

Monthly water situation report: Kent and South London Area

1 Summary - February 2026

In February, the Kent South London and East Sussex (KSLES) area received 158% of long-term average (LTA) rainfall, ranging from 135 percent in the Sheppey catchment in the North, to 179 percent in the Romney Marsh catchment in the East. February was characterised by early and mid-month rainfall peaks, with subdued totals thereafter. Soil Moisture Deficits (SMDs) continued to remain low across the area, with all catchments being below their LTA for this time of year. The effective rainfall recorded in February was 192% of the LTA average. Monthly Mean Flows (MMFs) ranged from normal to exceptionally high. Groundwater levels ranged from normal to notably high. Due to high Groundwater levels in the east of the patch, increased monitoring is being carried out during this period of high flow. Two out of five water company reservoirs in KSLES - Bewl and Darwell - saw a rise in levels during February, the remaining reservoir levels stayed stable throughout the month.

1.1 Rainfall

During February, the KSLES area received 158% of the LTA rainfall for the time of year, based on a whole-area average. Rainfall received in the Kent and South London and East Sussex area ranged from above normal to notably high. The percentage of long-term average rainfall received ranged from 135 percent in the Sheppey catchment in the North, to 179 percent in the Romney Marsh catchment in the East. The highest daily rainfall total of 26.0mm was observed on day 18 of the month at Brede PS TBR in the Eastern Rother catchment.

Rainfall in February was generally higher at the start and the middle of the month, with much lower totals throughout the remainder of the month. The top 5 highest rainfall days were 18, 5, 15, 1, and 12 February. There were no dry days in February that recorded rainfall less than 0.2mm. The lowest recorded rainfall total was 0.9mm on 17 February.

1.2 Soil moisture deficit and recharge

At the end of February, SMDs continued to remain close to zero across the area. Although individual catchments showed a very slight increase compared to January, deficits stayed minimal overall. This decline reflects the exceptionally high rainfall experienced throughout the month. The effective rainfall recorded in February was 192 percent of the LTA average. The

elimination of SMDs across the area was significant for the months of January and February. This meant soils became fully saturated allowing an increased rate of recharge of groundwater with the effective rainfall received.

1.3 River flows

Monthly Mean Flows (MMFs) in February ranged from normal to exceptionally high. Normal flows were observed at the River Wandle at Connolly's Mill, in the north-west of the patch. Above normal flows recorded at the Ravensbourne at Catford, the Darent at Hawley and the Eden at Vexour/Penshurst. Notably high flows were recorded at the Mole at Dorking in the west and the Medway at Teston, the Teise at Stonebridge, the Rother at Udiam and the Dour at Crabble in the center and east of the patch. The East Stour at South Willesborough and the Stour at Horton recorded exceptionally high flows. River baseflows have continued to increase due to the reduced soil moisture deficits and healthy groundwater recharge.

1.4 Groundwater levels

Groundwater levels across the KSLES area continued rising, to range from normal to notably high. In the chalk aquifer, Chipstead, Sweeps Lane, Riddles Lane and Fleete Reservoir registered normal levels for this time of year. Chipstead has recovered and recharged well since the end of December due to the increased effective rainfall received in January and February. In the East, Little Bucket registered above normal levels, and Wolverton registered as notably high. With high groundwater levels in the East, winter-bournes like the Nailbourne and the Alkham Bourne have begun to flow. Increased monitoring is being carried out during this period of high flow with groundwater situation reports being published on the Gov.uk website. [Kent: groundwater situation - GOV.UK](#) Groundwater levels in the Lower Greensand aquifer at Riverhead, located in the central west of the area, were above normal at the end of February.

1.5 Reservoir stocks

Two out of five water company reservoirs in KSLES - Bewl and Darwell - saw a rise in levels during February; the remaining reservoir levels stayed stable throughout the month.

By the end of February, the reservoirs held by the following live storage capacities and LTA class:

Bewl – 94% Normal

Darwell – 100% Notably high

Bough Beech – 100% Notably high

Powdermill – 100% Above normal

Weir Wood – 100% Above normal

1.6 Environmental impact

There were 21 fluvial flood alerts and ten fluvial flood warnings issued in February. A groundwater flood alert was issued on 13 February, and 2 updates have been issued on the 20 and 27 February.

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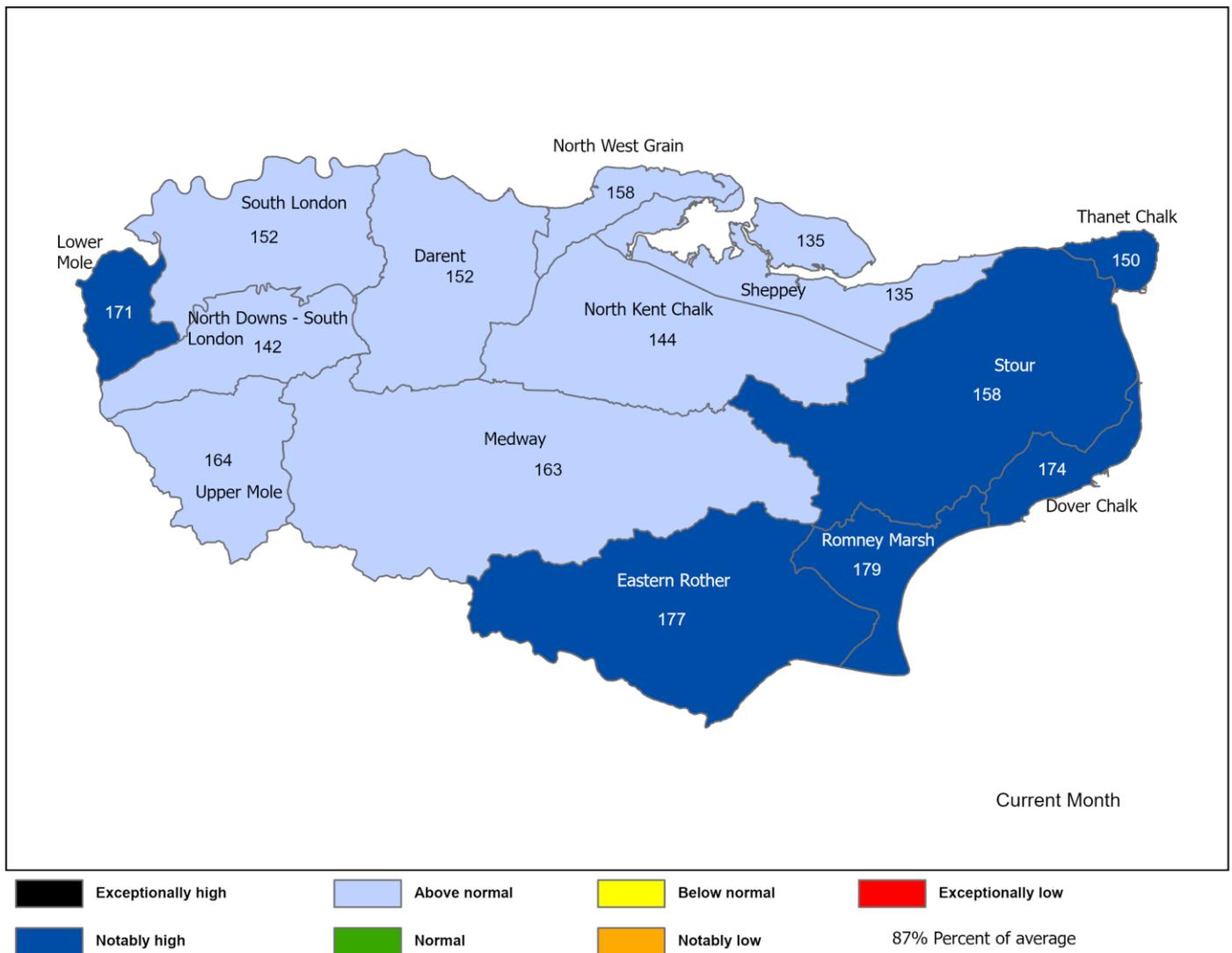
Contact Details: 03708 506 506

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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 28 February 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.

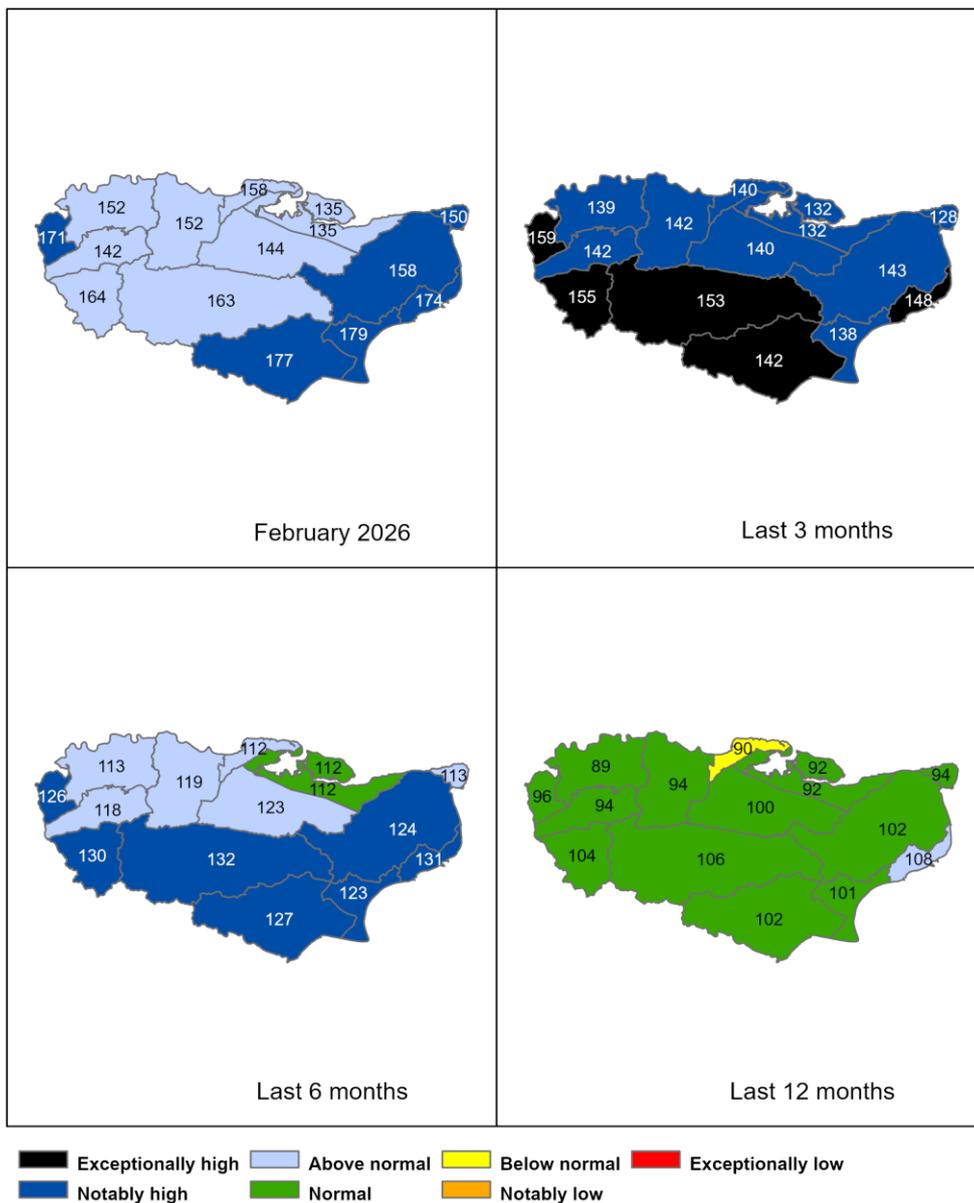


HadUK data for October 2023 onwards, based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2026). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Includes material based on Ordnance Survey 1:50 000 maps with the

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2.2 Rainfall map two

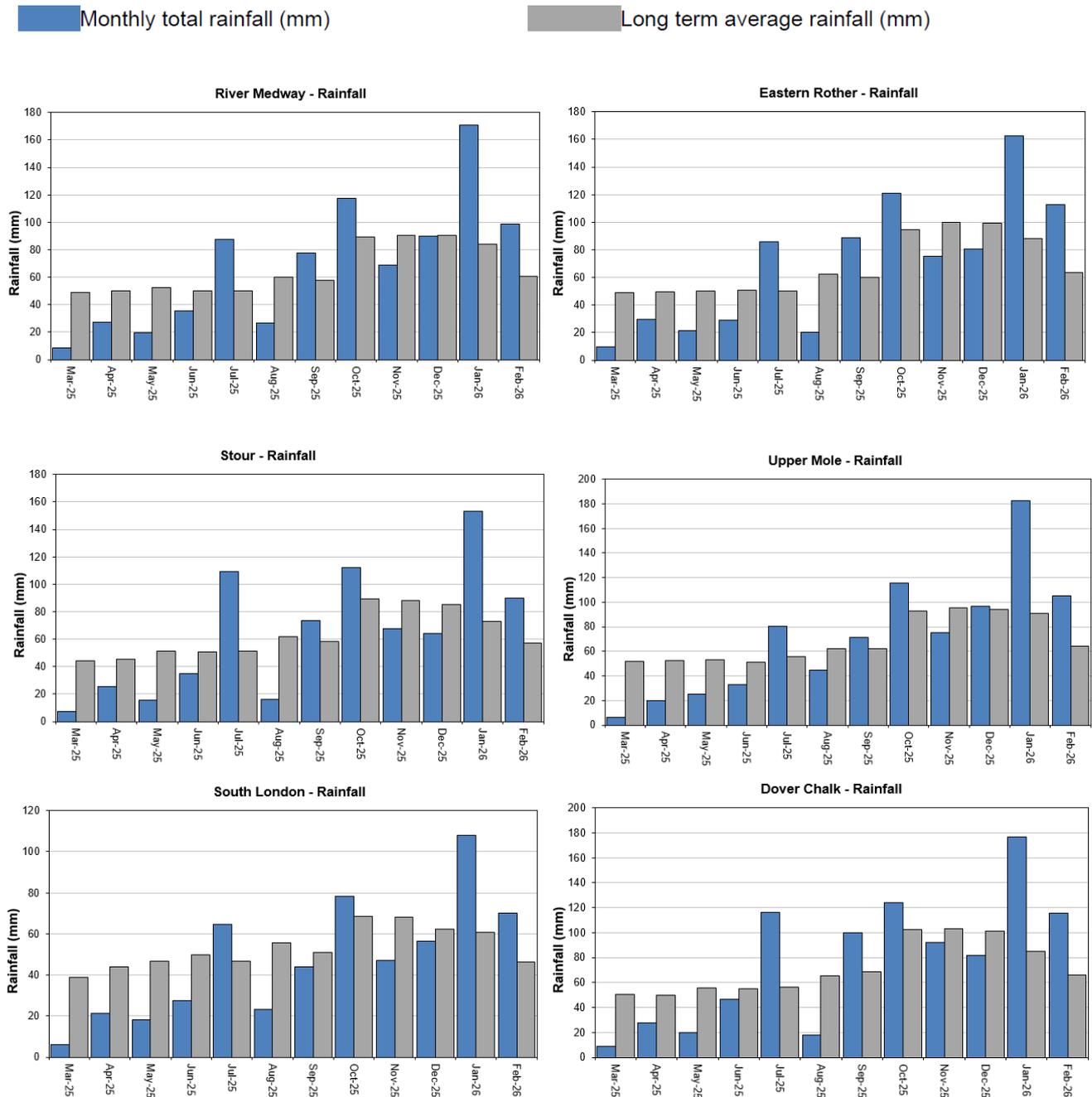
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 28 February 2026), the last 3 months, the last 6 months, and the last 12 months,) , classed relative of historic totals. The percentage of average uses the period of 1991 – 2020. Table available in the appendices with detailed information.



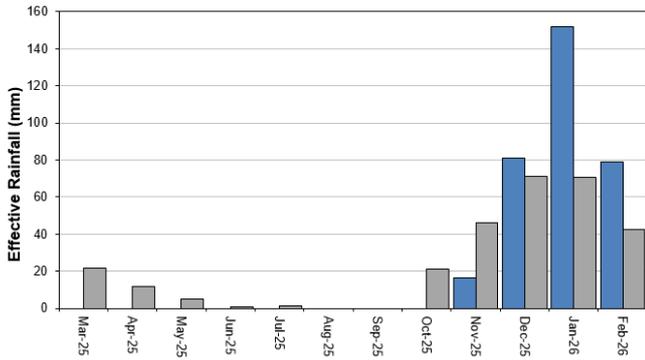
HadUK data for October 2023 onwards, based the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2026). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Includes material 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

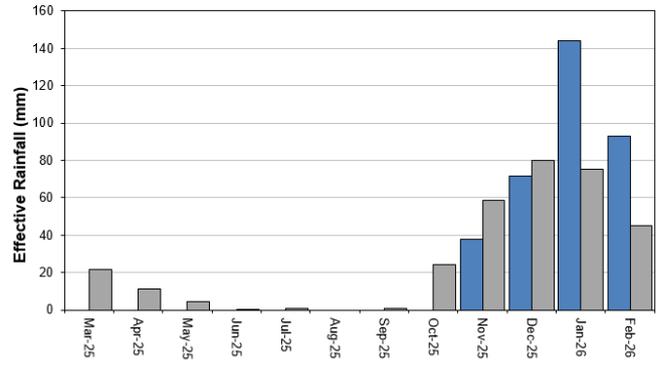
Figure 2.3: Monthly rainfall and effective rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average (LTA) for a selection of areal units. HadUK rainfall data. (Source: Met Office. Crown copyright, 2026). EA effective rainfall data (Source EA Soil Moisture Model).



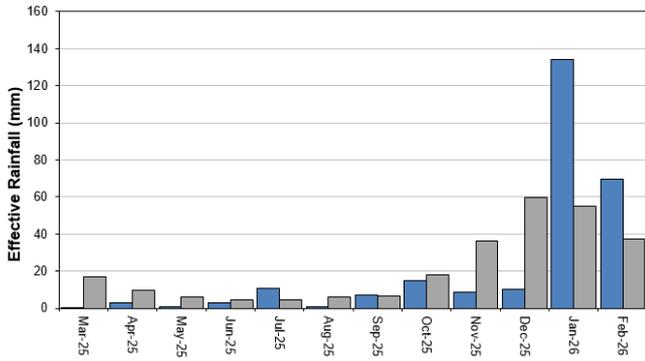
River Medway - Effective Rainfall



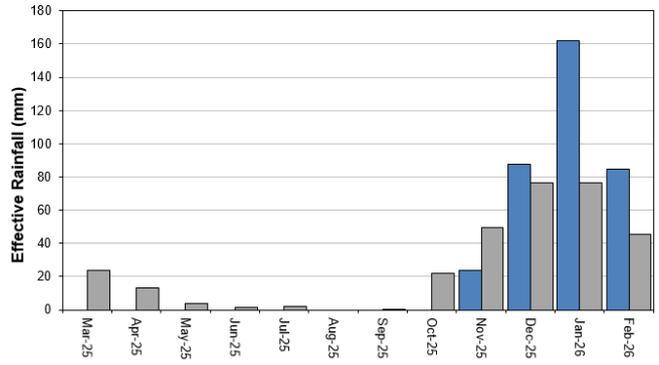
Eastern Rother - Effective Rainfall



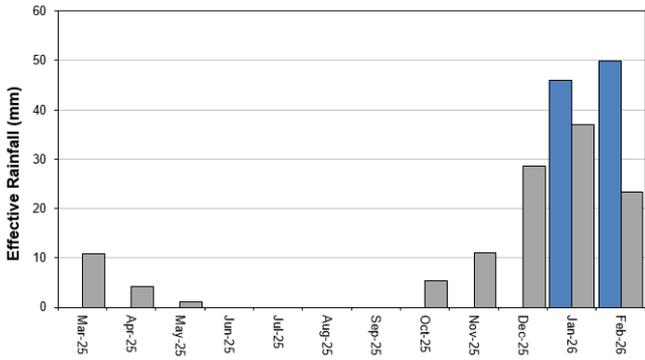
Stour - Effective Rainfall



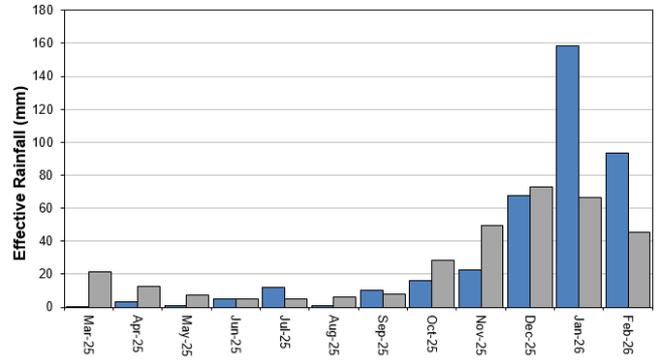
Upper Mole - Effective Rainfall



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) 28 day Total	February % LTA	Effective Rainfall (mm) 28 day total	February % LTA
6230TH	North Downs - South London (W)	89	141%	69	153%
6505TH	Upper Mole	105	164%	84	186%
6508TH	South London	70	151%	50	215%
6706So	Darent	82	151%	61	188%
6707So	North Kent Chalk	80	144%	61	172%
6708So	Stour	90	158%	70	187%
6709So	Dover Chalk	115	175%	94	206%
6710So	Thanet Chalk	63	150%	7	63%
6809So	Medway	99	162%	79	185%
6810So	Eastern Rother	113	176%	93	206%
6811So	Romney Marsh	94	178%	73	224%

6812So	North West Grain	63	156%	37	283%
6813So	Sheppey	58	135%	39	242%
	Kent & South London Average	86	158%	63	192%

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 01/10/2025 to 28/02/2026

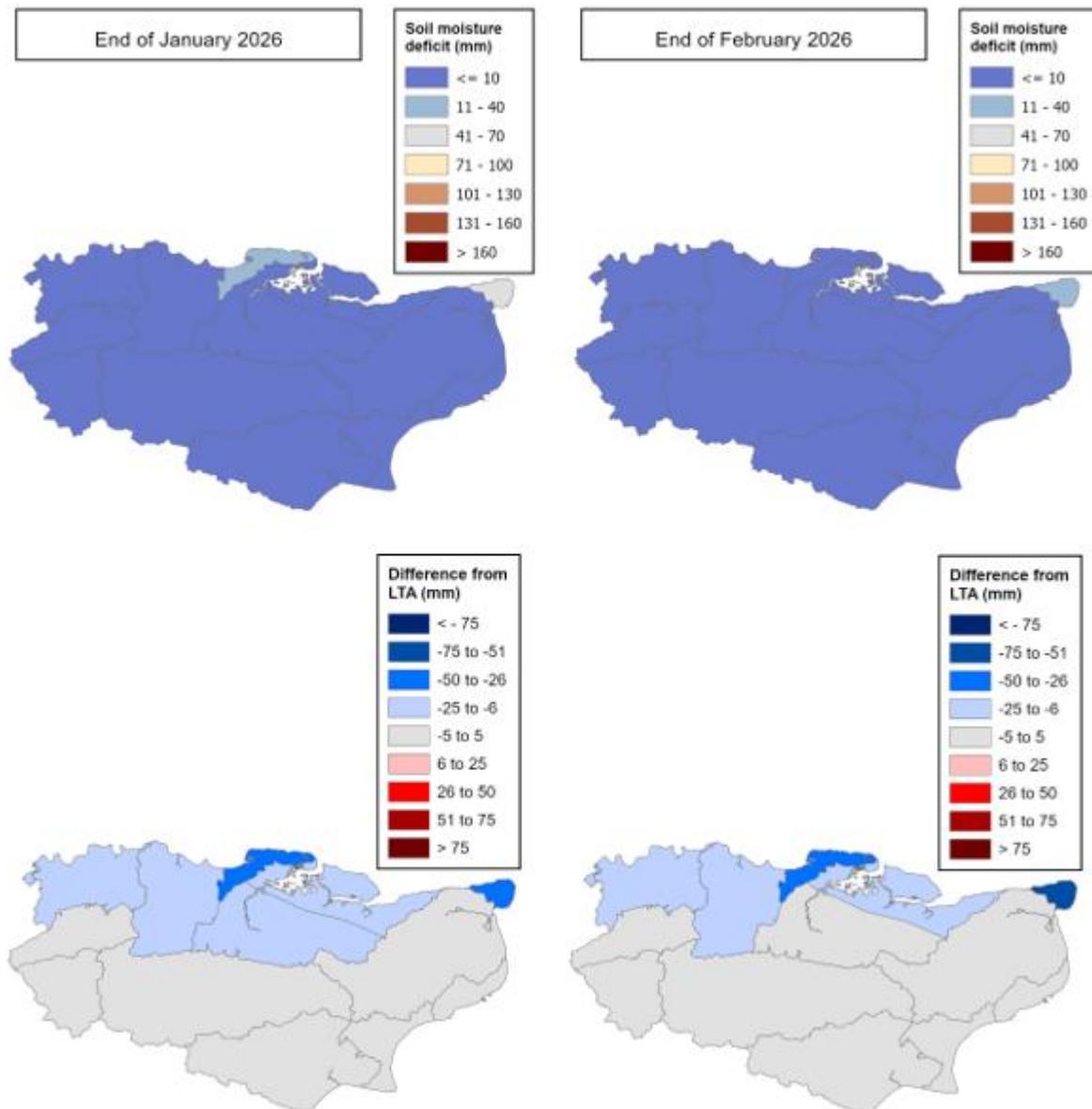
Number	Hydrological Area	Seasonal Rainfall (mm) Total	% LTA	Seasonal Effective Rainfall (mm) Total	% LTA
6230TH	North Downs - South London (W)	506	122%	263	110%
6505TH	Upper Mole	576	132%	372	138%
6508TH	South London	361	118%	104	99%
6706So	Darent	427	121%	171	106%
6707So	North Kent Chalk	458	125%	213	117%
6708So	Stour	488	124%	247	120%
6709So	Dover Chalk	587	129%	365	139%
6710So	Thanet Chalk	336	110%	42	75%
6809So	Medway	546	131%	341	135%
6810So	Eastern Rother	552	124%	357	126%

6811So	Romney Marsh	456	121%	225	117%
6812So	North West Grain	316	117%	37	65%
6813So	Sheppey	330	116%	55	80%
	Kent & South London Average	457	123%	215	119%

3 Soil moisture deficit

3.1 Soil moisture deficit map

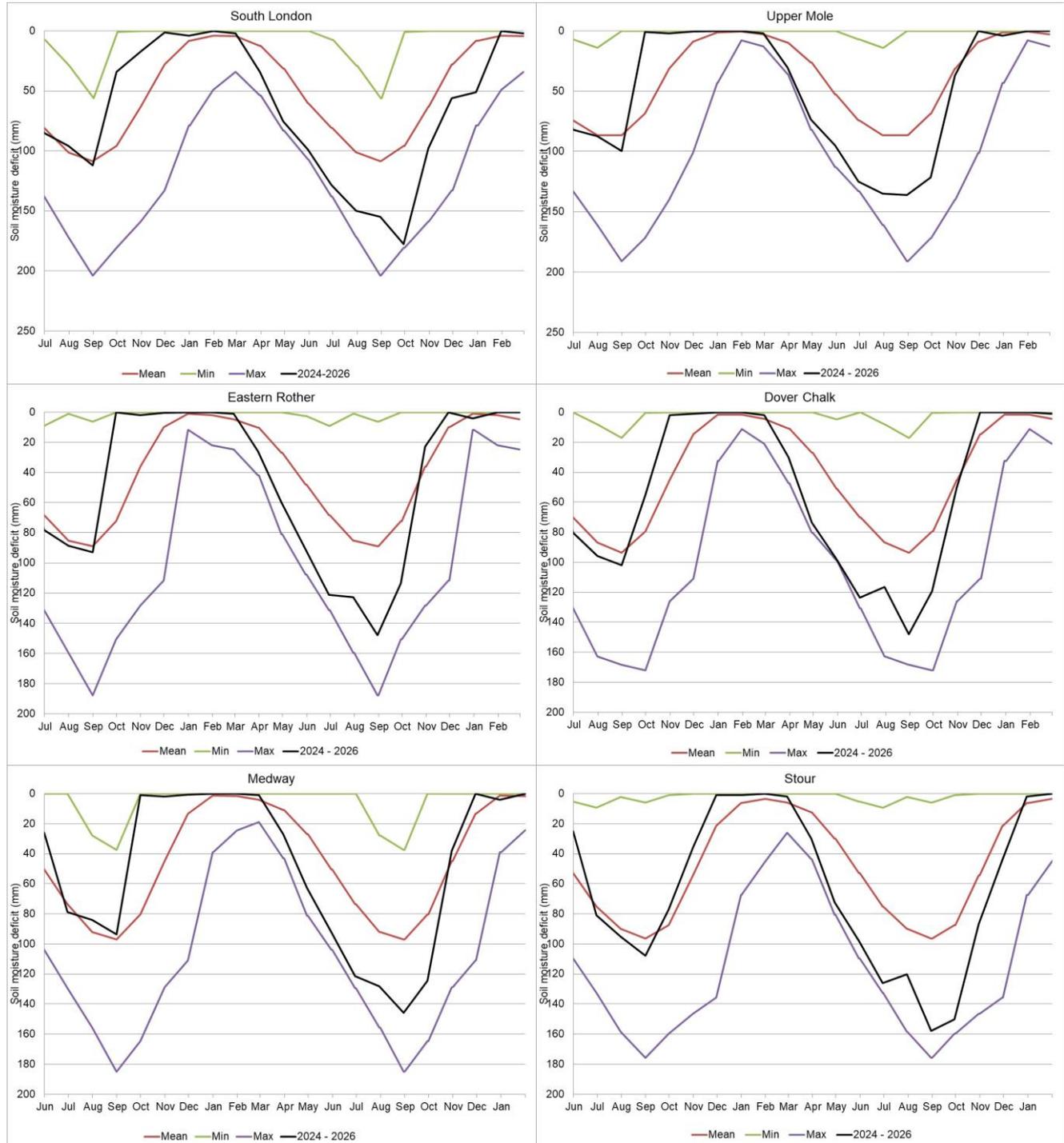
Figure 3.1: Soil moisture deficits for weeks ending 31 January (left panel) and 28 February 2026 (right panel). Top row shows actual soil moisture deficits (mm) and bottom row shows the difference (mm) of the actual from the 1991 to 2020 long term average soil moisture deficits. EA Soil Moisture Deficit 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

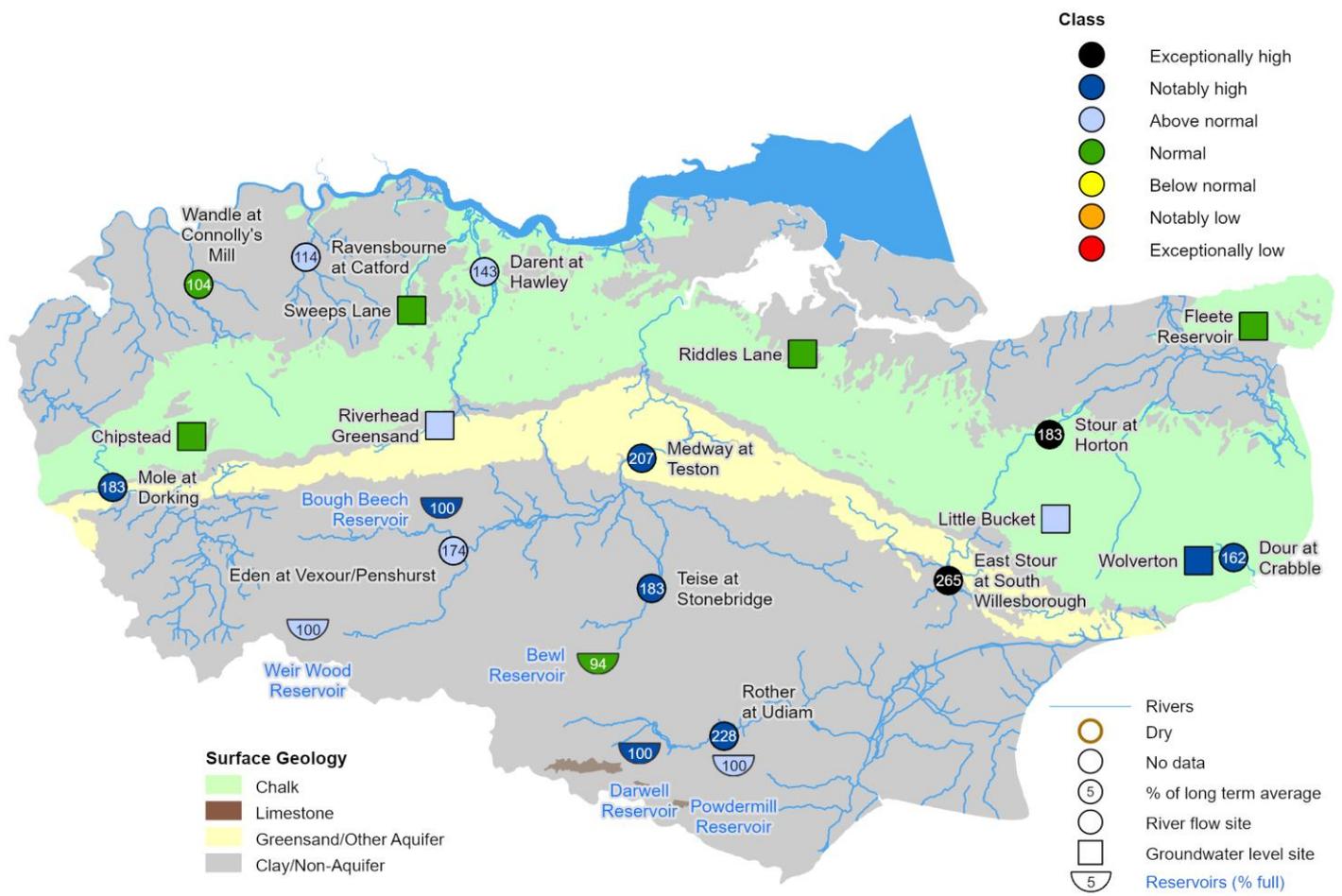
Figure 3.3: This is a second estimate of soil moisture deficit for the hydrological areas across the Kent and South London area. There may be significant variation within each area which must be considered when interpreting these data. EA soil moisture deficit data (Source EA Soil Moisture Model).

Number	Hydrological Area	SMD (mm) Day 28	End Feb LTA
6230TH	North Downs - South London (W)	0	3
6505TH	Upper Mole	0	3
6508TH	South London	2	10
6706So	Darent	0	7
6707So	North Kent Chalk	2	5
6708So	Stour	1	4
6709So	Dover Chalk	1	4
6710So	Thanet Chalk	34	97
6809So	Medway	0	3
6810So	Eastern Rother	0	3
6811So	Romney Marsh	1	3
6812So	North West Grain	3	33
6813So	Sheppey	4	20
	Kent & South London Average	4	15

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



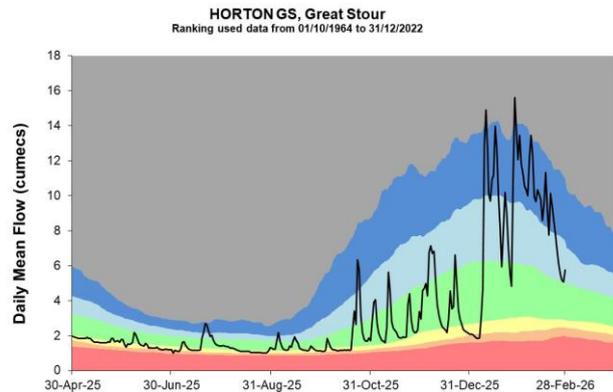
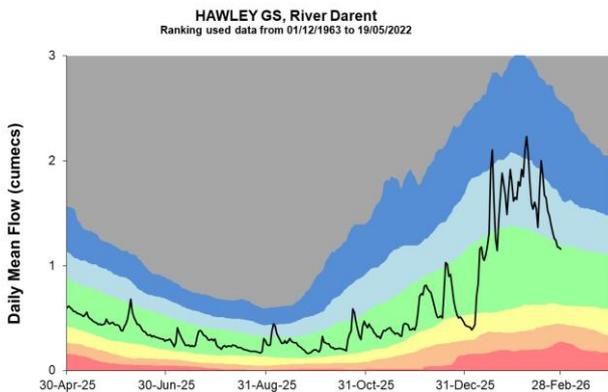
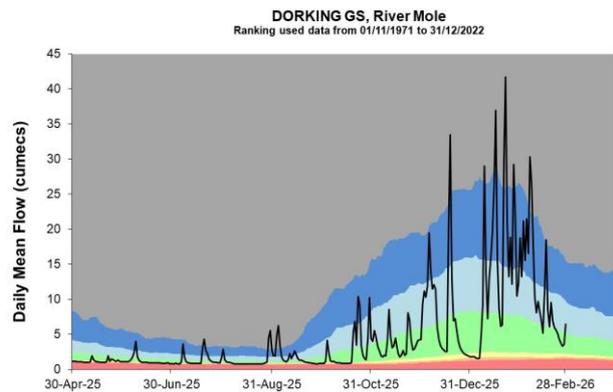
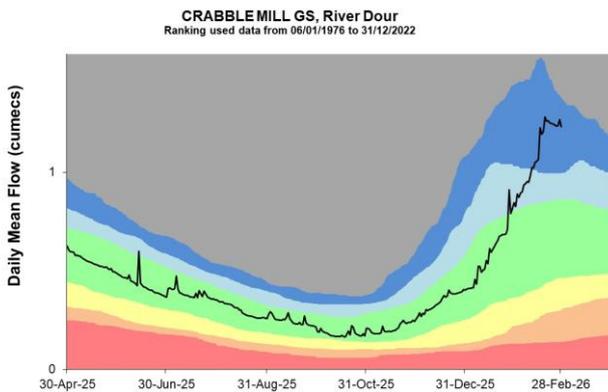
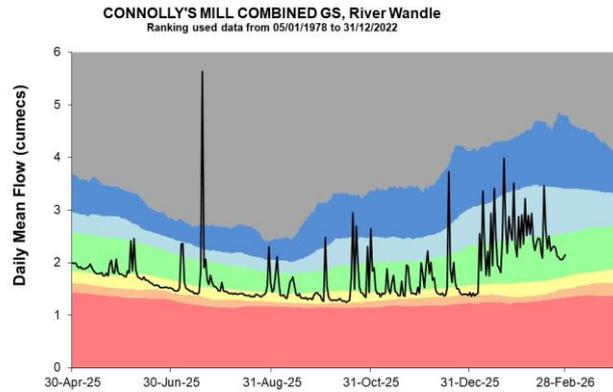
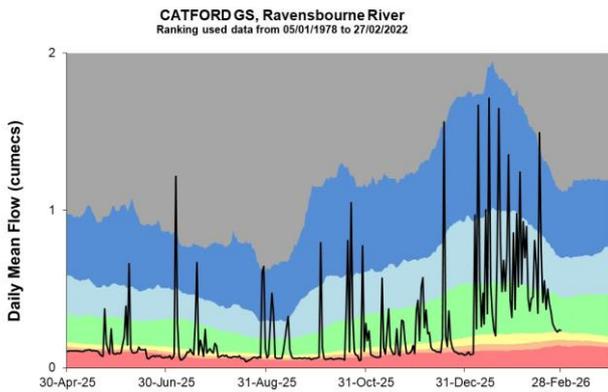
*Flows at gauging stations in the Medway catchment might be affected by upstream reservoir releases

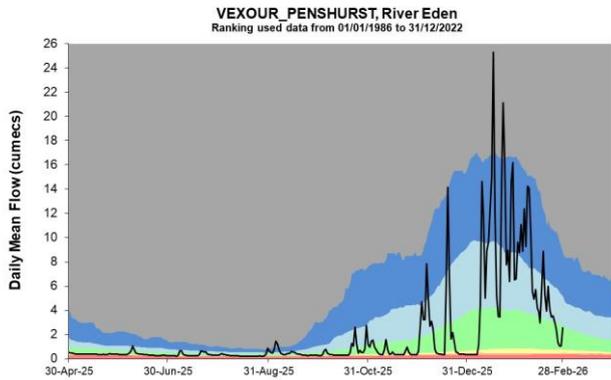
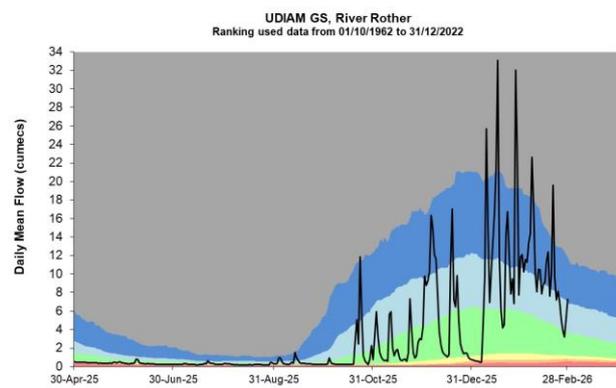
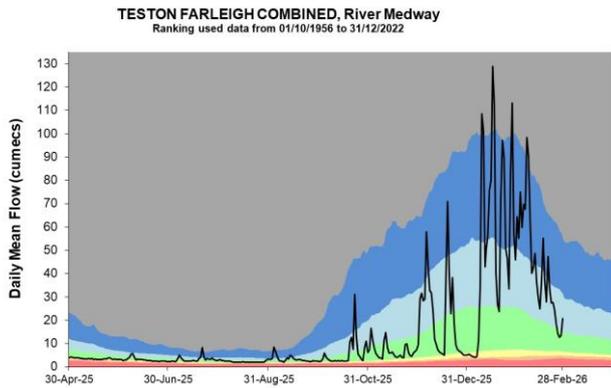
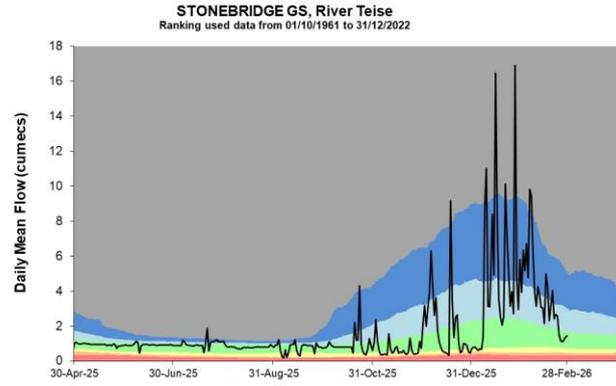
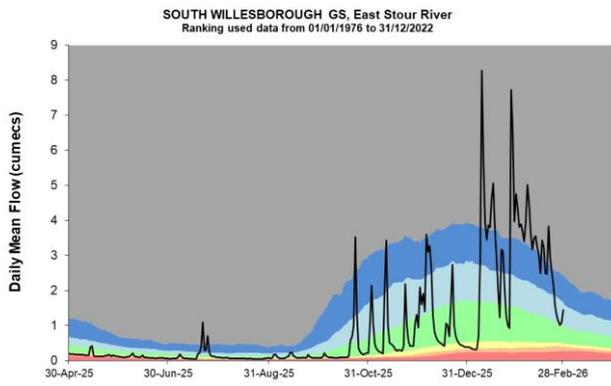
**Weirwood Reservoir is currently offline

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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.



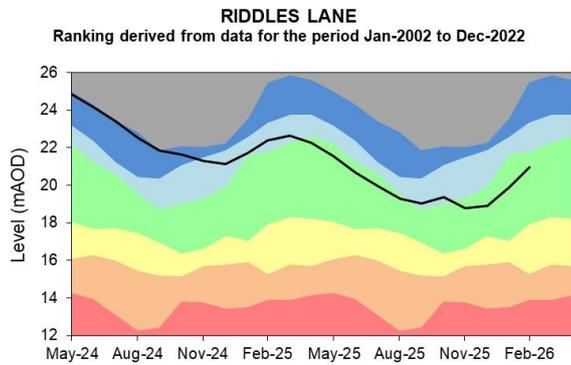
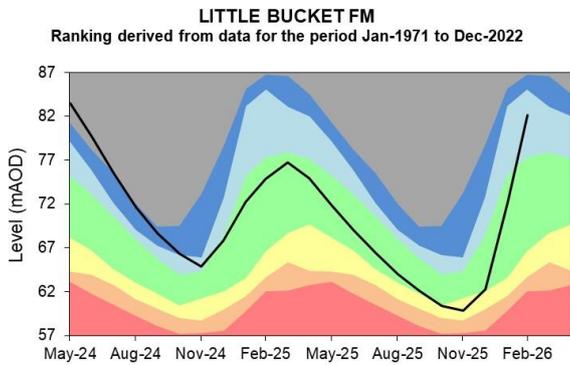
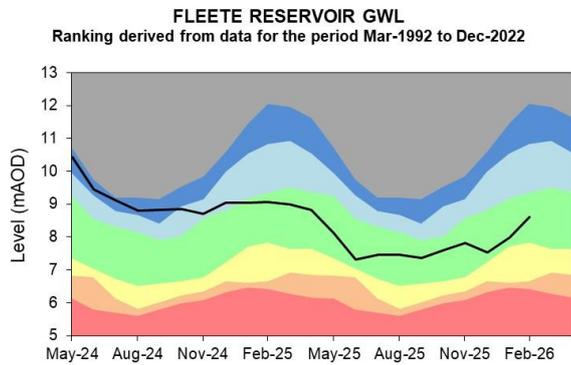
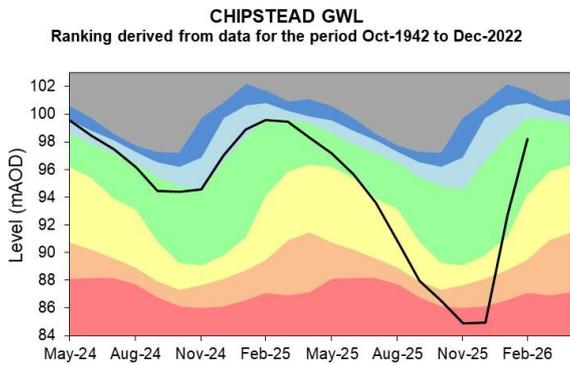


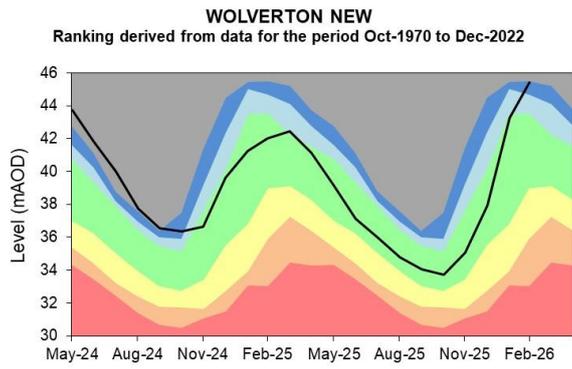
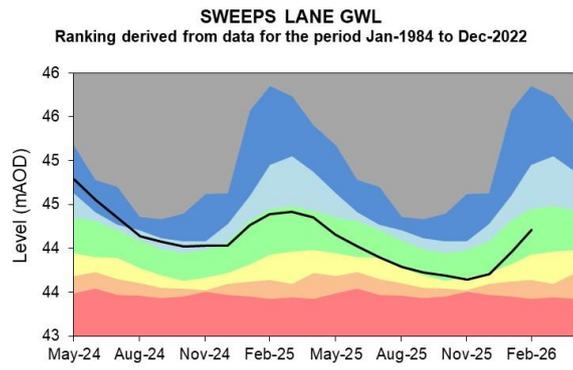
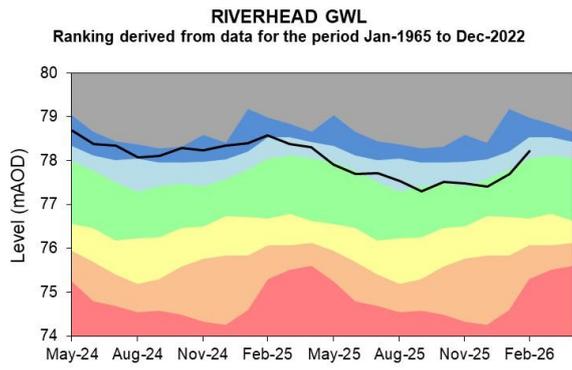
Source: Environment Agency.

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.



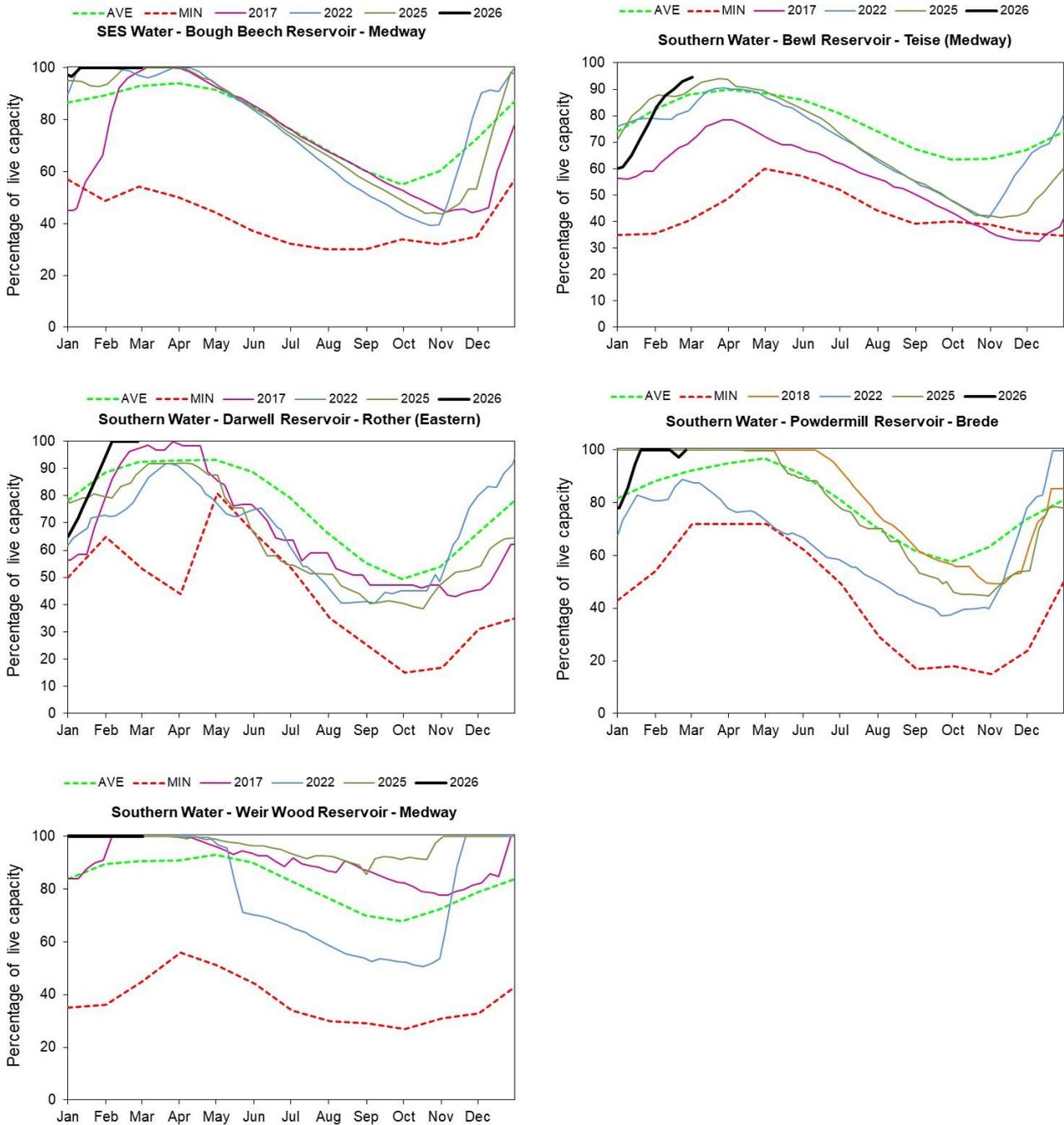


Source: Environment Agency, 2026.

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	Feb 2026 rainfall % of long term average 1991 to 2020	Feb 2026 band	Dec 2025 to February cumulative band	Sep 2025 to February cumulative band	Mar 2025 to February cumulative band
North Downs - South London	142	Above Normal	Notably high	Above normal	Normal
Upper Mole	164	Above Normal	Exceptionally high	Notably high	Normal
South London	152	Above Normal	Notably high	Above normal	Normal
River Darent	152	Above Normal	Notably high	Above normal	Normal
North Kent Chalk	144	Above Normal	Notably high	Above normal	Normal
Stour	158	Notably High	Notably high	Notably high	Normal
Dover Chalk	174	Notably High	Exceptionally high	Notably high	Above normal
Thanet Chalk	150	Notably High	Notably high	Above normal	Normal
River Medway	163	Above Normal	Exceptionally high	Notably high	Normal
Eastern Rother	177	Notably High	Exceptionally high	Notably high	Normal

Romney Marsh	180	Notably High	Notably high	Notably high	Normal
North West Grain	158	Above Normal	Notably high	Above normal	Below normal
Sheppy	136	Above Normal	Notably high	Normal	Normal

8.2 River flows table

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

8.3 Groundwater table

Site name	Aquifer	End of Feb 2026 band	End of Jan 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	Normal
Riddles Lane	North Kent Swale Chalk	Normal	Normal
Riverhead Gwl	Kent Greensand	Above normal	Normal
Sweeps Lane Gwl	West Kent Chalk	Normal	Normal
Wolverton New	East Kent Chalk - Stour	Notably high	Normal