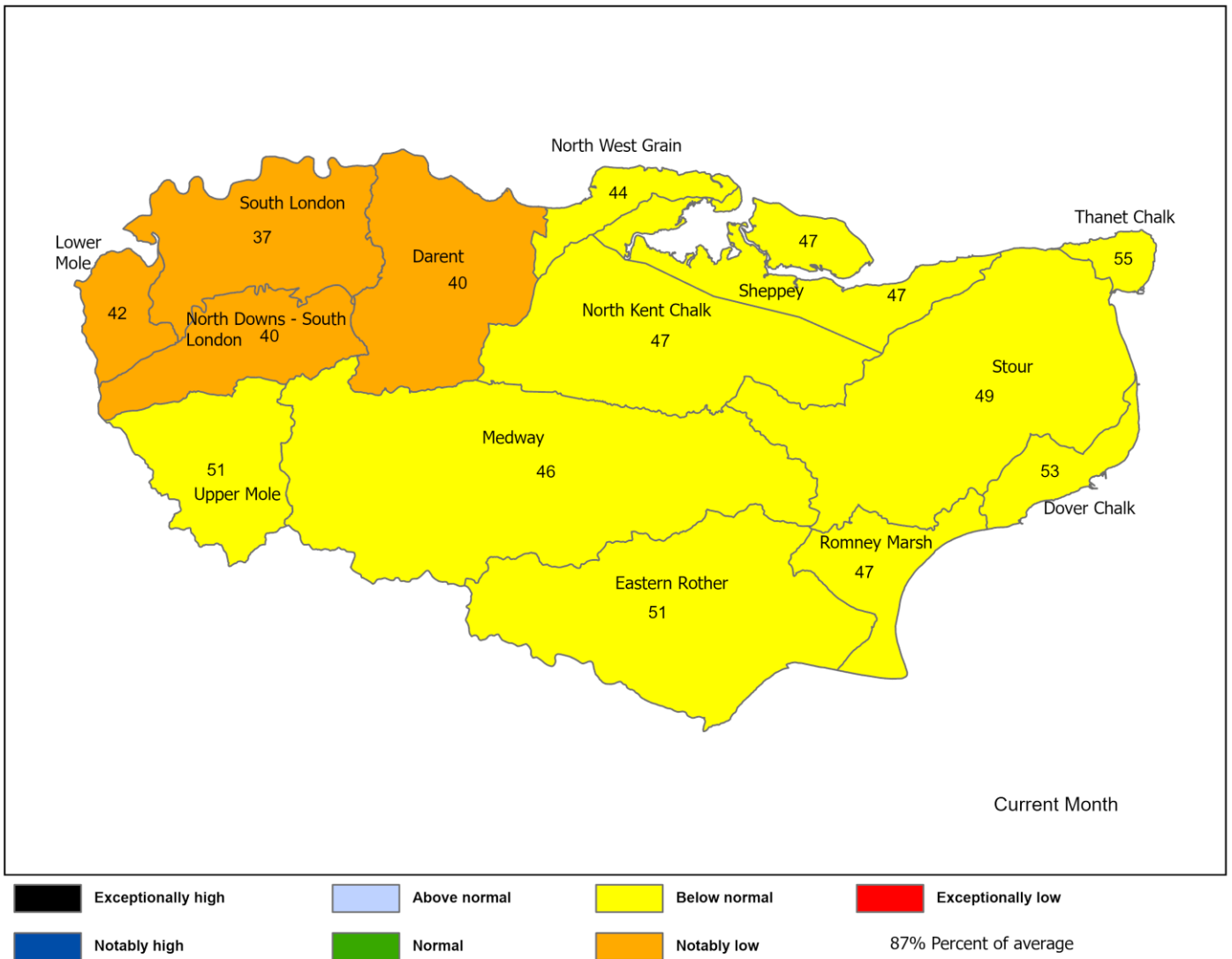
Contact Details: 03708 506 506

All data are provisional and may be subject to revision. The views expressed in this document are not necessarily those of the Environment Agency. Its officers, servants or agents accept no liability for any loss or damage arising from the interpretation or use of the information, or reliance upon views contained in this report.

2 Rainfall

2.1 Rainfall map one

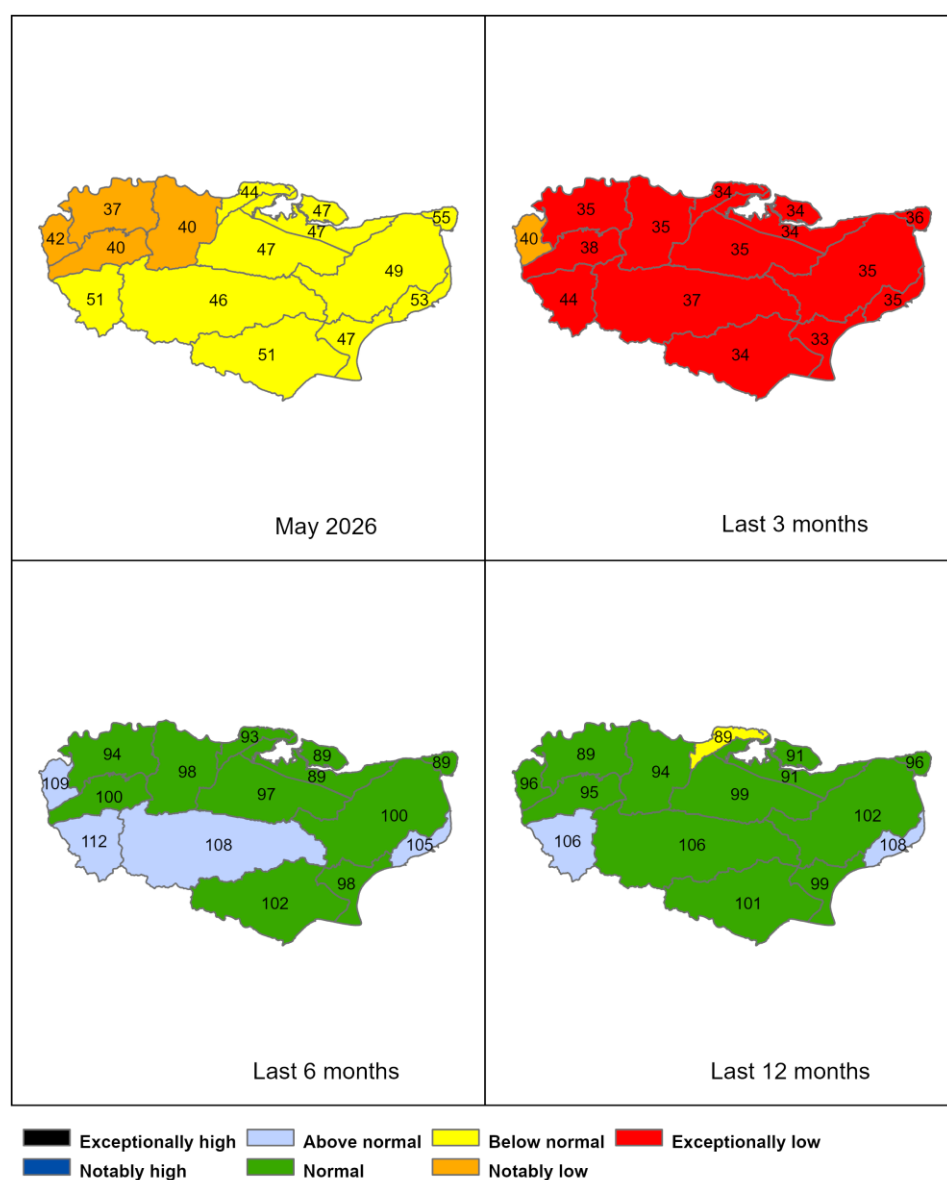
Figure 2.1: Total rainfall for hydrological areas across Kent and South London for the current month (up to 31 May 2026), classed relative of historic totals. The percentage of average uses the period of 1991 – 2020. Table available in the appendices with more detailed information.



HadUK data for October 2023 onwards, based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2026). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Includes material based on Ordnance Survey 1:50 000 maps with the permission of the controller of His Majesty's Stationery Office © Crown copyright. All rights reserved. Environment Agency, 100026380, 2026.

2.2 Rainfall map two

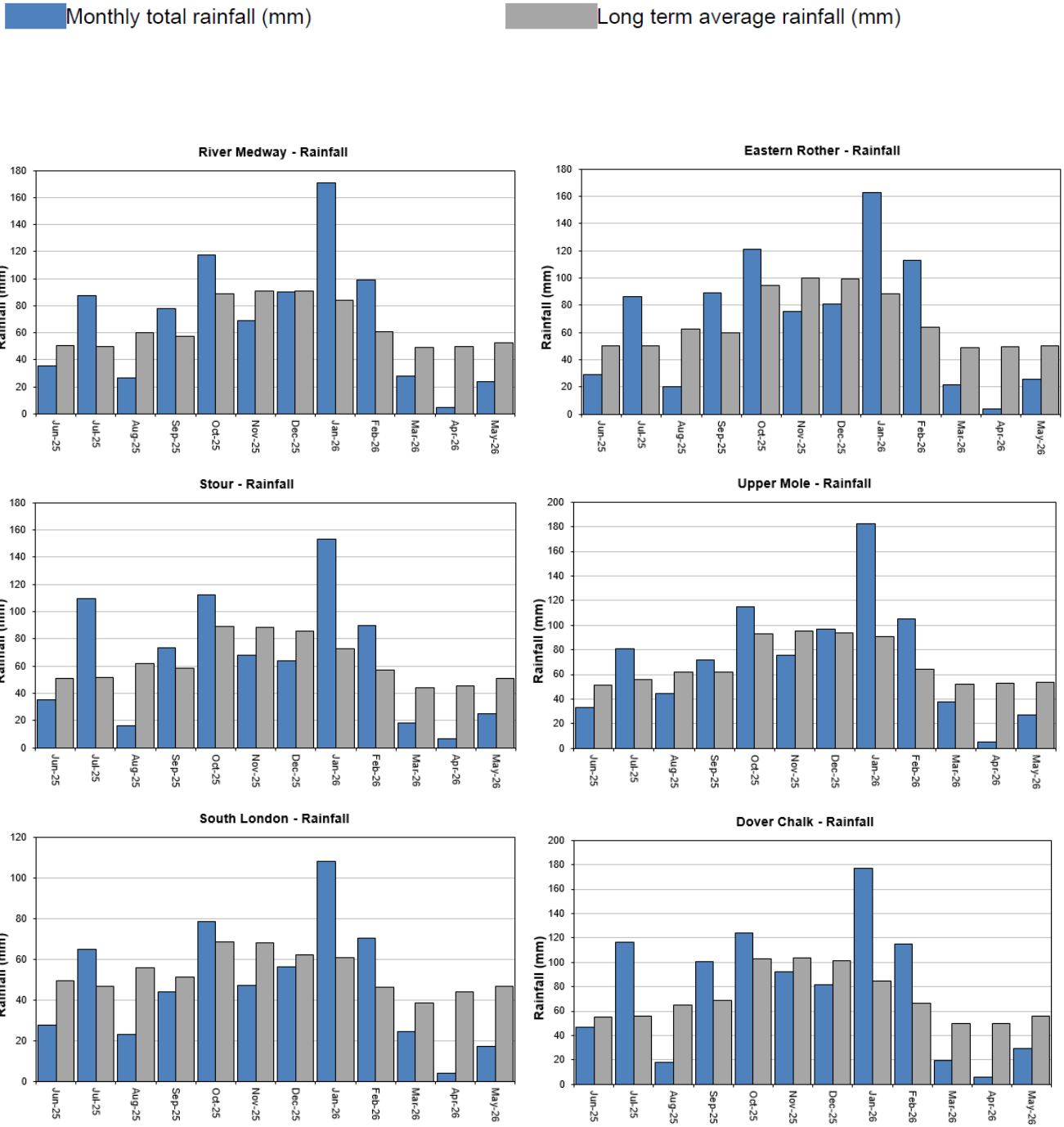
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 31 May 2026), the last 3 months, the last 6 months, and the last 12 months, , classed relative of historic totals. The percentage of average uses the period of 1991 – 2020. Table available in the appendices with detailed information.



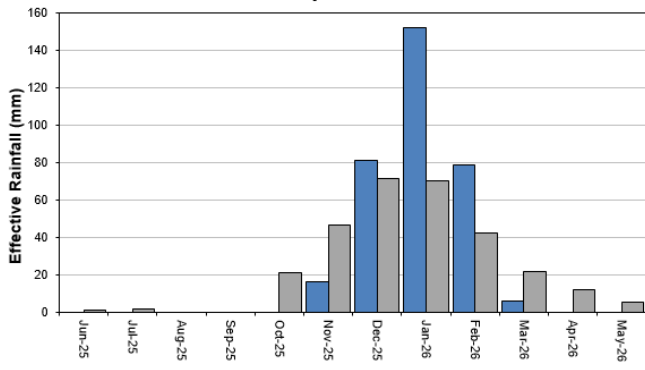
HadUK data for October 2023 onwards, based the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2026). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Includes material based on Ordnance Survey 1:50 000 maps with the permission of the controller of His Majesty’s Stationery Office © Crown copyright. All rights reserved. Environment Agency, 100026380, 2026.

2.3 Rainfall and effective rainfall charts

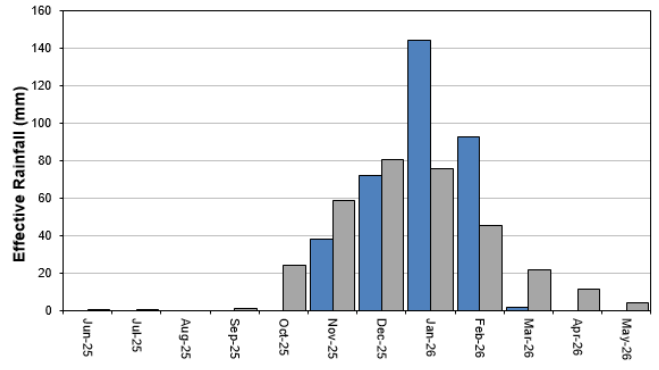
Figure 2.3: Monthly rainfall and effective rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average (LTA) for a selection of areal units. HadUK rainfall data. (Source: Met Office. Crown copyright, 2026). EA effective rainfall data (Source EA Soil Moisture Model).



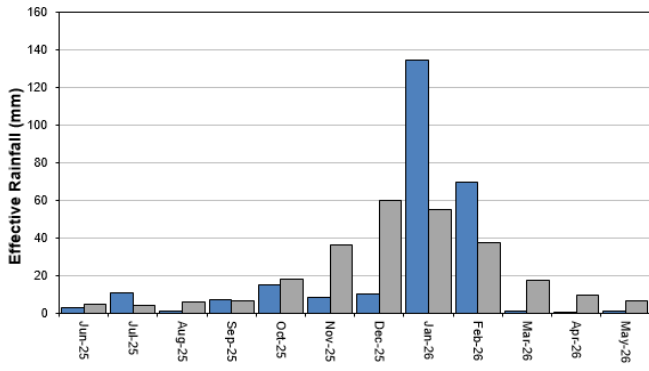
River Medway - Effective Rainfall



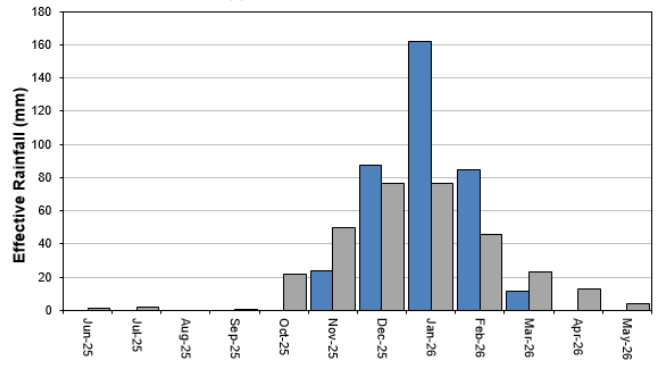
Eastern Rother - Effective Rainfall



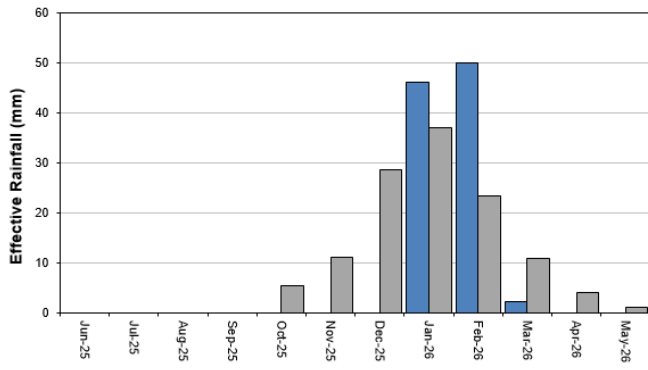
Stour - Effective Rainfall



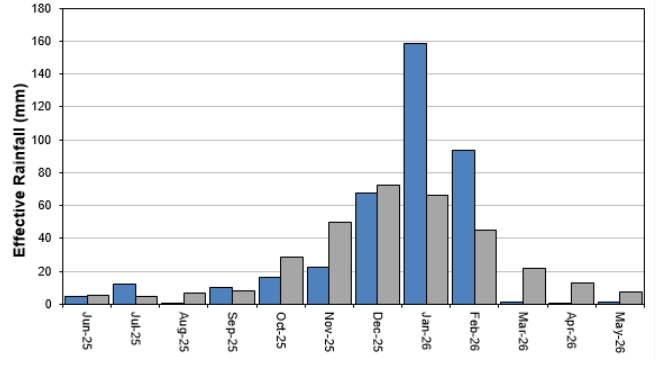
Upper Mole - Effective Rainfall



South London - Effective Rainfall



Dover Chalk - Effective Rainfall



2.4 Rainfall and effective rainfall table

Figure 2.4: This is a second estimate of areal rainfall and effective rainfall (percolation or runoff) for a selection of the hydrological areas across the Kent and South London area. 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 2.5.

Number	Hydrological Area	Rainfall (mm) 31 day Total	May % LTA	Effective Rainfall (mm) 31 day total	May % LTA
6230TH	North Downs - South London (W)	22	40%	1	12%
6505TH	Upper Mole	27	51%	0	0%
6508TH	South London	17	37%	0	0%
6706So	Darent	20	39%	1	12%
6707So	North Kent Chalk	24	46%	1	14%
6708So	Stour	25	49%	1	15%
6709So	Dover Chalk	30	52%	1	18%
6710So	Thanet Chalk	25	54%	1	14%
6809So	Medway	24	46%	0	0%
6810So	Eastern Rother	25	51%	0	0%

6811So	Romney Marsh	21	47%	0	0%
6812So	North West Grain	18	44%	0	0%
6813So	Sheppey	21	46%	0	0%
	Kent & South London Average	23	46%	0	10%

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

EA effective rainfall data (Source EA Soil Moisture Model)

2.5 Seasonal summary table of rainfall and effective rainfall

Figure 2.5: This is a seasonal estimate of areal rainfall and effective rainfall (percolation or runoff) for a selection of the hydrological areas across the Kent and South London area, expressed as totals and as a percentage of the LTA. 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.

Summer period 01/05/2026 to 31/05/2026

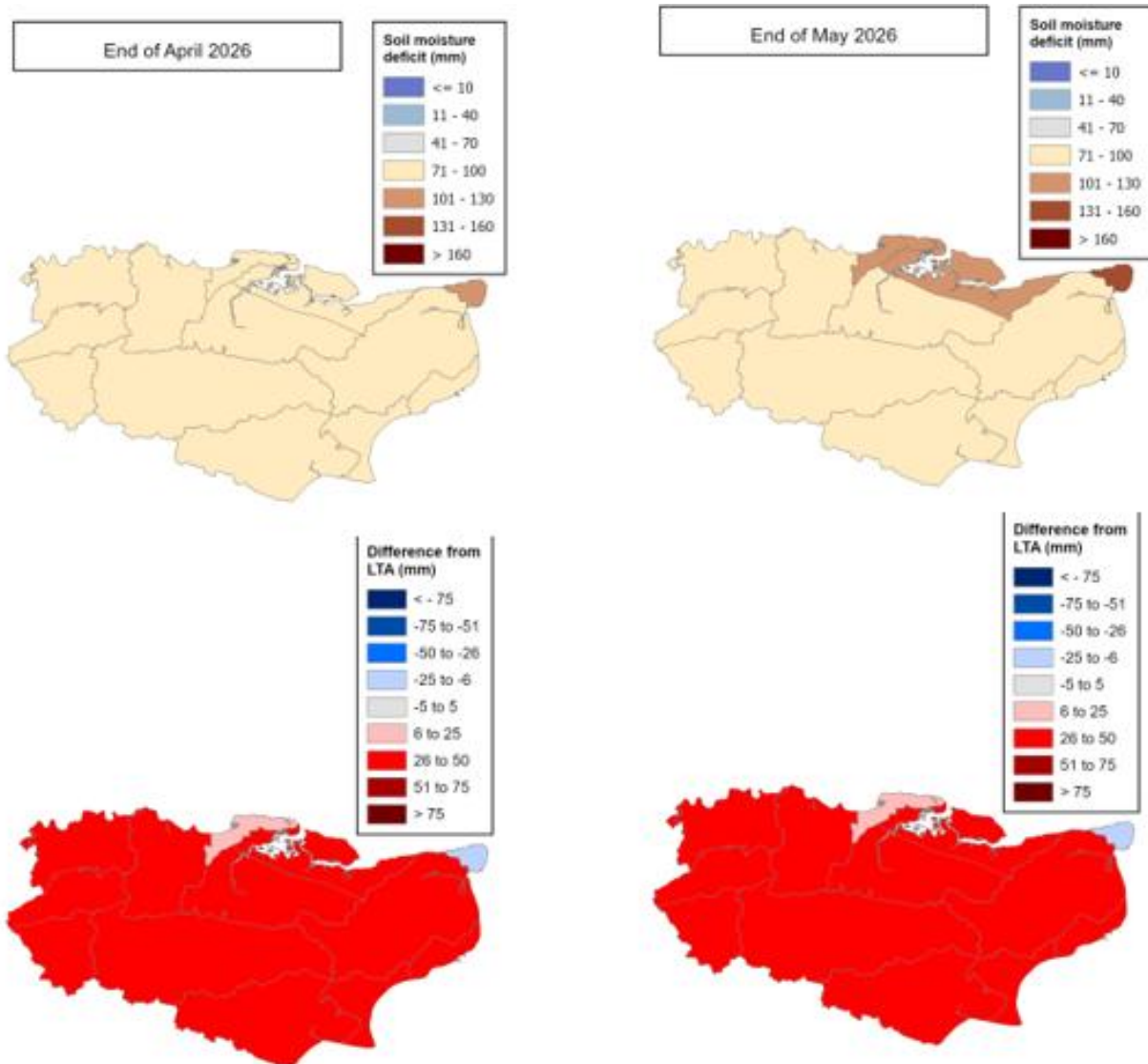
Number	Hydrological Area	Seasonal Rainfall (mm) Total	% LTA	Seasonal Effective Rainfall (mm) Total	% LTA
6230TH	North Downs - South London (W)	27	24%	1	4%
6505TH	Upper Mole	32	30%	0	0%
6508TH	South London	21	23%	0	0%
6706So	Darent	23	23%	1	4%
6707So	North Kent Chalk	29	29%	1	7%
6708So	Stour	31	32%	1	8%
6709So	Dover Chalk	36	34%	1	7%
6710So	Thanet Chalk	29	35%	1	7%
6809So	Medway	29	28%	0	0%
6810So	Eastern Rother	29	29%	0	0%

6811So	Romney Marsh	26	30%	0	0%
6812So	North West Grain	21	26%	0	0%
6813So	Sheppey	24	29%	0	0%
	Kent & South London Average	27	29%	0	4%

3 Soil moisture deficit

3.1 Soil moisture deficit map

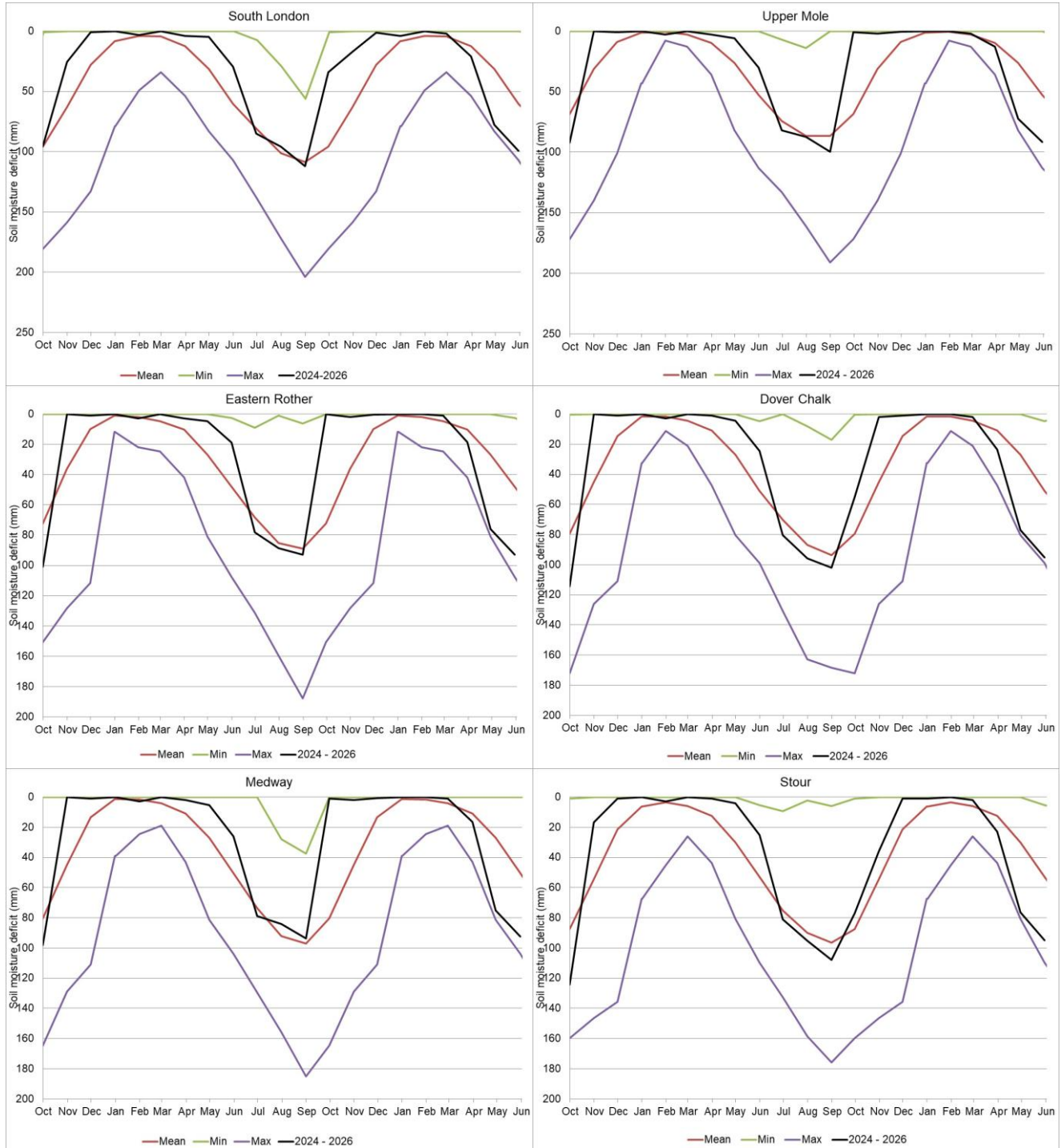
Figure 3.1: Soil moisture deficits for weeks ending 30 April (left panel) and 31 May 2026 (right panel). Top row shows actual soil moisture deficits (mm) and bottom row shows the difference (mm) of the actual from the 1991 to 2020 long term average soil moisture deficits. EA Soil Moisture Deficit data (Source EA Soil Moisture Model).



(Source: Met Office. Crown copyright, 2026). All rights reserved. Environment Agency, 100024198, 2026.

3.2 Soil moisture deficit charts

Figure 3.2: Latest soil moisture deficit compared to maximum, minimum, and 1991 to 2020 long term average. EA soil moisture deficit data (Source EA Soil Moisture Model).



(Source: Met Office. Crown copyright, 2026). All rights reserved. Environment Agency, 100024198, 2026

3.3 Soil moisture deficit table

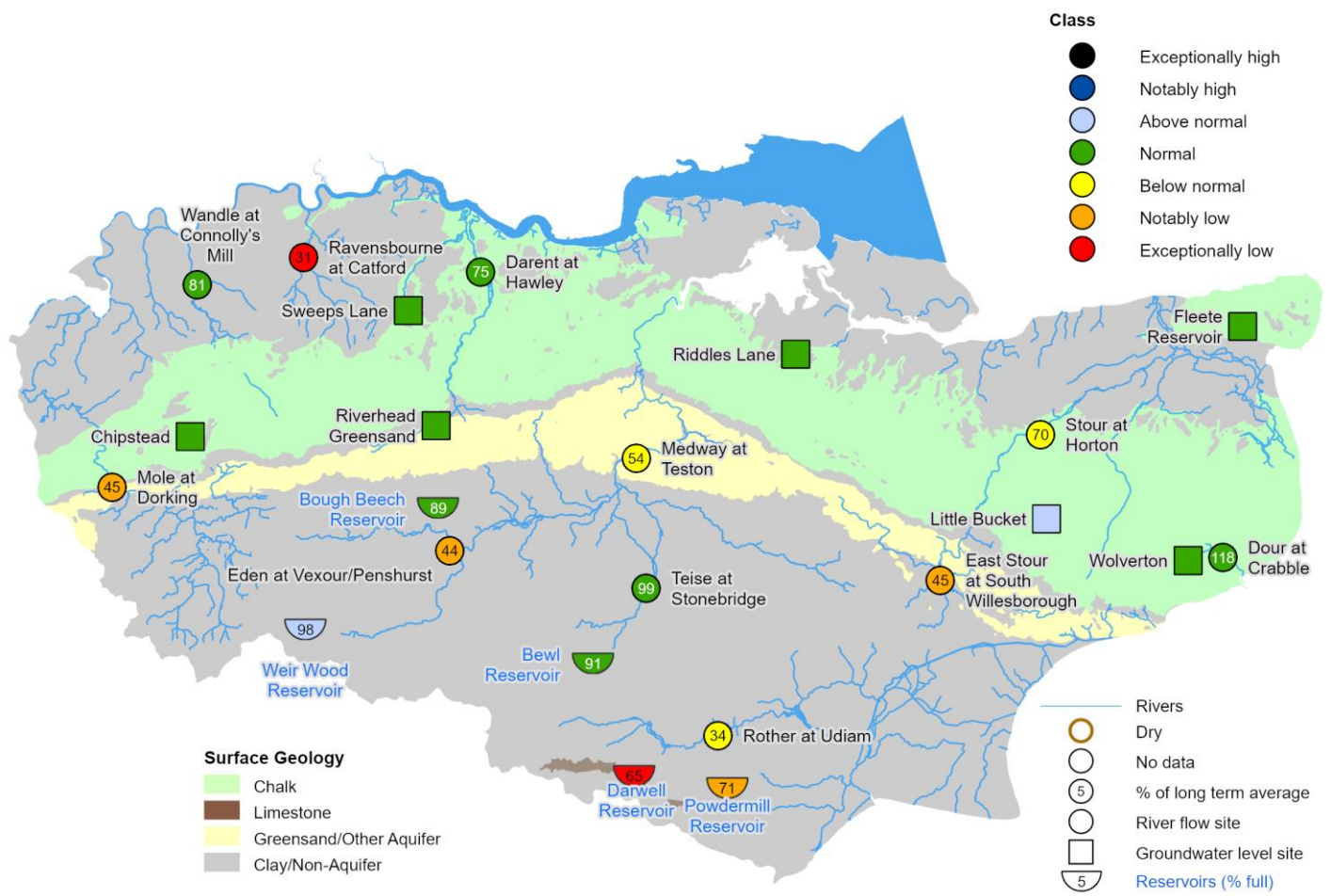
Figure 3.3: This is a second estimate of soil moisture deficit for the hydrological areas across the Kent and South London area. There may be significant variation within each area which must be considered when interpreting these data. EA soil moisture deficit data (Source EA Soil Moisture Model).

Number	Hydrological Area	SMD (mm) Day 31	End May LTA
6230TH	North Downs - South London (W)	94	50
6505TH	Upper Mole	91	49
6508TH	South London	99	62
6706So	Darent	97	56
6707So	North Kent Chalk	95	53
6708So	Stour	95	54
6709So	Dover Chalk	95	52
6710So	Thanet Chalk	132	149
6809So	Medway	92	49
6810So	Eastern Rother	93	50
6811So	Romney Marsh	97	55
6812So	North West Grain	102	83
6813So	Sheppey	102	72
	Kent & South London Average	99	64

4 River flows, groundwater levels and reservoir stocks

4.1 River flows, groundwater levels and reservoir stocks map

Figure 4.1: Monthly mean river flows* ** for indicator sites for May 2026, expressed as a percentage of the respective long term average (period 1992 – 2020) and classed relative to an analysis of historic May monthly means. End of month groundwater levels for indicator sites for May 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic May levels. Tables available in the appendices with detailed information. End of month levels for reservoirs for May 2026, expressed as percent full. (Source: Water Companies).



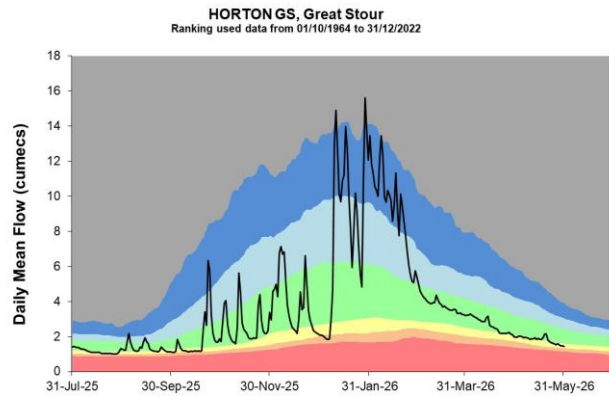
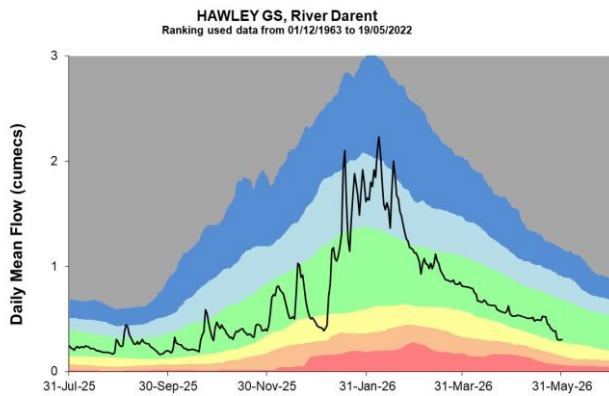
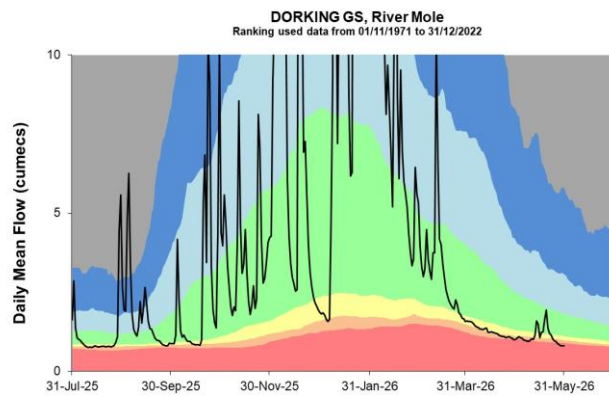
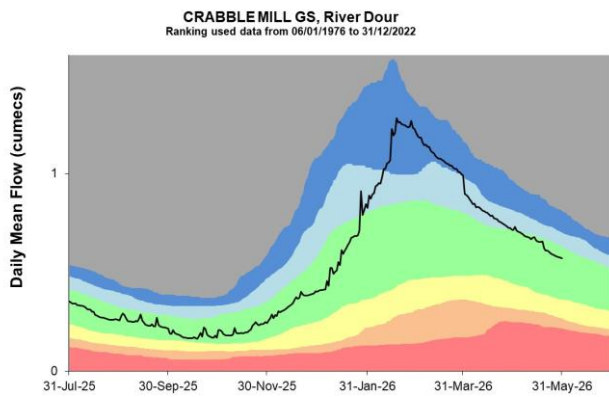
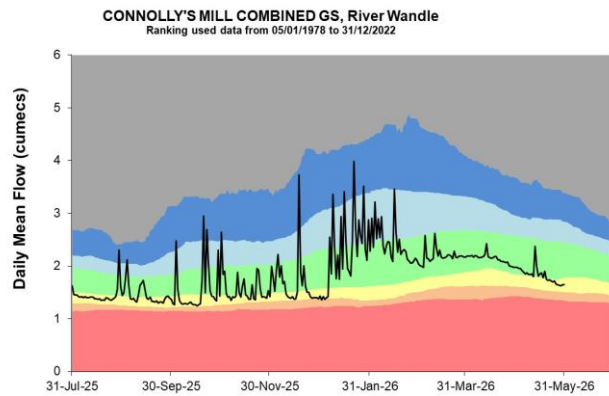
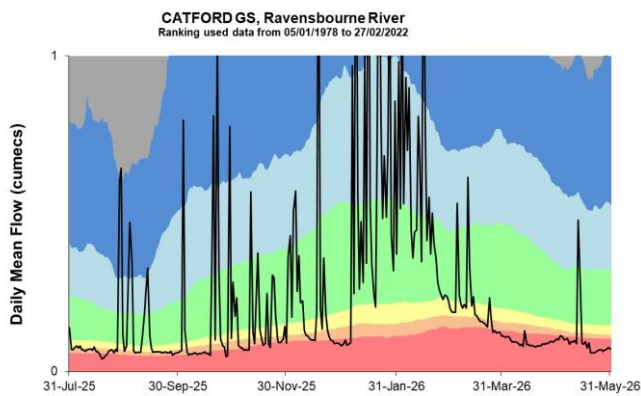
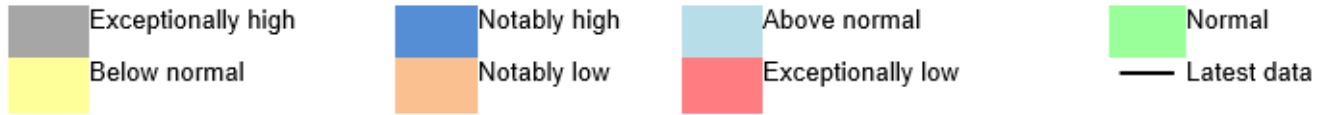
*Flows at gauging stations in the Medway catchment might be affected by upstream reservoir releases

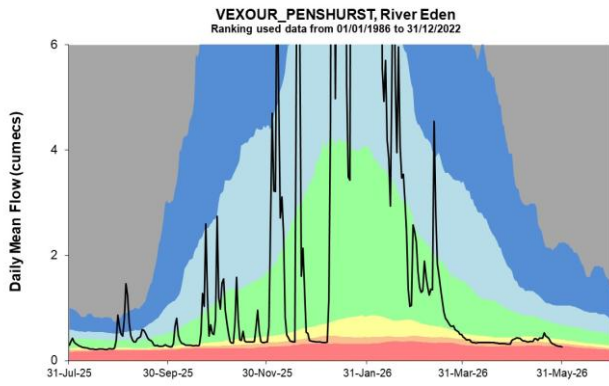
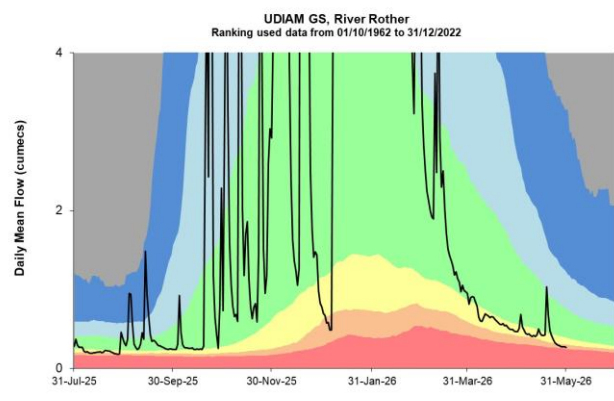
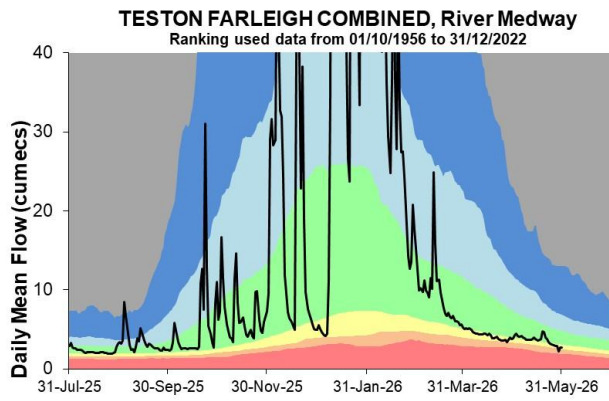
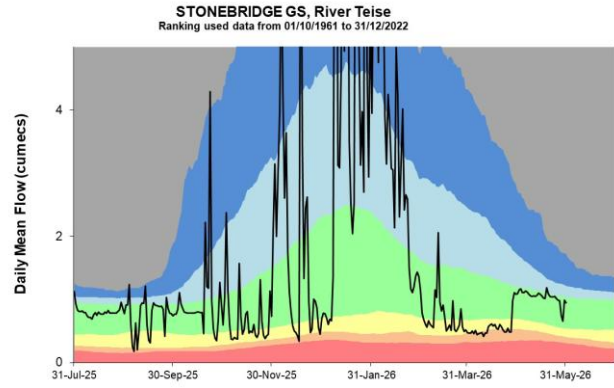
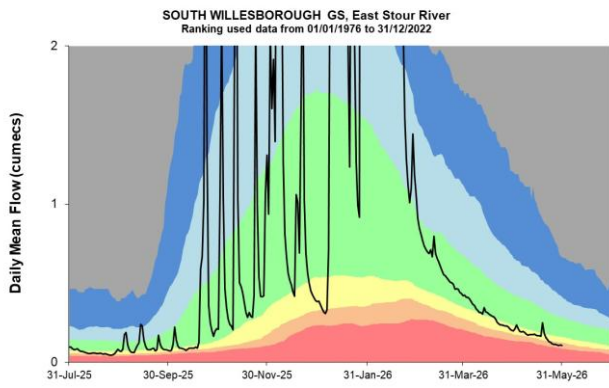
**Weirwood Reservoir is currently offline

Some features of this map are based on digital spatial data licensed from the UK Centre for Ecology and Hydrology, © UKCEH. Includes material based on Ordnance Survey 1:50 000 maps with the permission of the controller of His Majesty's Stationery Office © Crown copyright. Geological map reproduced with kind permission from UK Groundwater Forum, BGS © NERC. All rights reserved. Environment Agency, 100026380, 2026.

4.2 River flow charts

Figure 4.1: 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.



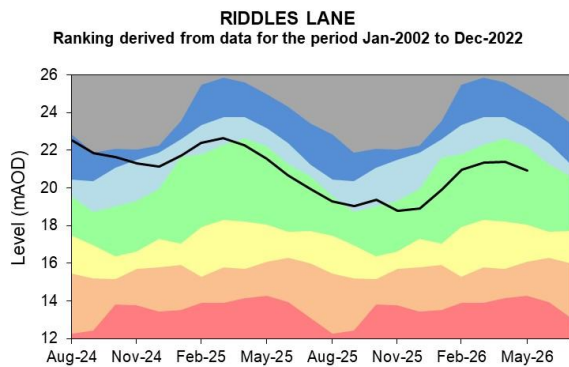
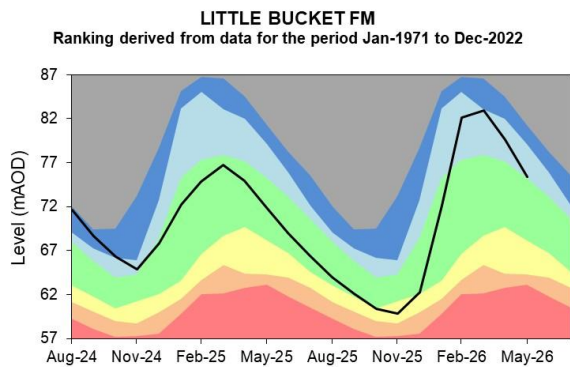
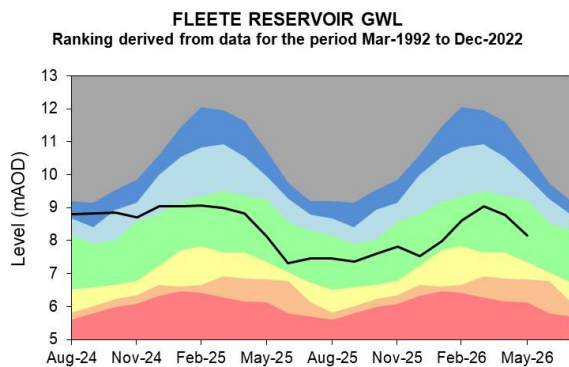
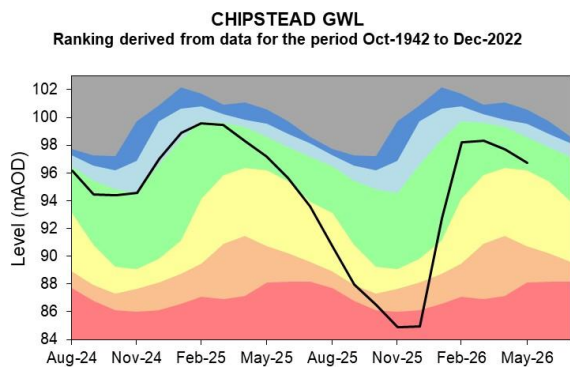
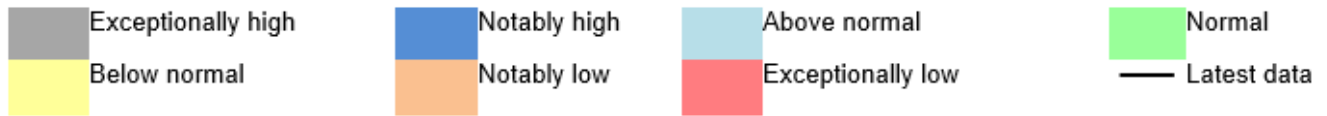


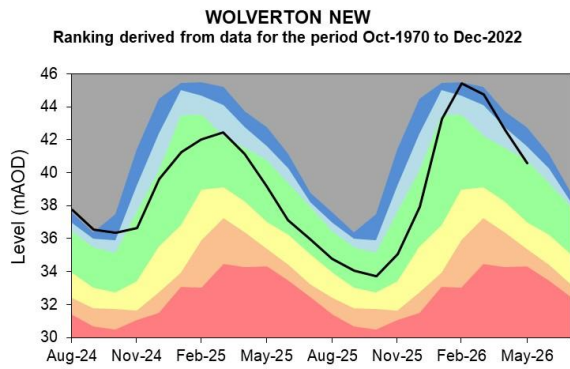
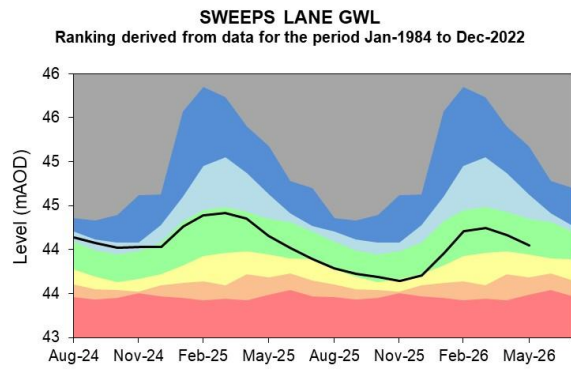
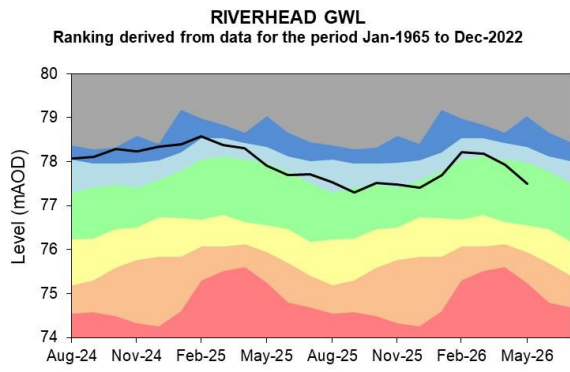
Source: Environment Agency.

5 Groundwater levels

5.1 Groundwater level charts

Figure 5.1: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.



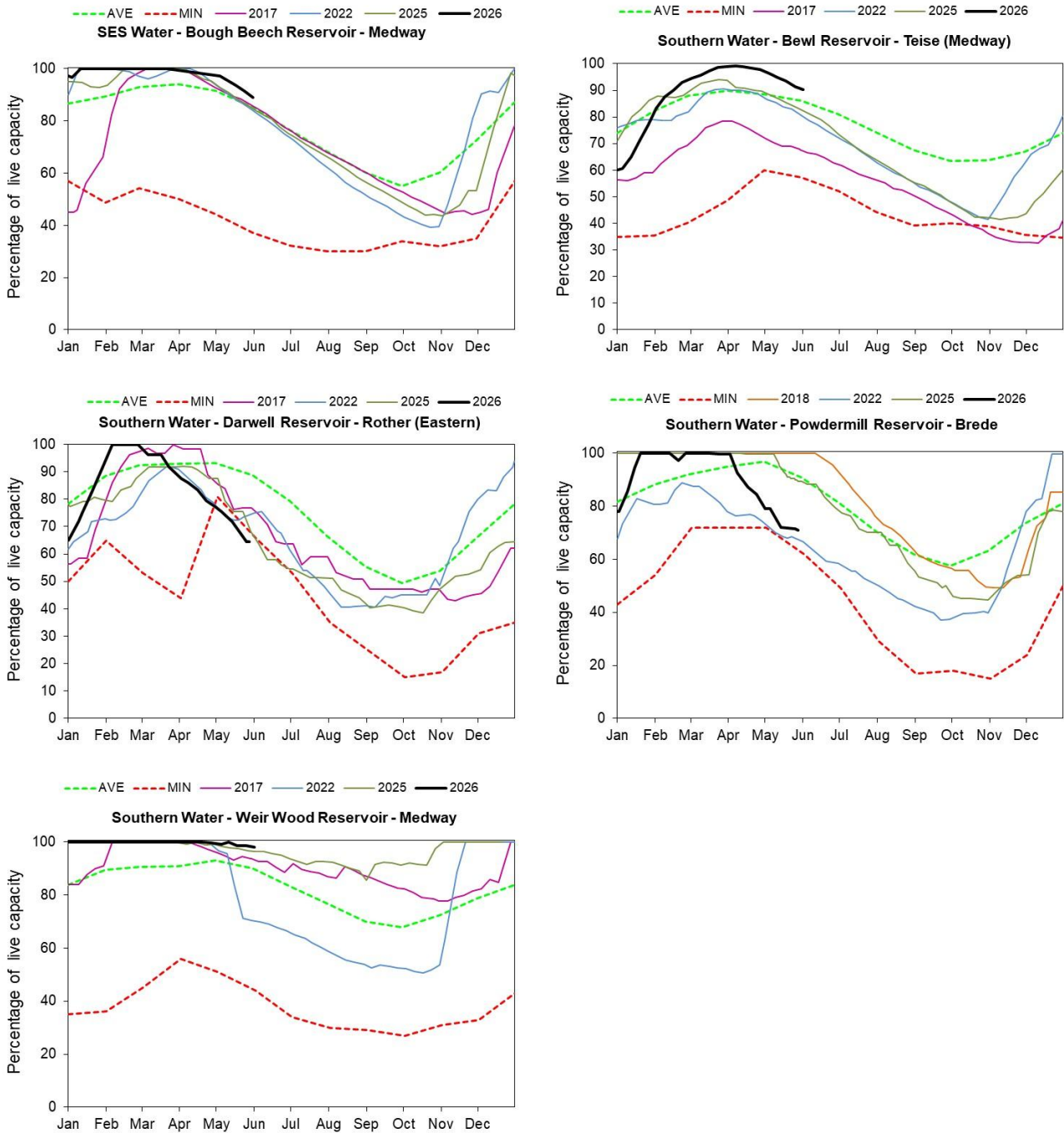


Source: Environment Agency, 2026.

6 Reservoir stocks

6.1 Reservoir stocks charts

Figure 7.1: End of month regional reservoir stocks compared to long term maximum, minimum and average stocks. (Source: Water Companies). Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.



7 Glossary

7.1 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).

7.2 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.

8 Appendices

8.1 Rainfall table

Hydrological area	May 2026 rainfall % of long term average 1991 to 2020	May 2026 band	Mar 2026 to May cumulative band	Dec 2025 to May cumulative band	Jun 2025 to May cumulative band
North Downs - South London	40	Notably Low	Exceptionally low	Normal	Normal
Upper Mole	51	Below Normal	Exceptionally low	Above normal	Above normal
South London	37	Notably Low	Exceptionally low	Normal	Normal
River Darent	40	Notably Low	Exceptionally low	Normal	Normal
North Kent Chalk	47	Below Normal	Exceptionally low	Normal	Normal
Stour	49	Below Normal	Exceptionally low	Normal	Normal
Dover Chalk	53	Below Normal	Exceptionally low	Above normal	Above normal
Thanet Chalk	55	Below Normal	Exceptionally low	Normal	Normal
River Medway	46	Below Normal	Exceptionally low	Above normal	Normal

Eastern Rother	51	Below Normal	Exceptionally low	Normal	Normal
Romney Marsh	47	Below Normal	Exceptionally low	Normal	Normal
North West Grain	44	Below Normal	Exceptionally low	Normal	Below normal
Sheppy	47	Below Normal	Exceptionally low	Normal	Normal

8.2 River flows table

Site name	River	Catchment	May 2026 band	Apr 2026 band
Catford Gs	River Ravensbourne	Ravensbourne	Exceptionally low	Exceptionally low
Connolly's Mill Combined Gs	River Wandle	Wandle	Normal	Normal
Crabble Mill Gs	River Dour	Dour	Normal	Above normal
Dorking Gs	River Mole	Mole Surrey	Notably low	Notably low
Hawley Gs	River Darent and Cray	Darent and Cray	Normal	Normal
Horton Gs	Great Stour River	Great Stour	Below normal	Normal
South Willesborough Gs	East Stour River	East Stour	Notably low	Below normal
Stonebridge Gs	River Teise	Teise	Normal	Notably low
Teston Farleigh Combined	River Medway	Medway (Middle)	Below normal	Below normal
Udiam Gs	River Rother	Rother (Kent)	Below normal	Below normal
Vexour_penshurst	River Eden	Eden (Kent)	Notably low	Notably low

8.3 Groundwater table

Site name	Aquifer	End of May 2026 band	End of Apr 2026 band
Fleete Reservoir Gwl	Isle Of Thanet Chalk	Normal	Normal
Chipstead Gwl	Epsom North Downs Chalk	Normal	Normal
Little Bucket Fm	East Kent Chalk - Stour	Above normal	Above normal
Riddles Lane	North Kent Swale Chalk	Normal	Normal
Riverhead Gwl	Kent Greensand	Normal	Normal
Sweeps Lane Gwl	West Kent Chalk	Normal	Normal
Wolverton New	East Kent Chalk - Stour	Normal	Above normal