

Monthly water situation report: Kent and South London Area

1 Summary - August 2026

The dry weather was interrupted in August, with the Kent, South London and East Sussex (KSLES) area recording 60% of the long-term average (LTA) rainfall for August. Soil Moisture Deficits (SMDs) remained largely the same as the end of July in response to limited effective rainfall levels, staying significantly higher than the LTA. River flows continued to fall throughout August but at a slower rate. Monthly mean flows ranged significantly across the area, with two sites recording normal flows and four sites recording exceptionally low flows. Groundwater level trends also remained similar to those at the end of July, with levels in the Chalk aquifer staying between normal and below normal and Lower Greensand aquifer levels remaining normal. Fleete Reservoir was the only site to change banding, moving from below normal to normal. Reservoir storage levels continued to decrease throughout August, ranging from exceptionally low to above normal. However, they are tracking slightly steeper than normal drawdown rates.

1.1 Rainfall

An average of 35mm of rain fell across the KSLES area in August, 60% of the LTA. Rainfall totals were generally higher in the east of the patch where catchments recorded normal rainfall totals for the time of year, whilst catchments in the west recorded below normal to exceptionally low rainfall. The Dover Chalk hydrological area received the most rain in KSLES 79% of the LTA, while the Lower Mole received the least rain with just 28% of the LTA.

The first two weeks of August were very dry, with only small, scattered showers, whilst the second two weeks were much wetter, with the highest daily rainfall total of 23.8mm being recorded at Throwley Rain Gauge in the North Kent hydrological area. Over the last 3 months, rainfall was notably low across western catchments, while eastern catchments recorded below normal rainfall. Over the past 6 months, all catchments recorded exceptionally low rainfall, making this period the fourth driest since records began in 1871. Over the past 12 months, most catchments recorded normal rainfall, except for 4 catchments in the north of the patch which recorded below normal rainfall.

1.2 Soil moisture deficit and recharge

Despite the rainfall received during August, SMDs continued to rise across the KSLES area. Effective rainfall was 45% of the LTA in August, which, compounded with previous dry months, was insufficient to stabilise or reduce deficits. By month end, KSLES had a SMD of 178mm, increasing from 155mm in July. Most hydrological areas recorded deficits over 160mm, except for two areas that recorded levels between 131 and 160mm. In most areas, SMD was 51 to 75mm higher than the LTA at the end of August.

1.3 River flows

Daily mean river flows generally continued to fall throughout August in response to the below average rainfall; however, for some sites the decline in flows was relatively small. Flow monitoring sites in the KSLES area recorded mean flows between normal and exceptionally low. Normal flows were seen at the Teise at Stonebridge and Dour at Crabble. The Dour continued to benefit from typical groundwater contributions from the Dover Chalk aquifer. Flows in the Teise at Stonebridge are supported by releases from Bewl reservoir, which feeds into the Medway. Exceptionally low flows have been recorded in flashy rivers that are highly responsive to rainfall. These are the Ravensbourne at Catford, Mole at Dorking, Eden at Vexour/Penshurst and Rother at Udiam. However, flows have increased or stayed the same at all sites that recorded exceptionally low flows.

1.4 Groundwater levels

Groundwater levels continued to decline seasonally across KSLES in response to the prolonged period of below normal rainfall. However, the rate of decline was generally less steep, and classifications remained largely the same as in July 2026, except for Fleete Reservoir which has risen from below normal to normal levels. Sites monitoring groundwater in the Chalk aquifer recorded normal and below normal levels. The only sites that are recording levels in the below normal class, namely Chipstead and Sweeps Lane, are situated in the western part of the KSLES area. In the Lower Greensand aquifer, levels remained in the normal range.

1.5 Reservoir stocks

Reservoir storage continued to fall throughout August. By the end of the month, reservoirs in the KSLES area held the following live storage capacities and banding categories:

- Bewl – 58% normal
- Bough Beech – 58% normal
- Darwell – 48% below normal
- Powdermill – 31% exceptionally low
- Weir Wood – 85% above normal

Weir Wood reservoir remains offline.

1.6 Environmental impact

Hands-off flow (HoF) restrictions remained widespread throughout August across the Medway, Stour, and Rother catchments. Restrictions introduced in the Medway and Stour catchments during March and April, and in the Rother catchment during mid-June, persisted throughout the month. Additional HoF restrictions were triggered during the first week of August across the Medway, Rother, North Kent, and Darent catchments. Following these early August triggers, no further HoF restrictions were implemented during the remainder of the month.

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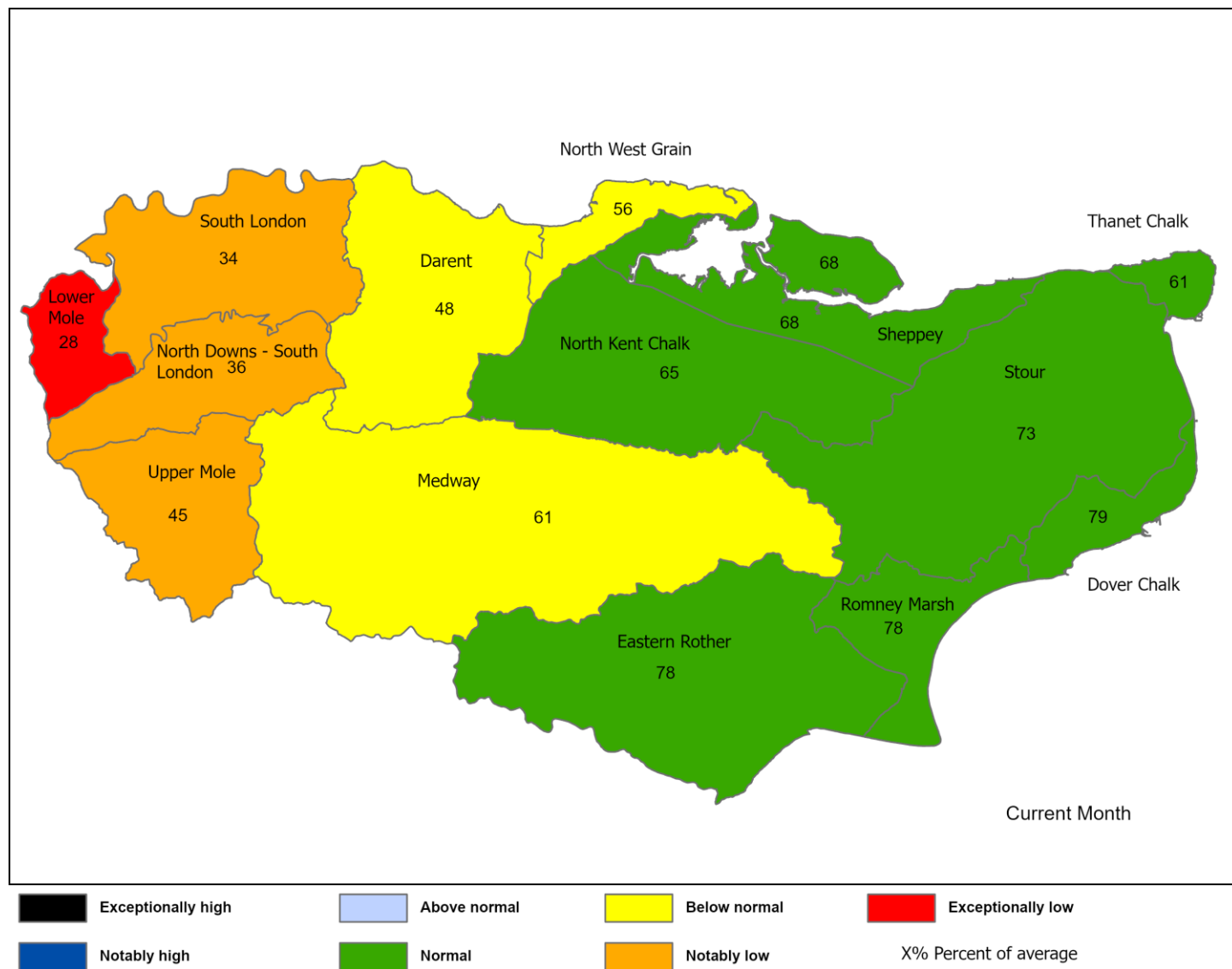
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2 Rainfall

2.1 Rainfall map one

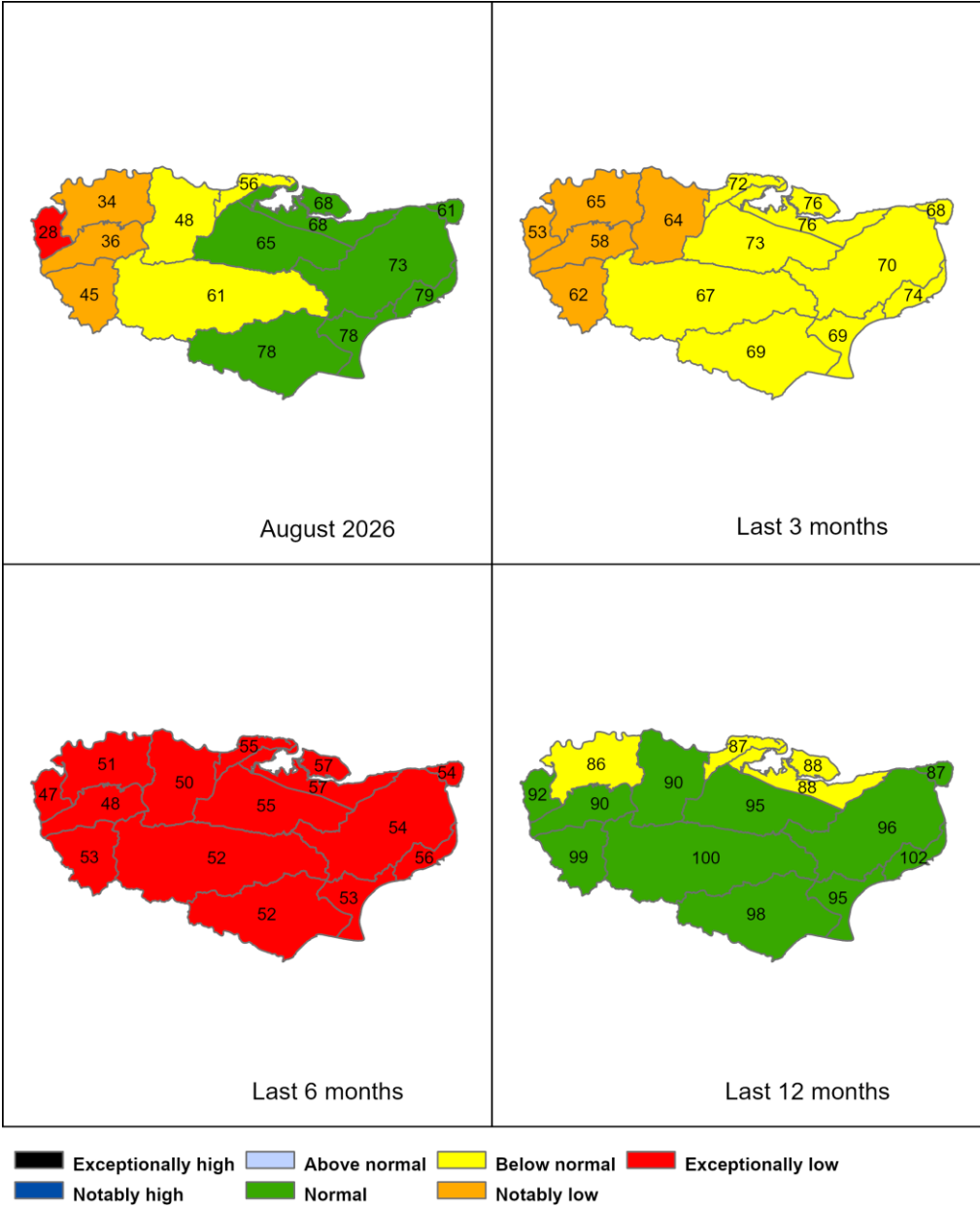
Figure 2.1: Total rainfall for hydrological areas across Kent and South London for the current month (up to 31 August 2026), classed relative of historic totals. The percentage of average uses the period of 1991 – 2020. Table available in the appendices with more detailed information.



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).

2.2 Rainfall map two

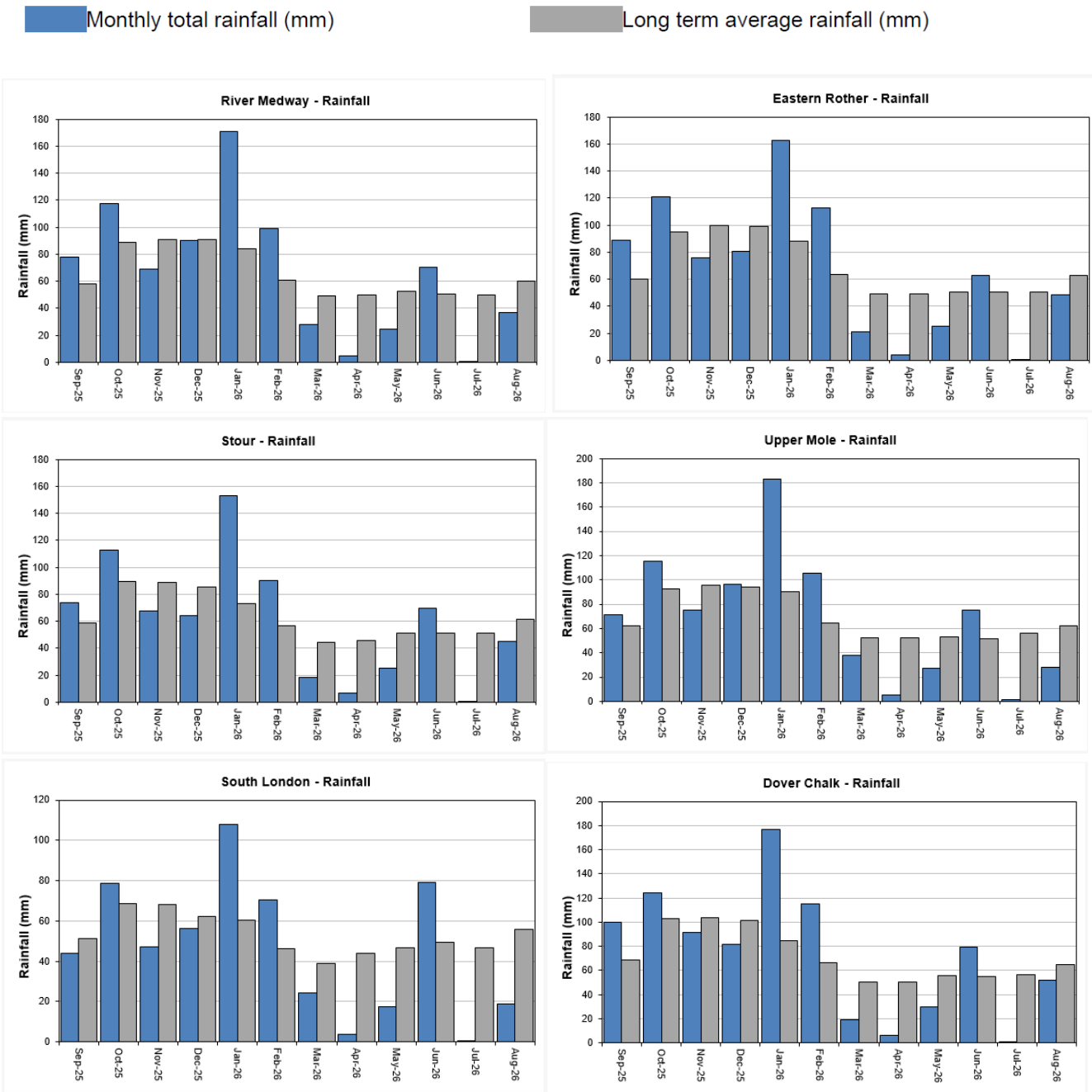
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 31 August 2026), the last 3 months, the last 6 months, and the last 12 months,), classed relative of historic totals. The percentage of average uses the period of 1991 – 2020. Table available in the appendices with detailed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

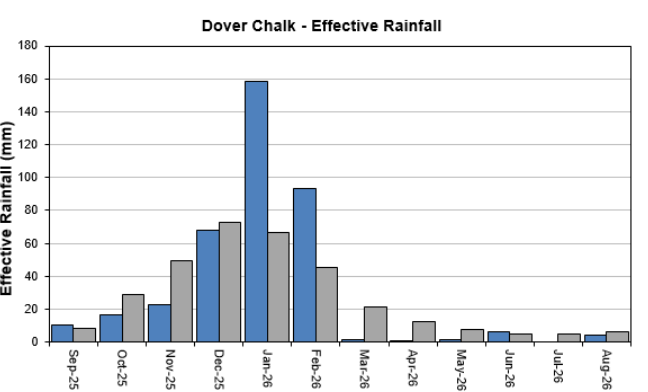
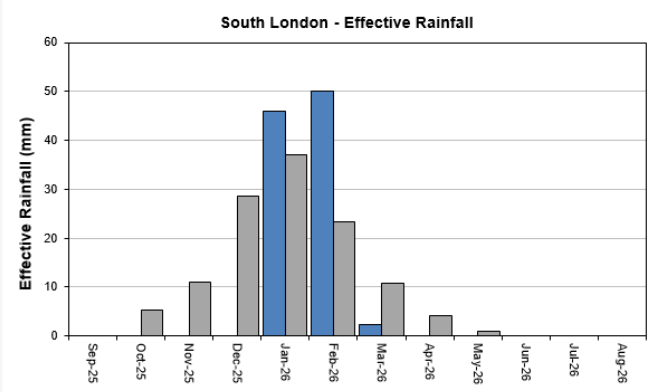
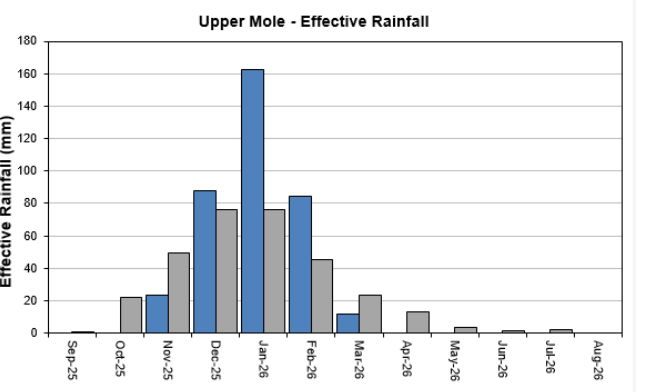
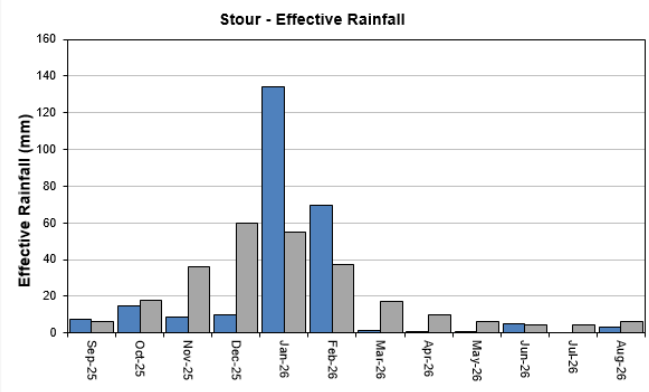
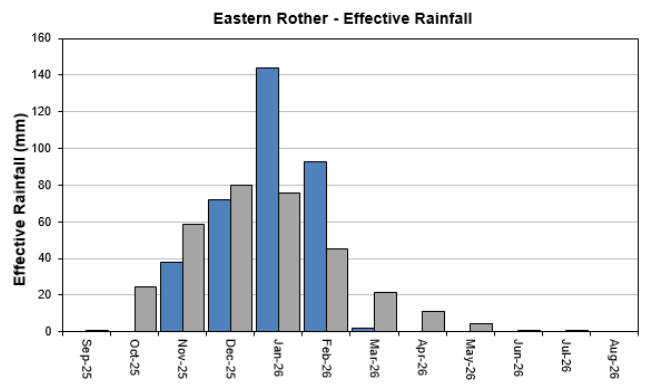
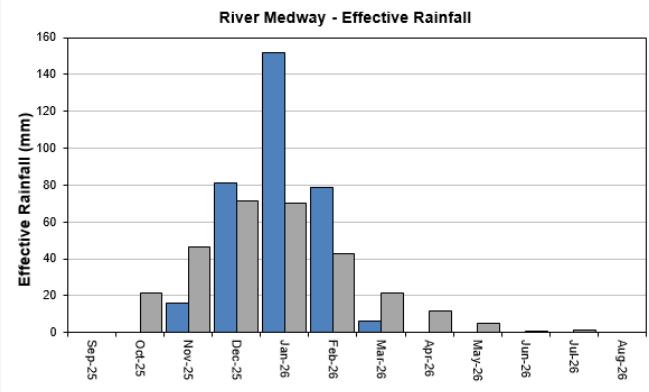


Rainfall data for January 2025 onwards, extracted from Environment Agency (EA) 1km gridded rainfall dataset derived from EA intensity rain gauges. (Source: EA. Crown Copyright, 100024198, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived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

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).

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	August % LTA	Effective Rainfall (mm) 31 day total	August % LTA
6230TH	North Downs - South London	23	36%	1	23%
6505TH	Upper Mole	28	45%	0	0%
6508TH	South London	19	34%	0	0%
6706So	Darent	28	48%	2	34%
6707So	North Kent Chalk	39	65%	3	56%
6708So	Stour	45	73%	3	55%
6709So	Dover Chalk	52	79%	4	62%
6710So	Thanet Chalk	31	61%	2	34%
6809So	Medway	37	61%	0	0%
6810So	Eastern Rother	49	78%	0	0%

6811So	Romney Marsh	45	78%	0	0%
6812So	North West Grain	26	56%	0	0%
6813So	Sheppey	34	68%	0	0%
	Kent, South London & East Sussex Average	35	60%	1	45%

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 01/04/2026 to 31/08/2026

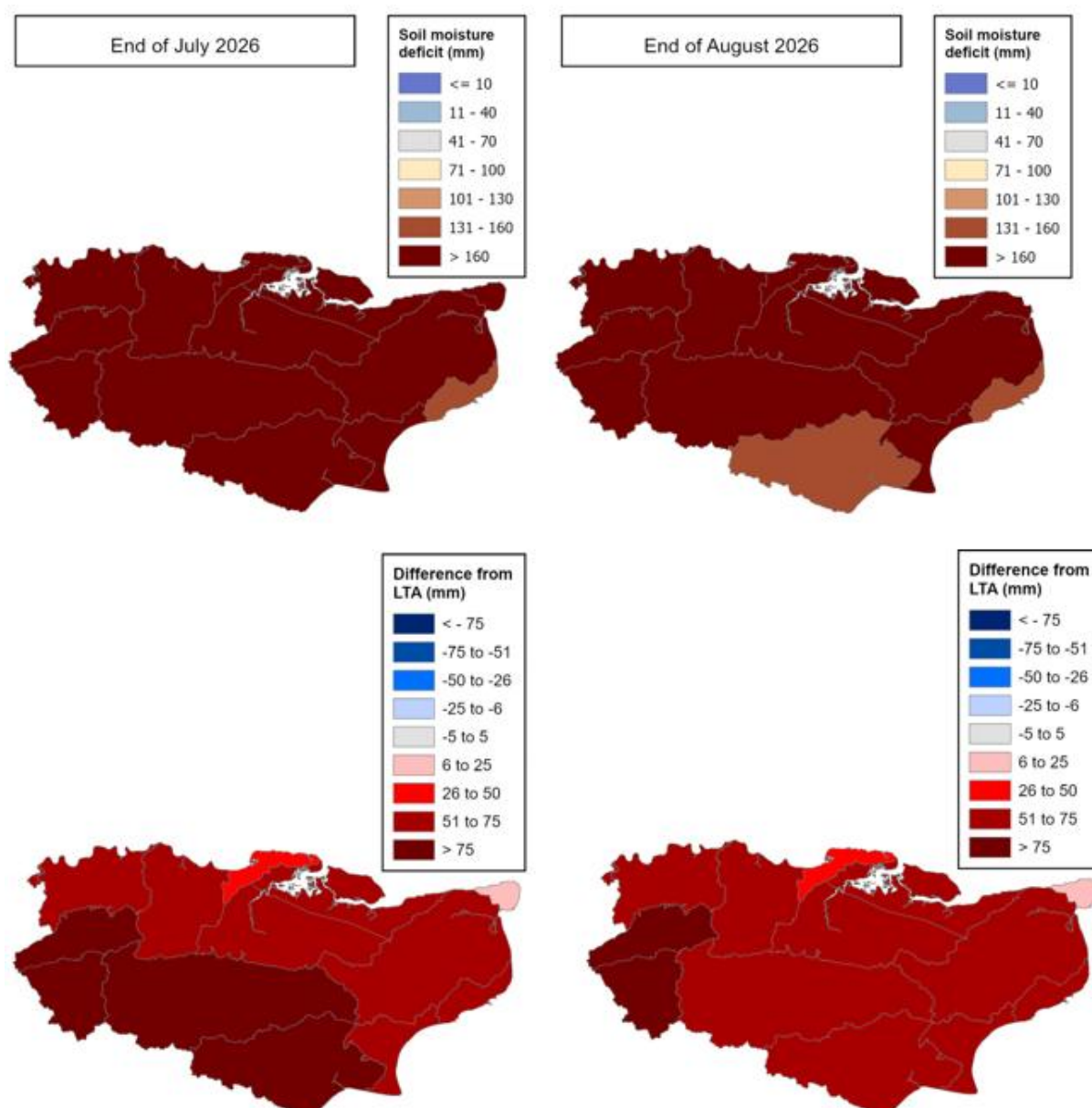
Number	Hydrological Area	Seasonal Rainfall (mm) Total	% LTA	Seasonal Effective Rainfall (mm) Total	% LTA
6230TH	North Downs - South London	126	44%	9	21%
6505TH	Upper Mole	137	50%	0	0%
6508TH	South London	120	49%	0	0%
6706So	Darent	121	48%	8	27%
6707So	North Kent Chalk	142	56%	9	30%
6708So	Stour	146	56%	9	30%
6709So	Dover Chalk	167	59%	12	33%
6710So	Thanet Chalk	131	56%	7	33%
6809So	Medway	136	51%	0	0%

6810So	Eastern Rother	141	54%	0	0%
6811So	Romney Marsh	133	55%	0	0%
6812So	North West Grain	118	55%	0	0%
6813So	Sheppey	130	59%	0	0%
	Kent, South London & East Sussex Average	134	53%	4	21%

3 Soil moisture deficit

3.1 Soil moisture deficit map

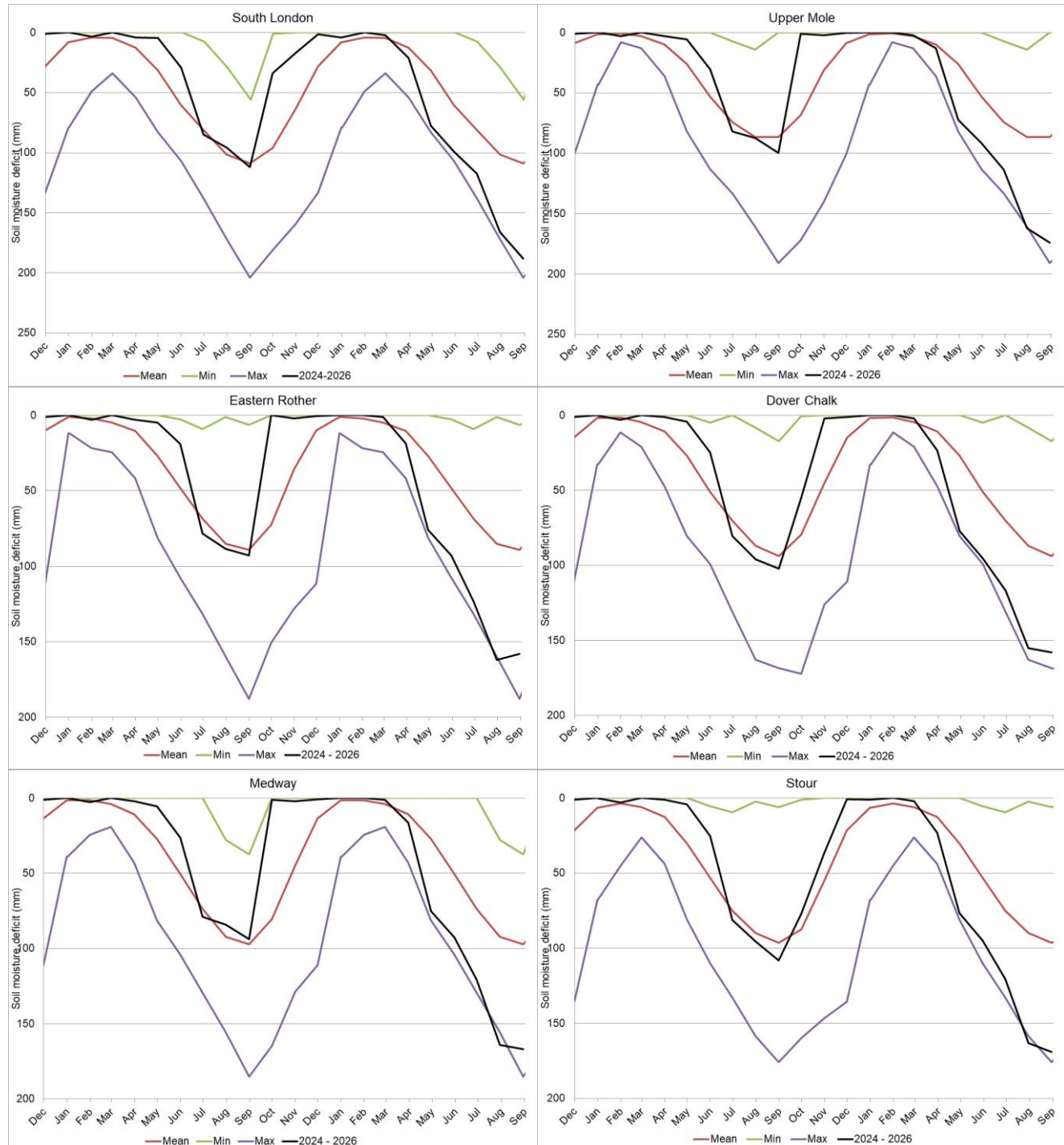
Figure 3.1: Soil moisture deficits for weeks ending 31 July (left panel) and 31 August 2026 (right panel). Top row shows actual soil moisture deficits (mm) and bottom row shows the difference (mm) of the actual from the 1991 to 2020 long term average soil moisture deficits. EA Soil Moisture Deficit data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

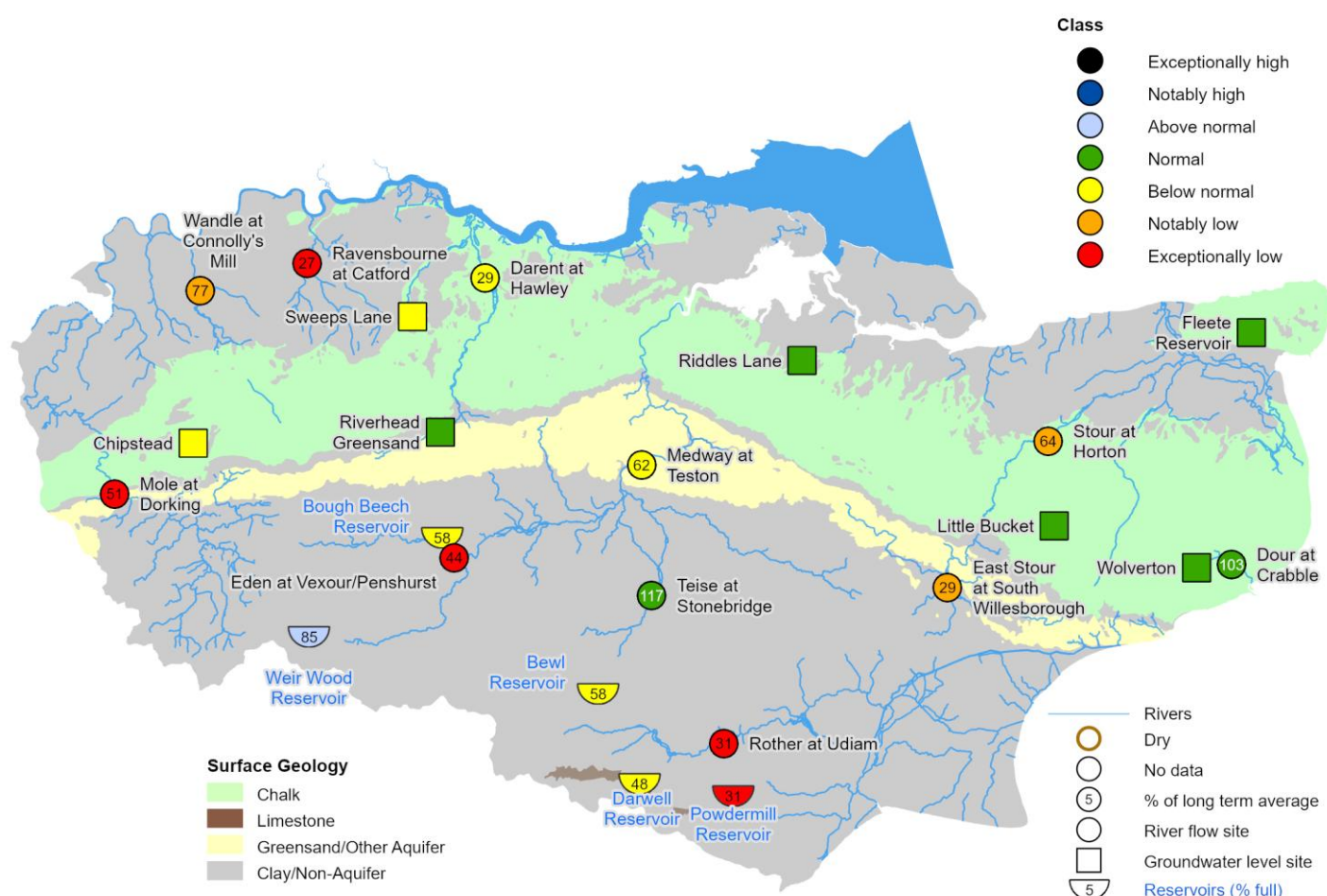
Number	Hydrological Area	SMD (mm) Day 31	End August LTA
6230TH	North Downs - South London (W)	184	102
6505TH	Upper Mole	174	96
6508TH	South London	188	117
6706So	Darent	186	113
6707So	North Kent Chalk	174	111
6708So	Stour	169	109
6709So	Dover Chalk	158	106
6710So	Thanet Chalk	220	210
6809So	Medway	167	99
6810So	Eastern Rother	158	98
6811So	Romney Marsh	165	106
6812So	North West Grain	192	143
6813So	Sheppey	186	132
	Kent & South London Average	178	119

EA soil moisture deficit data (Source EA Soil Moisture Model).

4 River flows, groundwater levels and reservoir stocks

4.1 River flows, groundwater levels and reservoir stocks map

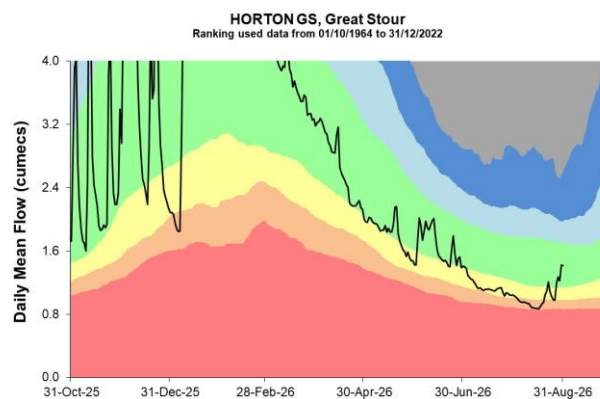
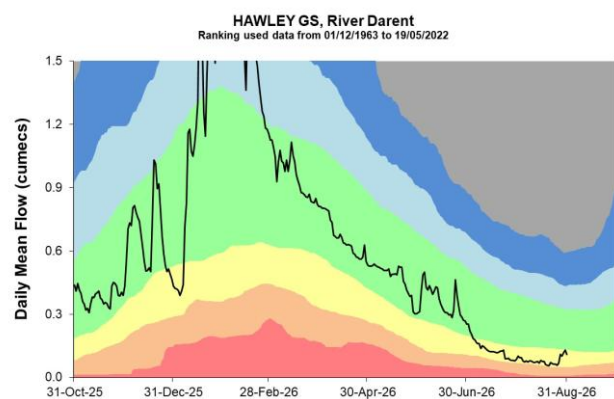
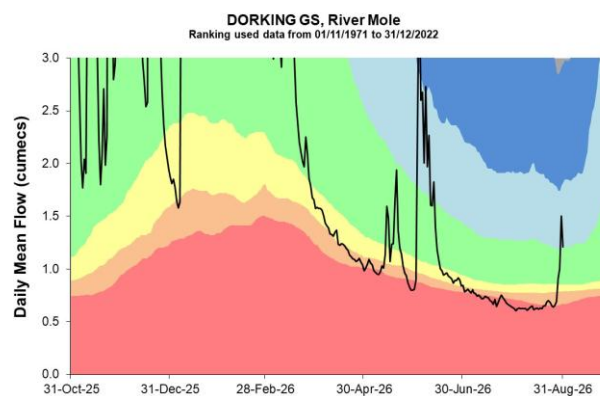
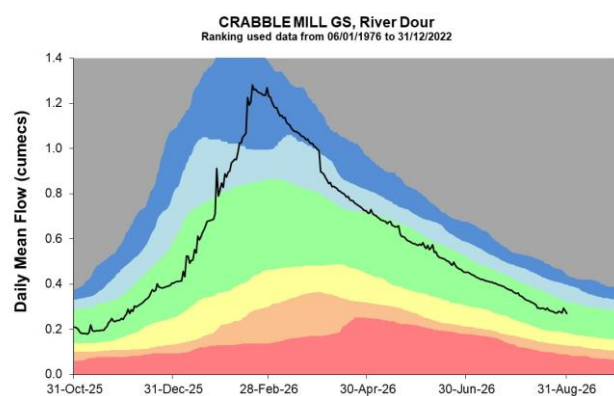
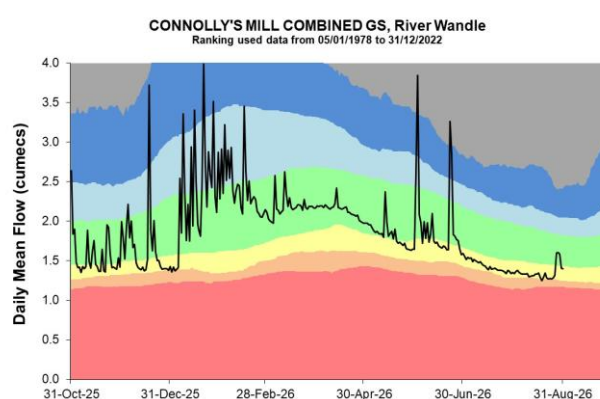
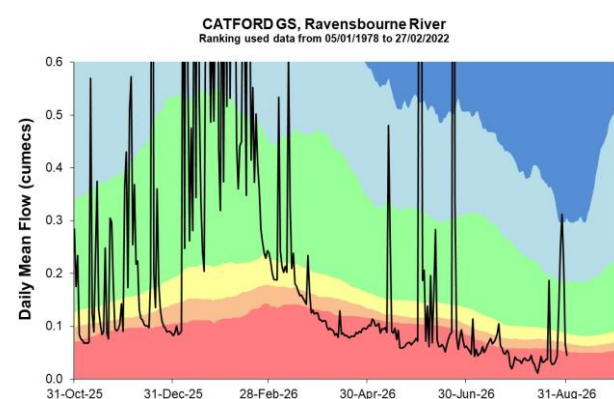
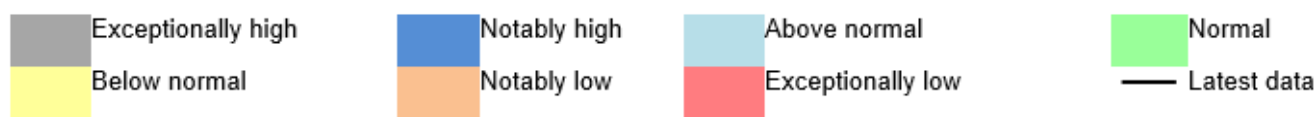
Figure 4.1: Monthly mean river flows* for indicator sites for August 2026, expressed as a percentage of the respective long term average (period 1992 – 2020) and classed relative to an analysis of historic August monthly means. ***Flows at gauging stations in the Medway catchment might be affected by upstream reservoir releases.** End of month groundwater levels for indicator sites for August 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic August levels. Tables available in the appendices with detailed information. End of month levels for reservoirs** for August 2026, expressed as percent full. ****Weirwood Reservoir is currently offline** (Source: Water Companies).

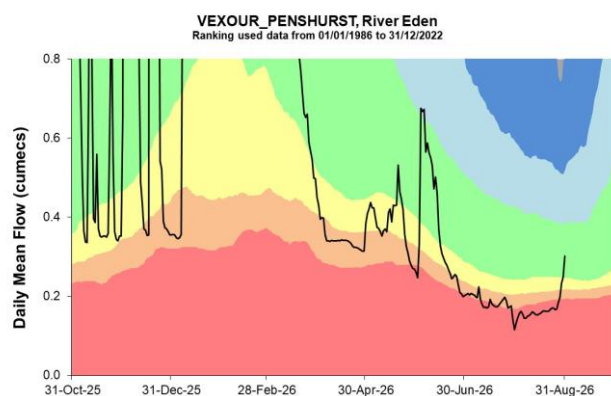
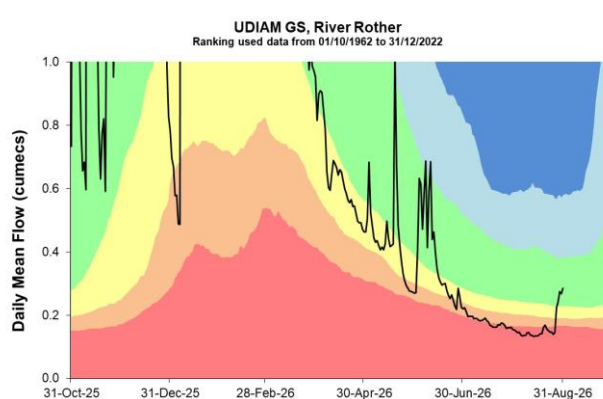
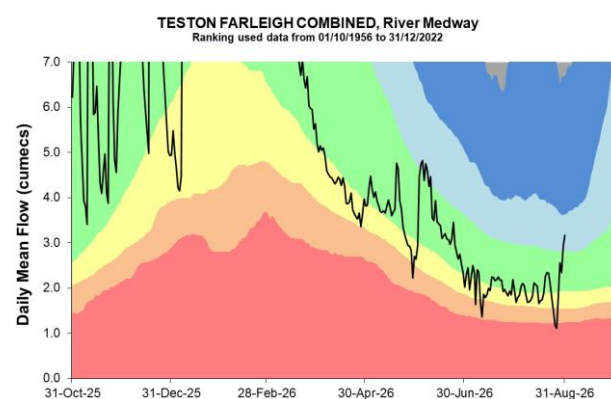
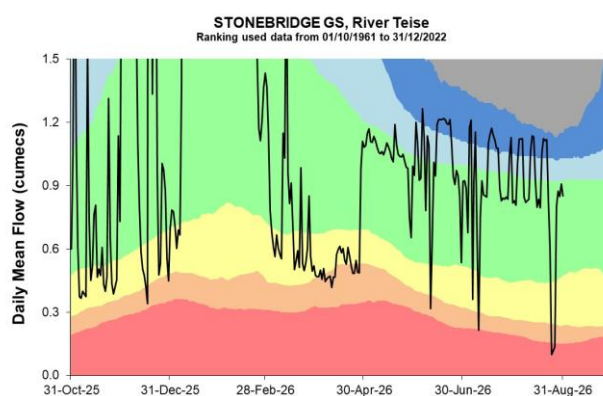
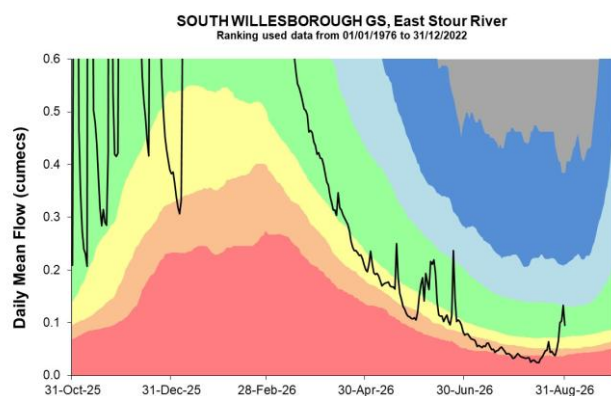


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4.2 River flow charts

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.



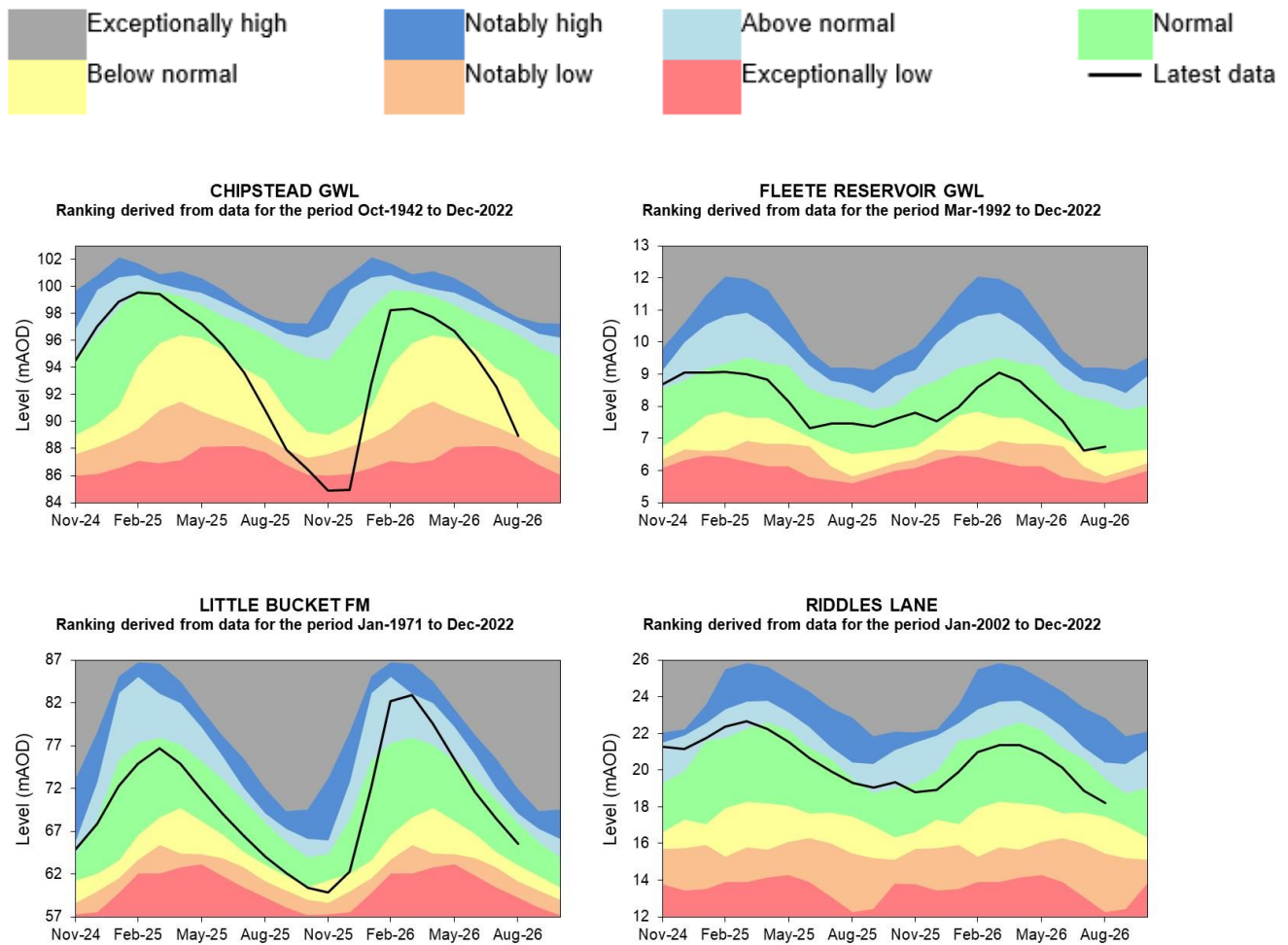


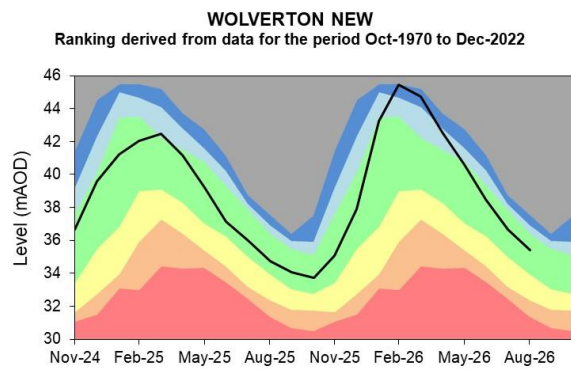
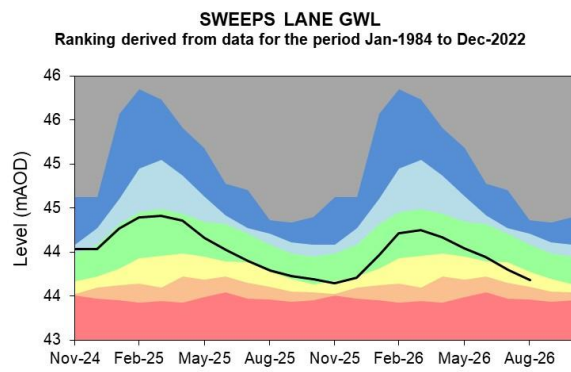
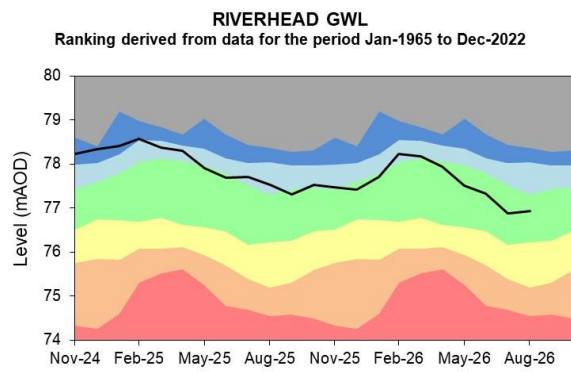
Source: Environment Agency.

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.



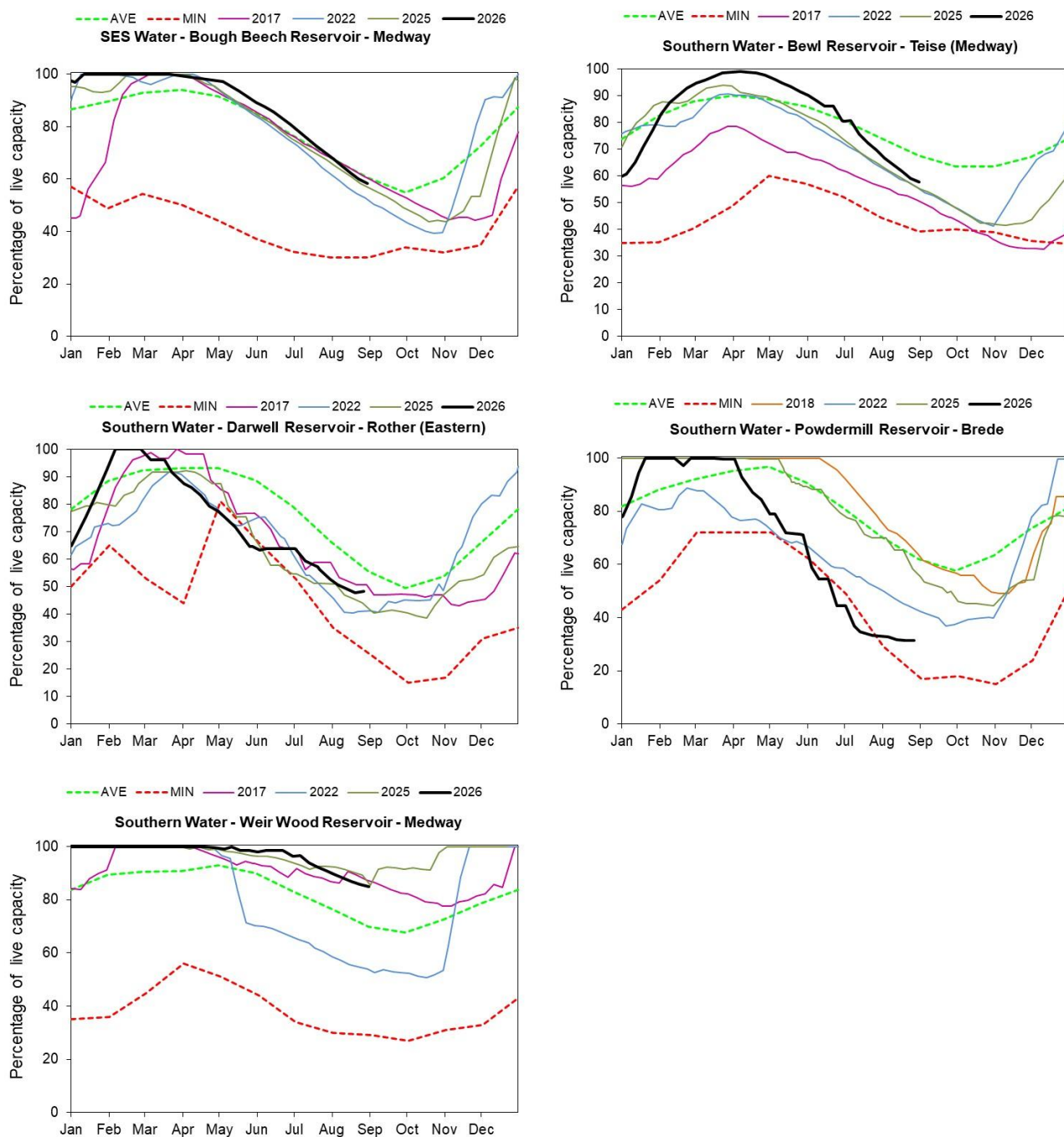


Source: Environment Agency, 2026.

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	Aug 2026 rainfall % of long term average 1991 to 2020	Aug 2026 band	Jun 2026 to August cumulative band	Mar 2026 to August cumulative band	Sep 2025 to August cumulative band
North Downs - South London	36	Notably Low	Notably low	Exceptionally low	Normal
Upper Mole	45	Notably Low	Notably low	Exceptionally low	Normal
South London	34	Notably Low	Notably low	Exceptionally low	Below normal
River Darent	48	Below Normal	Notably low	Exceptionally low	Normal
North Kent Chalk	65	Normal	Below normal	Exceptionally low	Normal
Stour	73	Normal	Below normal	Exceptionally low	Normal
Dover Chalk	79	Normal	Below normal	Exceptionally low	Normal
Thanet Chalk	61	Normal	Below normal	Exceptionally low	Normal
River Medway	61	Below Normal	Below normal	Exceptionally low	Normal

Eastern Rother	78	Normal	Below normal	Exceptionally low	Normal
Romney Marsh	78	Normal	Below normal	Exceptionally low	Normal
North West Grain	56	Below Normal	Below normal	Exceptionally low	Below normal
Sheppy	68	Normal	Below normal	Exceptionally low	Below normal

8.2 River flows table

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

8.3 Groundwater table

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