

Monthly water situation report: Thames Area

1 Summary - August 2026

Despite some rainfall at the end of the month, August was another drier than average month. Thames area received 28mm of rainfall, equivalent to 45% of the long term average (LTA). Thames area remained in drought status, having entered drought in July. Soil moisture deficits (SMDs) were still much higher than expected for the time of year. Monthly mean river flows decreased at all river indicator sites across Thames area. Groundwater levels continued their seasonal decline and ranged from exceptionally low to notably high across Thames area at the end of August.

1.1 Rainfall

Thames area received a total of 28mm of rainfall in August, 45% of the LTA for the month. The start of the month was drier, less than 1 mm of rain had fallen by 17 August. More than three-quarters of the month's rainfall fell in the last week of August, with 26 and 29 August accounting for half of the month's rainfall, totalling 14mm. Two hydrological areas, the Lower Wey and the Cut, received exceptionally low rainfall, equivalent to about a quarter of their LTAs, with totals of 16mm and 15mm respectively. The Thame, Loddon, North Downs Hampshire and Wey Greensand hydrological areas received notably low, while the remaining areas received below normal rainfall compared to their LTAs. Thames area remained in drought status, having entered drought in July.

1.2 Soil moisture deficit and recharge

SMDs continued to increase across the hydrological areas, with Thames area reaching almost twice its end of August LTA. SMDs in both the Cotswolds East and Cotswolds West areas were approximately double their respective LTA. Effective rainfall was negligible during the month, even in areas that would typically receive some at this time of year.

1.3 River flows

Monthly mean river flows continued to decrease at all indicator sites across Thames area. Two thirds (10 of 15) of our indicator sites were classified as notably low or exceptionally low for the time of year. Exceptionally low flows were recorded at: the River Thame at Wheatley, the River Coln at Bibury, the River Kennet at Calcot, and at three sites on the River Thames; Kingston, Kingston (naturalised), and Windsor. The monthly mean flow of the River Thames at Kingston was 20% of the LTA. The remaining 5 sites were classified as normal for the time of year. The West Berkshire Groundwater Scheme was switched on towards the end of the month in order to supplement the flows in the River Thames and to bolster the water available for abstraction in the Lower Thames during the drought.

1.4 Groundwater levels

Groundwater levels continued their seasonal decline at all indicator sites in August. At the end of the month, 5 of our 11 indicator sites remained normal for the time of year. Groundwater levels in the chalk and Lower Greensand aquifers continued to be relatively resilient through the drought, resulting from storage of the above average winter rainfall. The lower storage oolite aquifers are showing less resilience. The only change from July was at Jackaments Bottom, in the Inferior Oolite, which declined from notably low to exceptionally low for the time of year. Levels at Rockley (Berkshire Downs Chalk) remained below normal. Ampney Crucis (Great Oolite) and Model Farm (Upper Greensand) also remained below normal. The Flashes (Lower Greensand) continued to have higher levels than typical for the time of year, with notably high levels.

1.5 Reservoir stocks

Farmoor Reservoir's storage decreased to 75.6% at the end of the month, down from 91.8% at the end of July, and was below the LTA for the time of year. Storage in the Lower Thames Reservoirs also decreased, ending the month at 59.4%, down from 72.4% at the end of July, and was also below the LTA.

1.6 Environmental impact

At the end of August, 41 abstraction licences were having their flows constrained to protect the environment.

Author: Thames Area Groundwater Resources and Hydrology, enquiriesWT@environment-agency.gov.uk

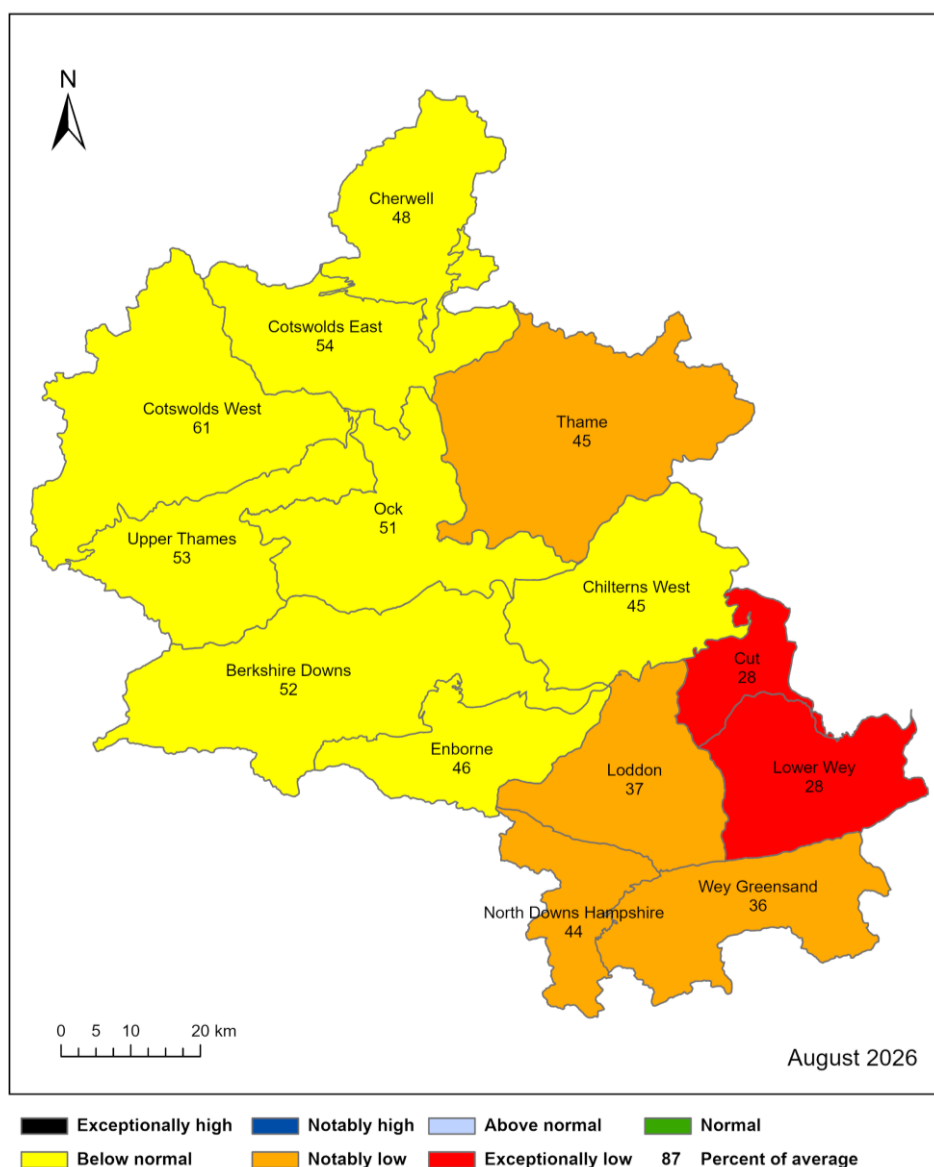
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2 Rainfall

2.1 Rainfall map

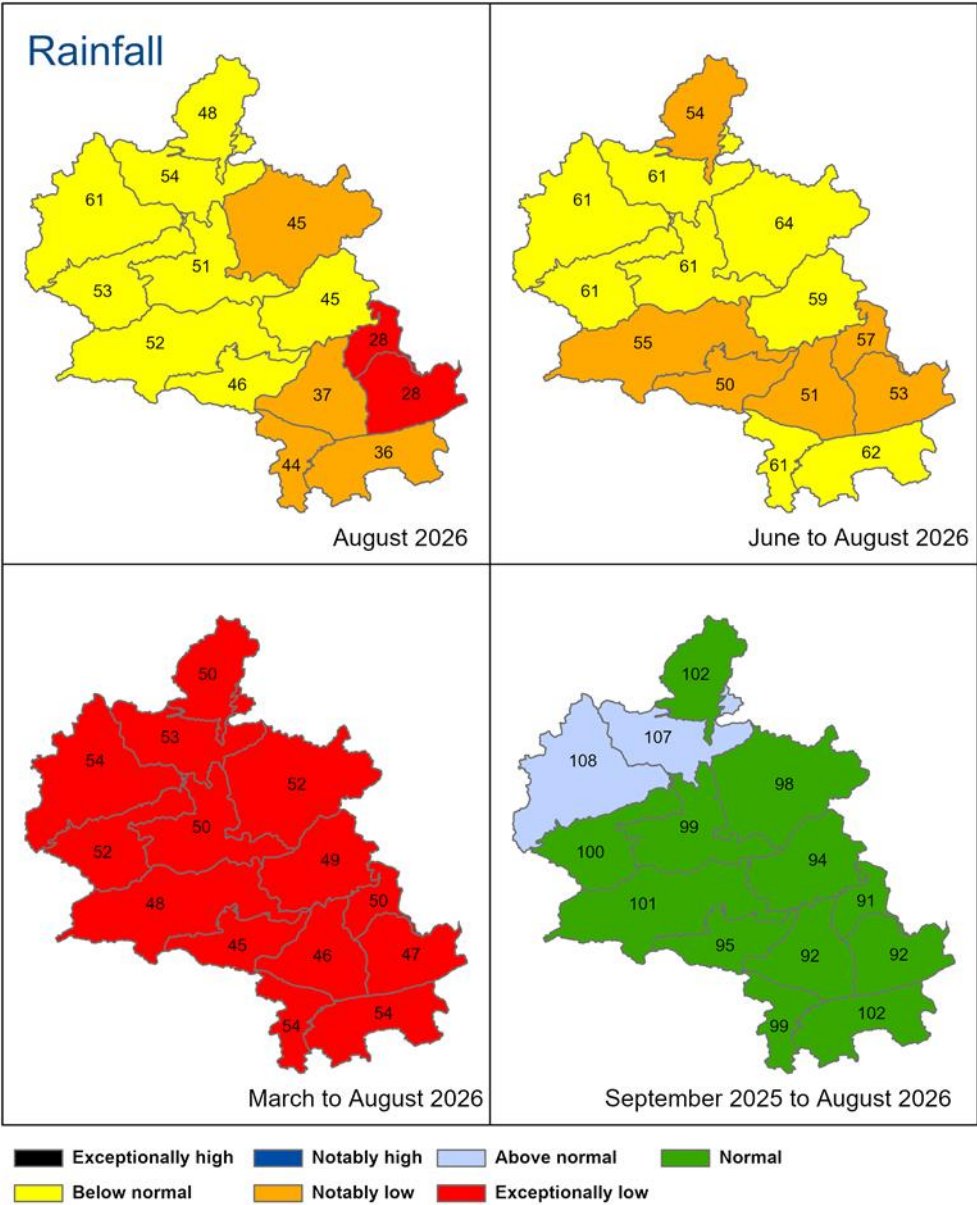
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 31 August 2026), classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



Rainfall data for Jan 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2026). Rainfall data prior to Jan 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

2.2 Rainfall map (2)

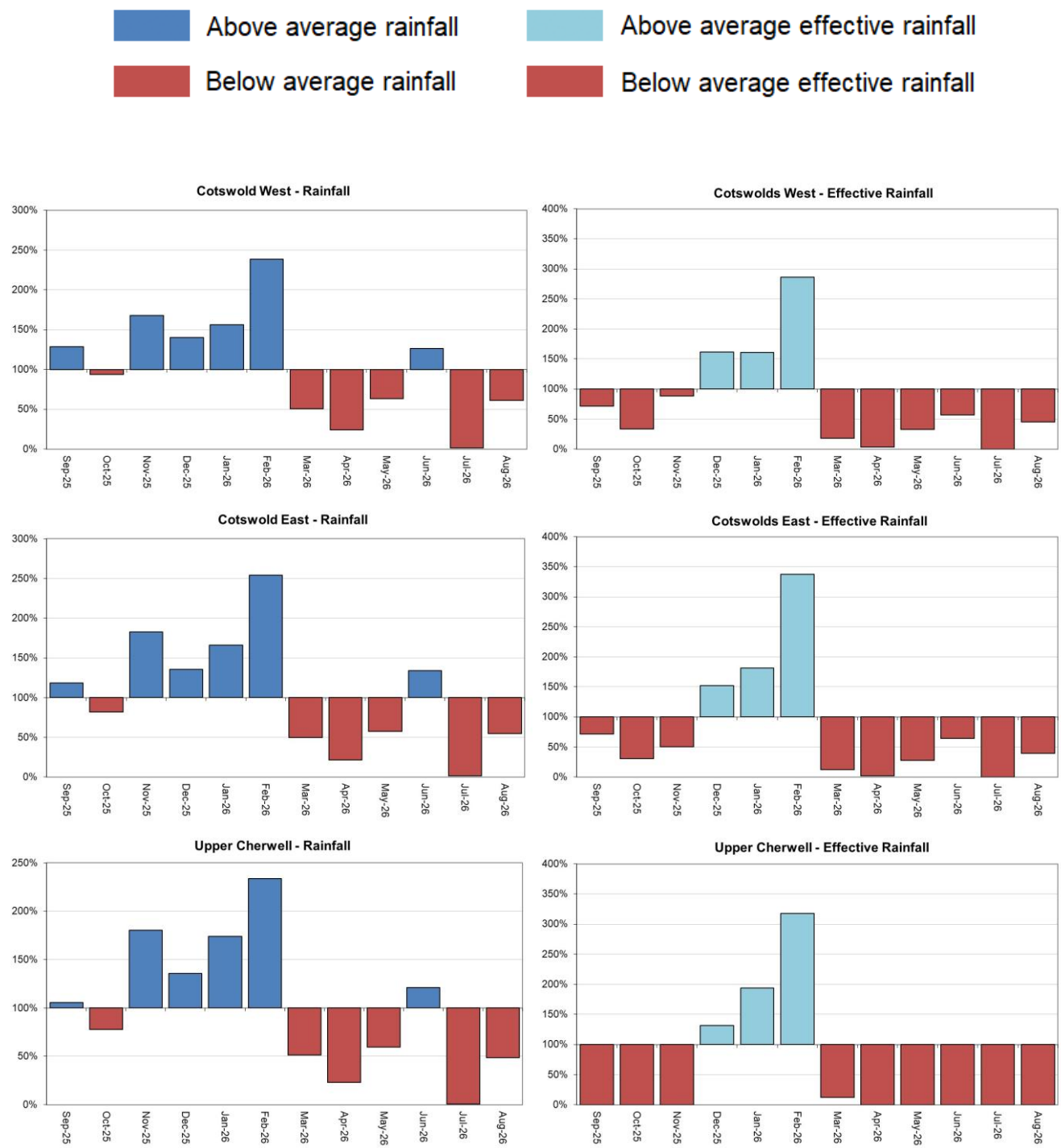
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 31 August 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.

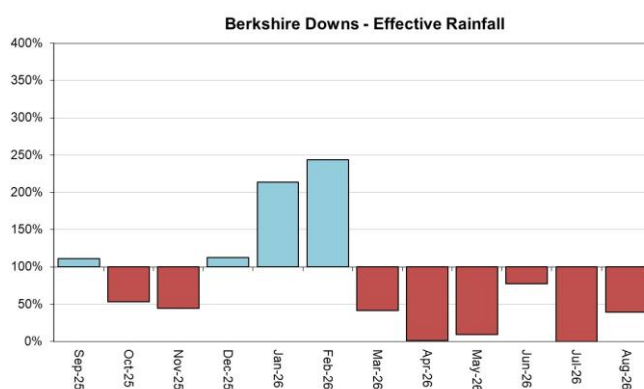
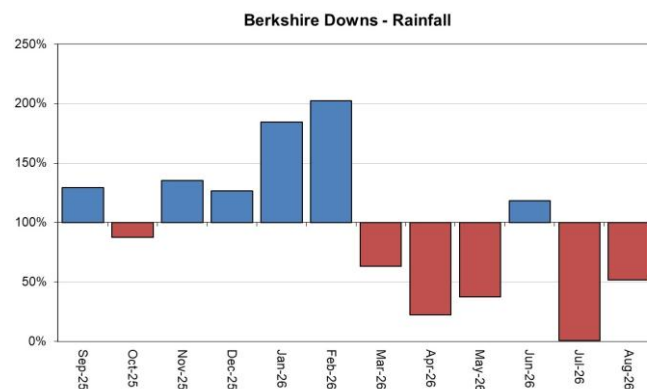
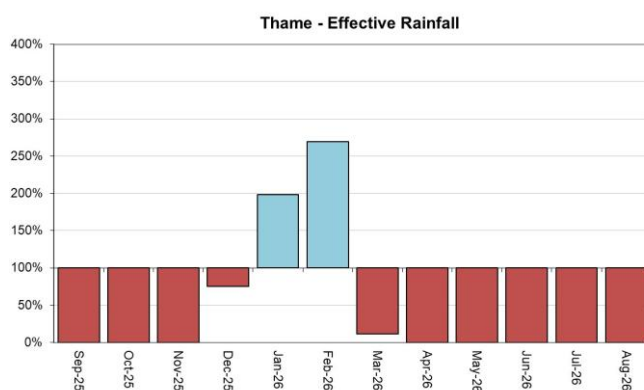
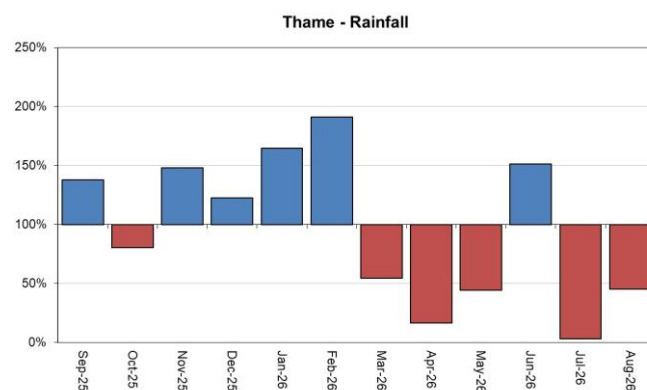
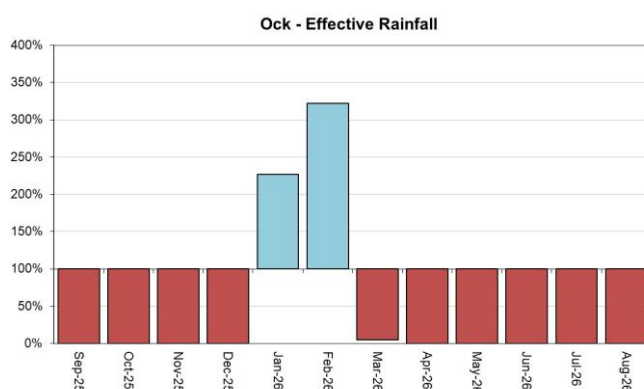
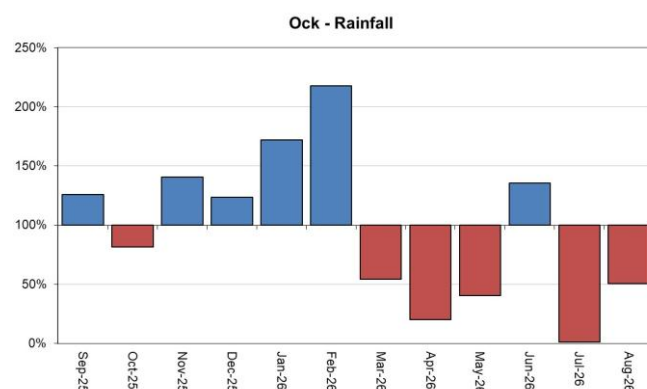
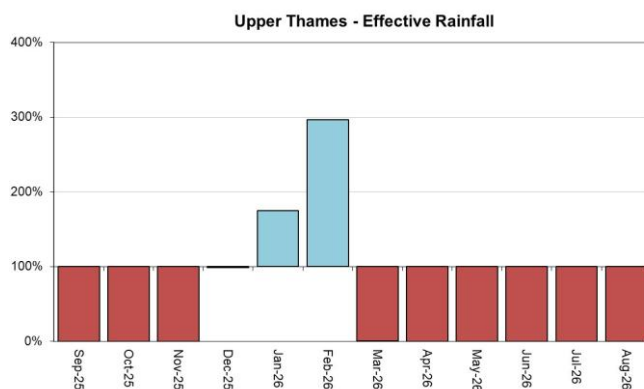
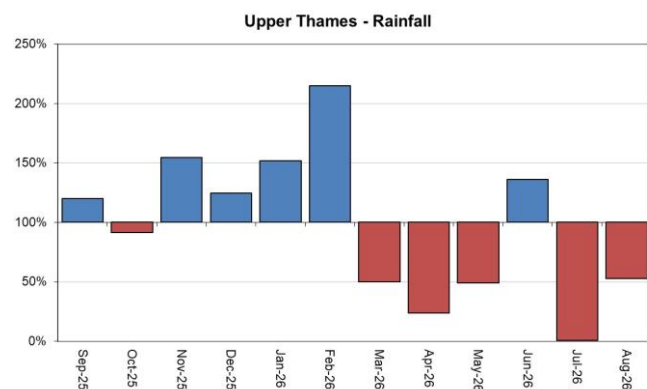


HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency). © Ordnance Survey Crown Copyright and Database Rights 2026 – AC0000807064.

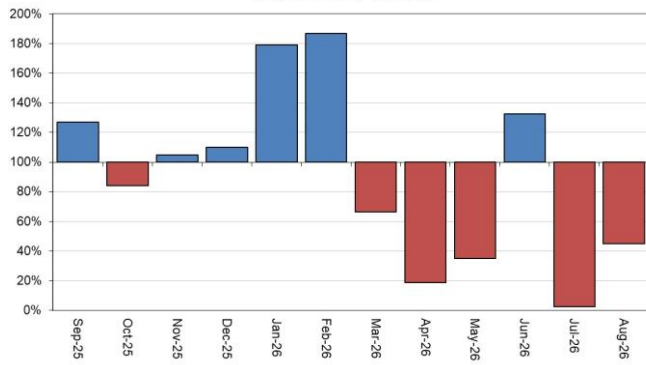
2.3 Rainfall charts

Figure 2.3: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each areal unit.

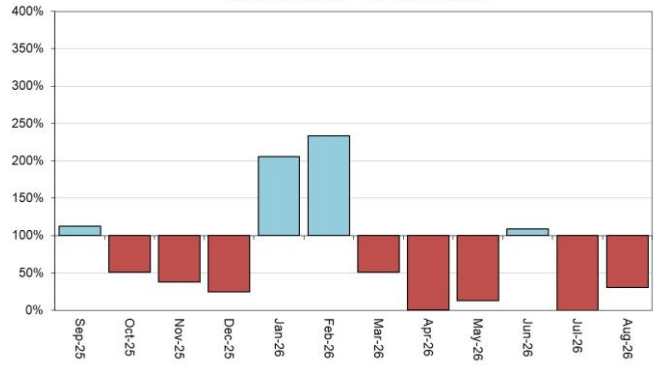




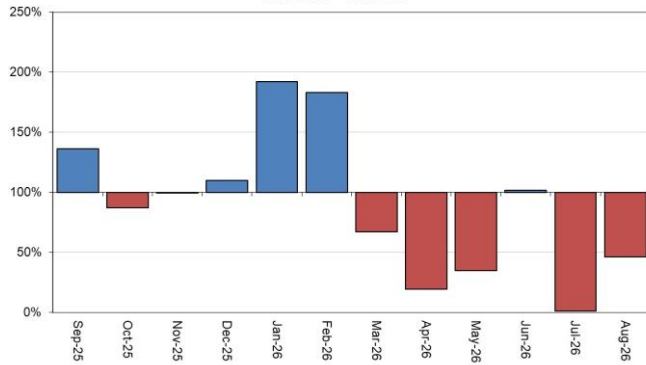
Chilterns West - Rainfall



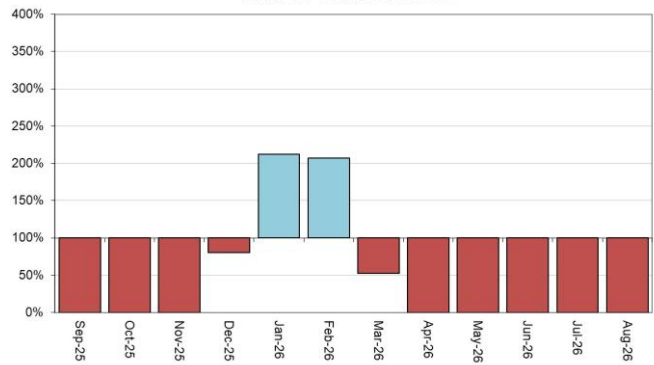
Chilterns West - Effective Rainfall



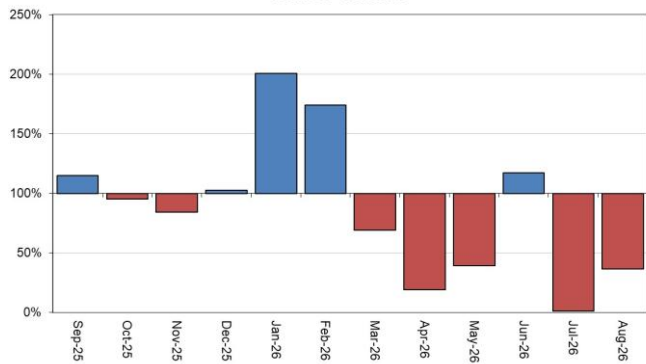
Enborne - Rainfall



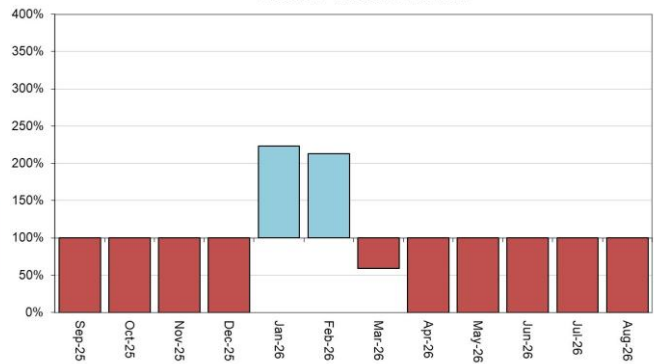
Enborne - Effective Rainfall



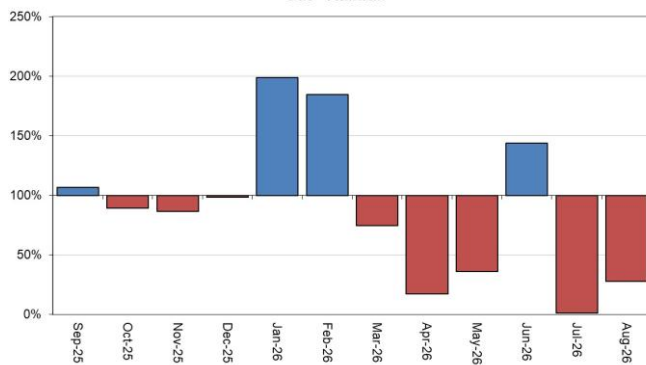
Loddon - Rainfall



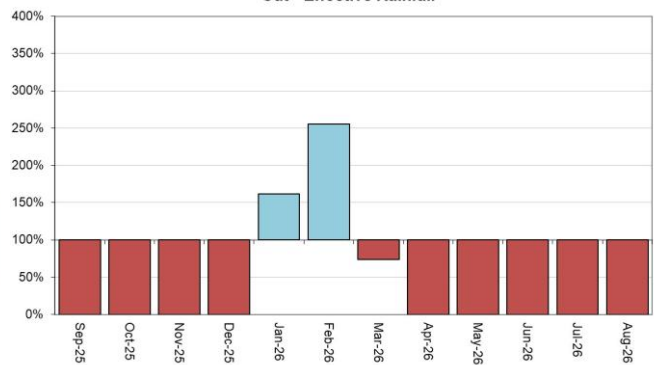
Loddon - Effective Rainfall

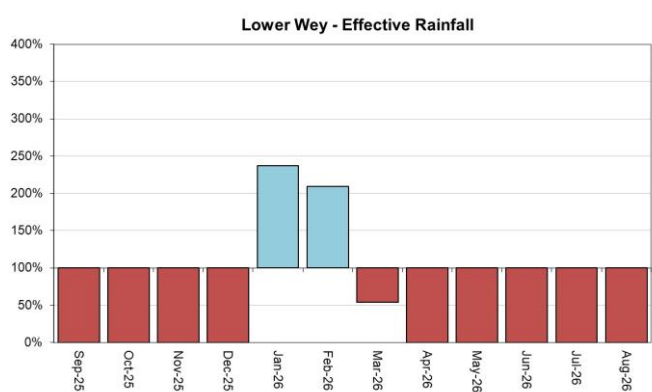
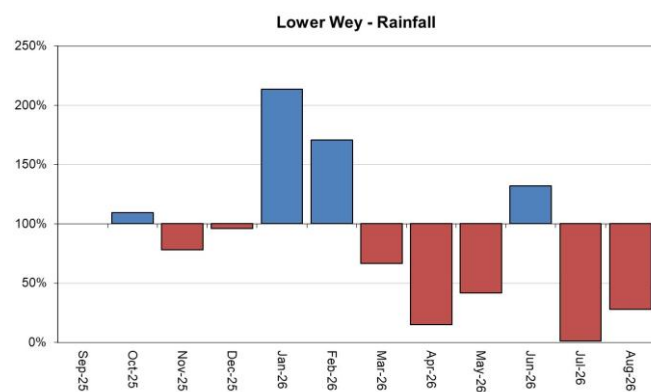
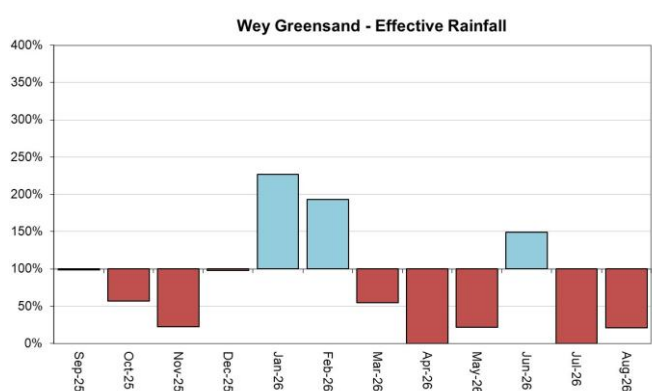
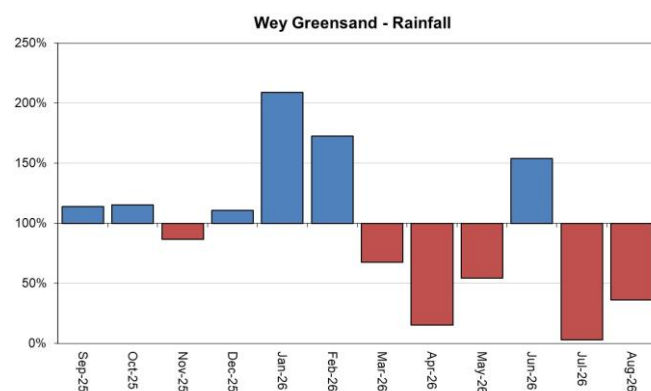
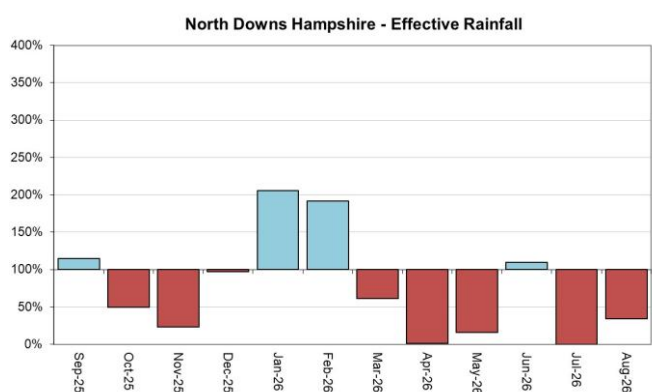
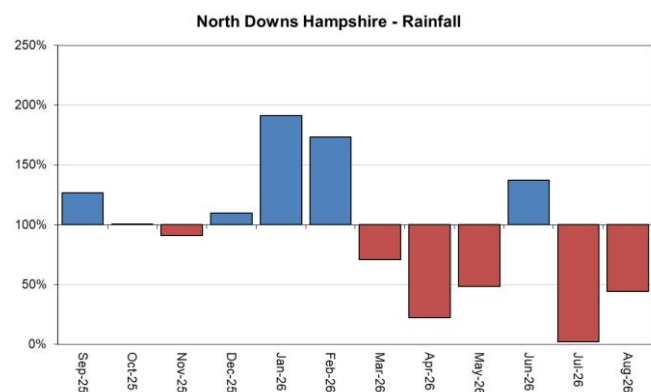


Cut - Rainfall



Cut - Effective Rainfall





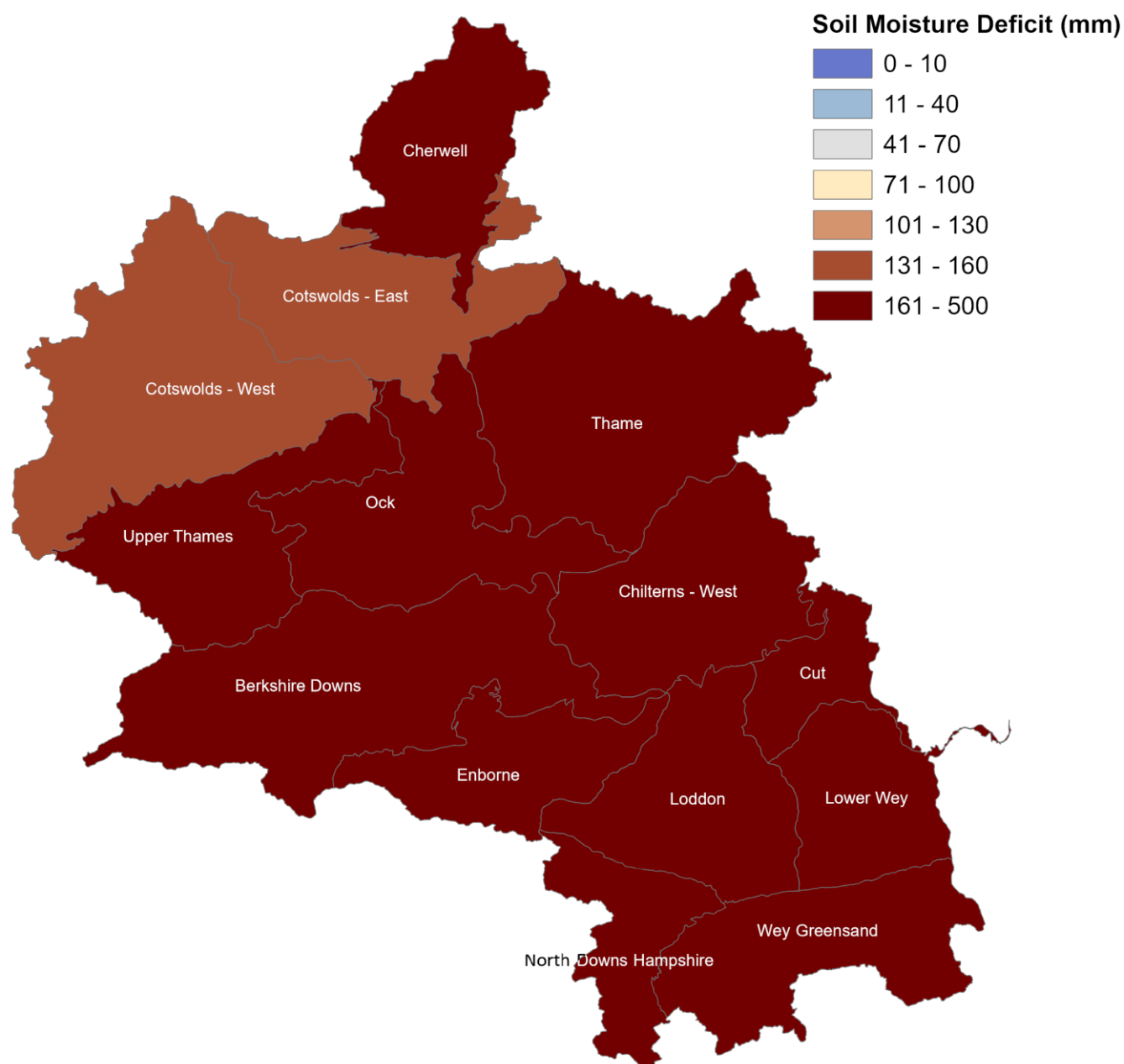
HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

EA effective rainfall data (Source: EA Soil Moisture Model)

3 Soil moisture deficit

3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for the week ending 31 August 2026. Shows the areal SMD estimate in millimetres.

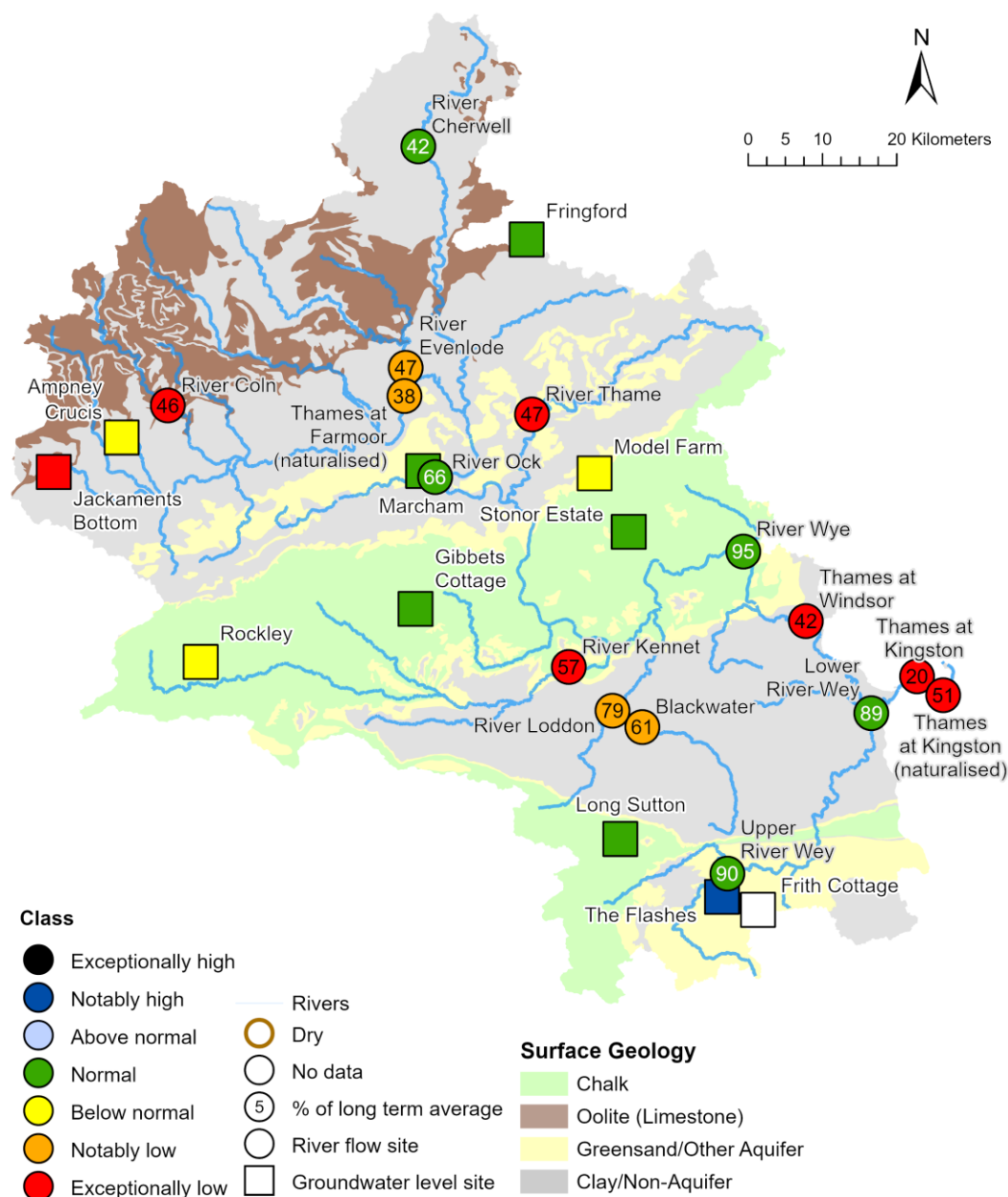


(Source: Environment Agency). © Ordnance Survey Crown Copyright and Database Rights 2026 – AC0000807064.

4 River Flow and Groundwater Status

4.1 River flow and groundwater level map

Figure 4.1: Monthly mean river flow for indicator sites and end of month groundwater levels for indicator sites for August 2026, Monthly mean river flows are expressed as a percentage of their respective long term averages and classified relative to historic August flows. Groundwater levels are classified relative to historic end of August groundwater levels.

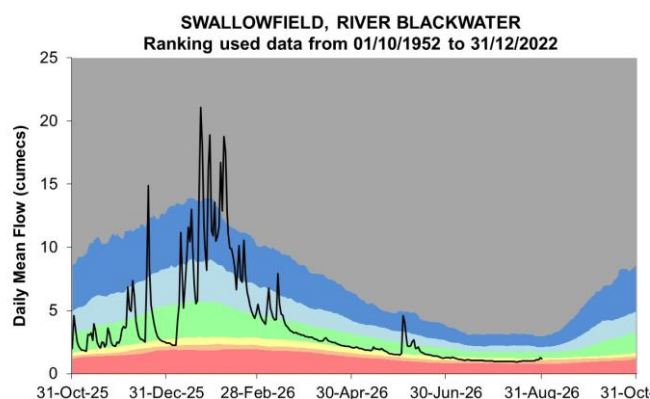
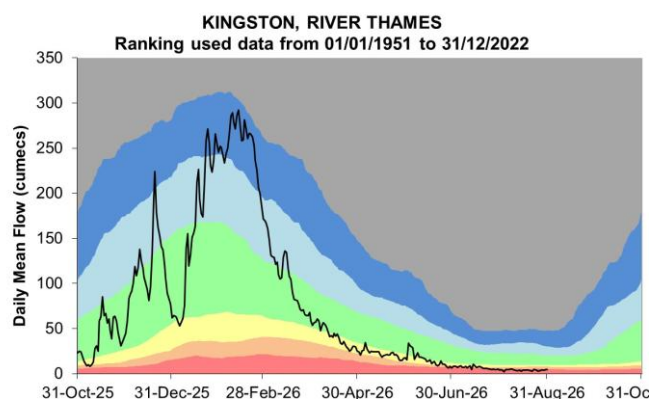
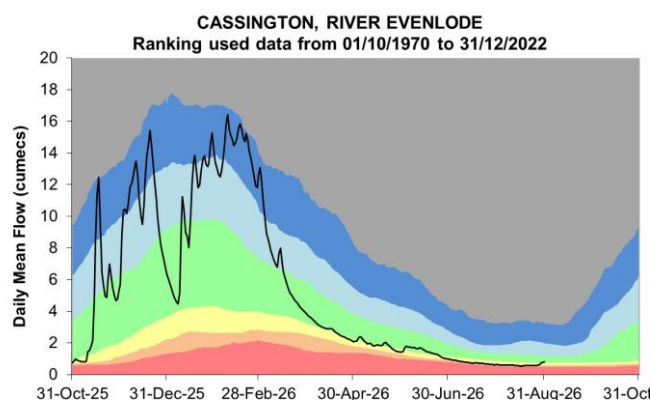
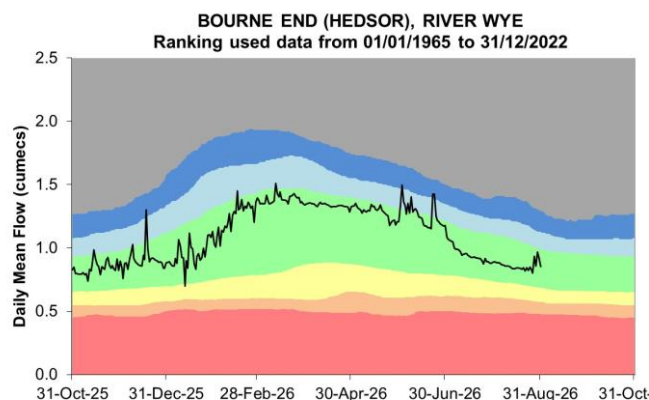
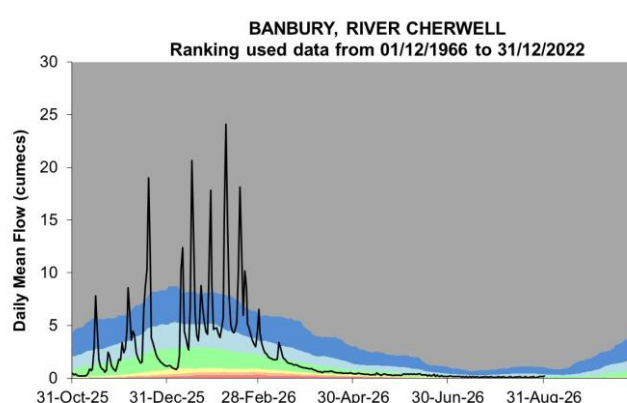
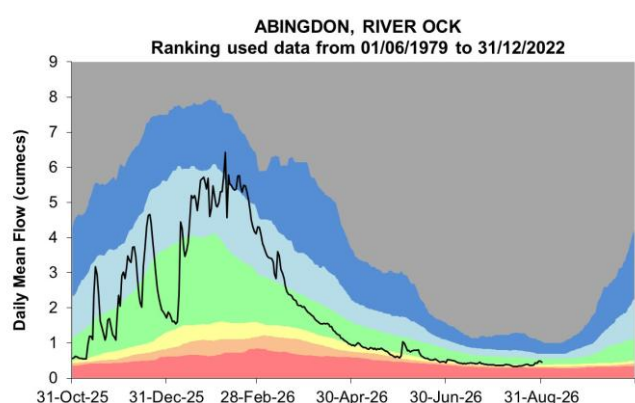
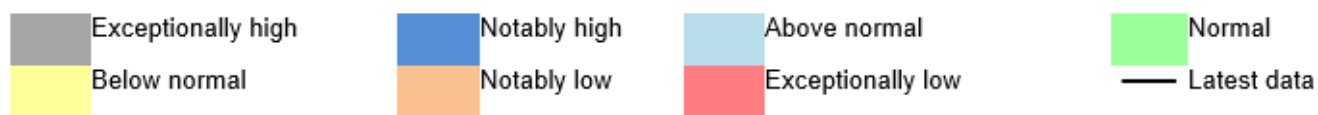


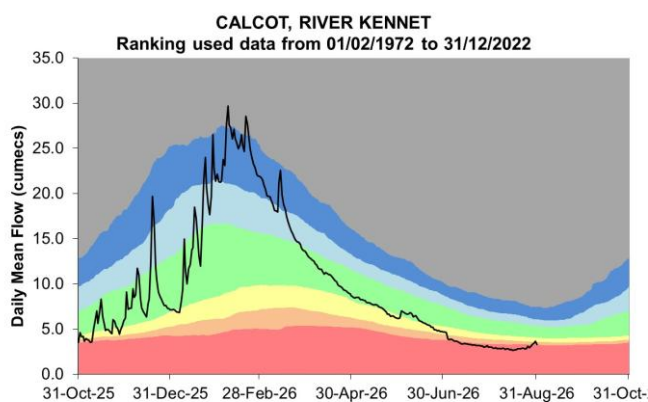
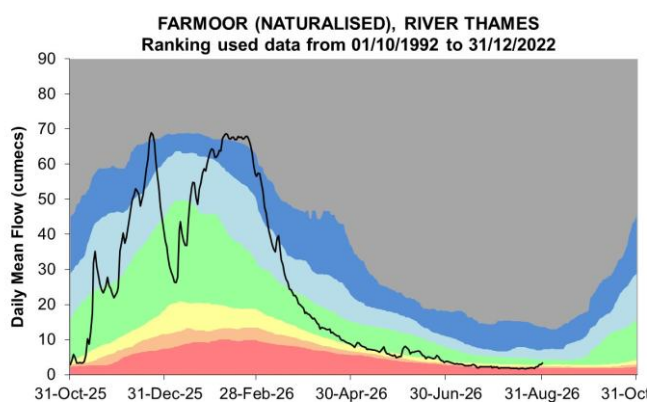
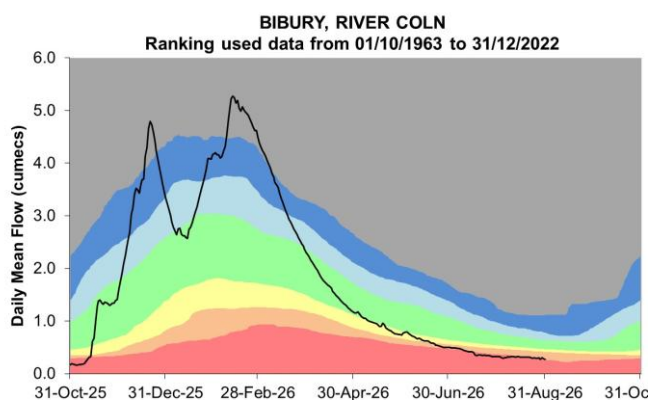
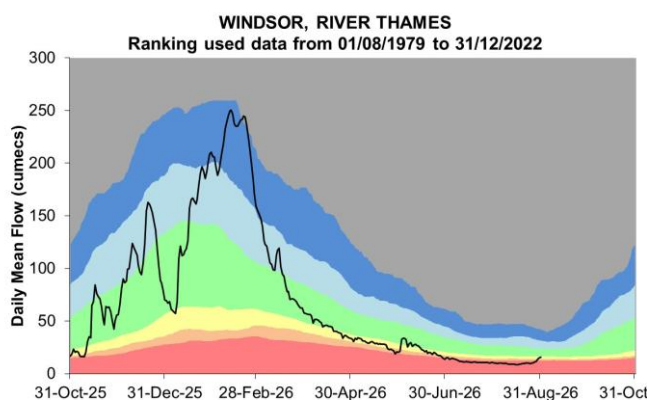
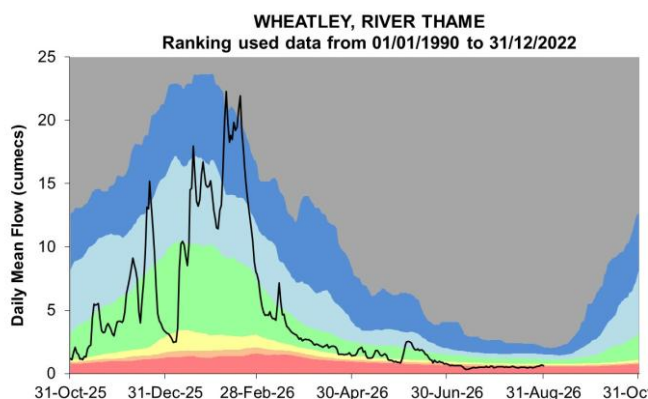
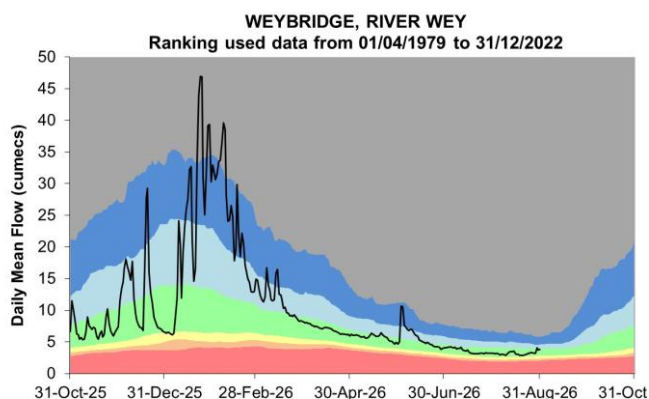
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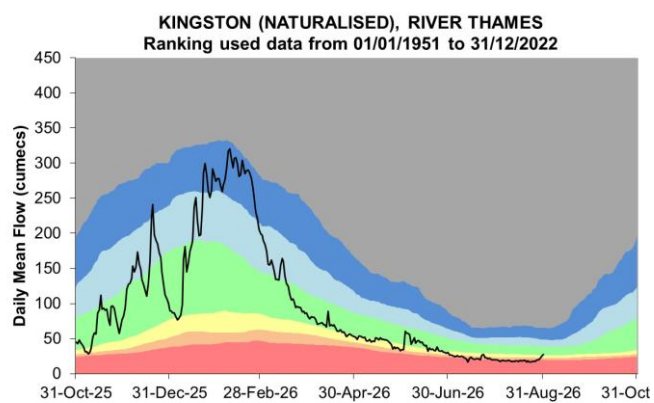
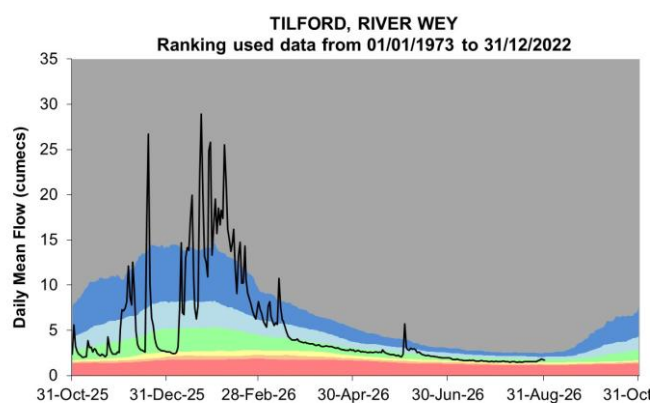
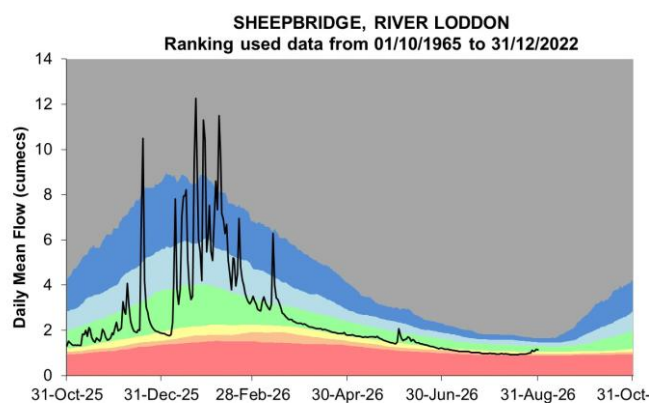
5 River flows

5.1 River flow charts

Figure 5.1: Daily mean river flows for indicator sites compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.





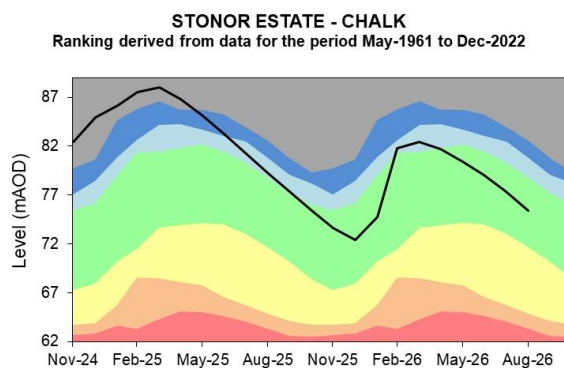
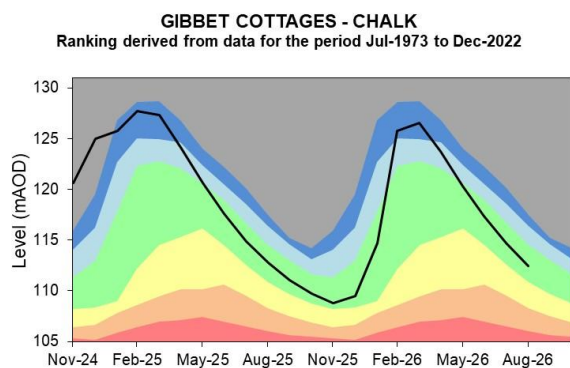
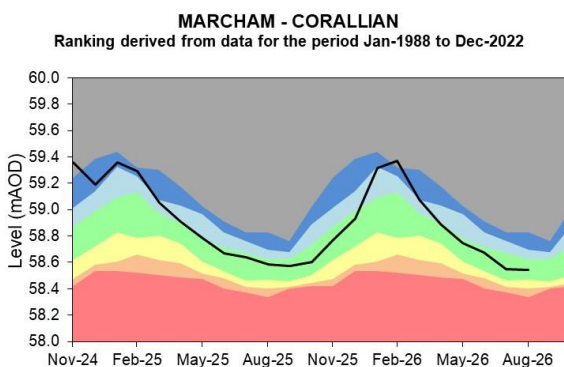
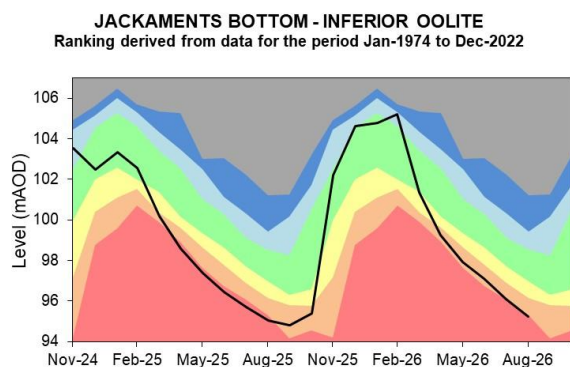
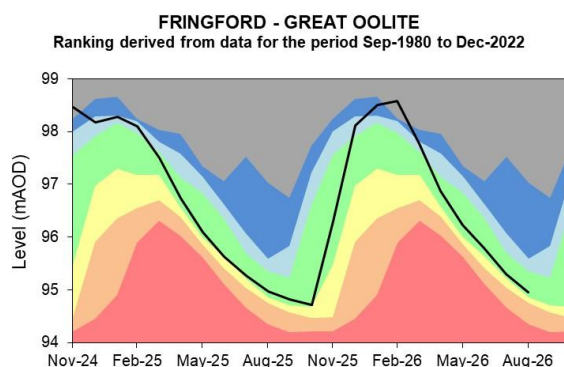
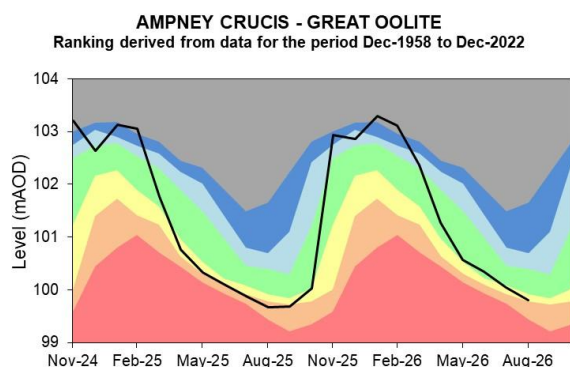
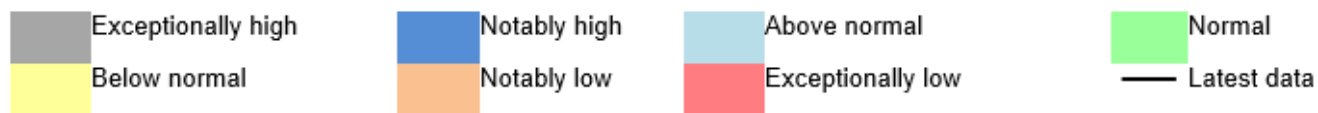


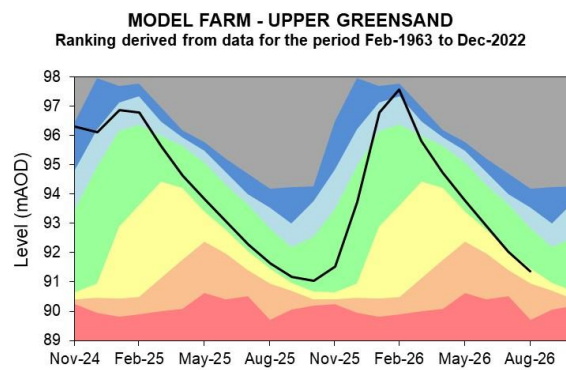
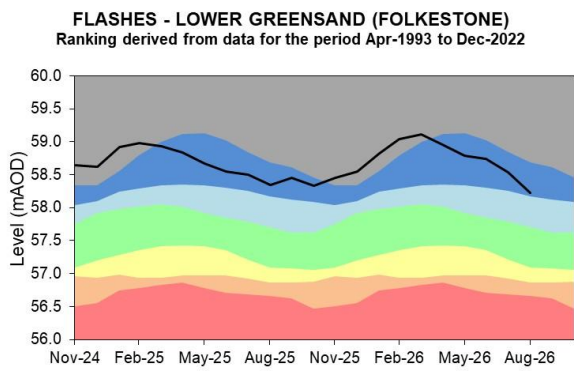
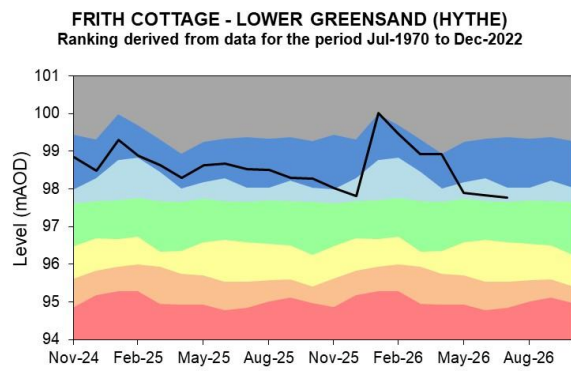
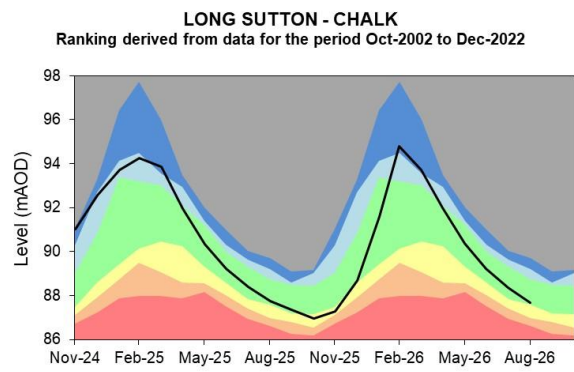
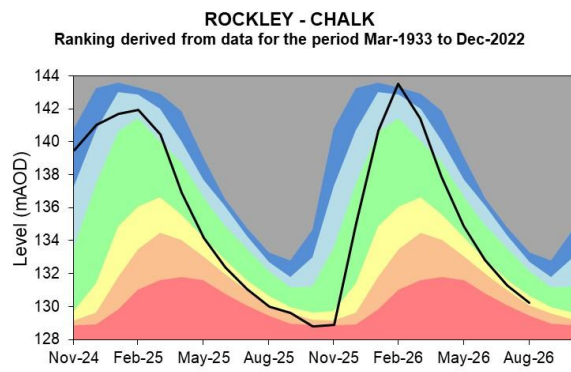
Source: Environment Agency.

6 Groundwater levels

6.1 Groundwater level charts

Figure 6.1: End of month groundwater levels for indicator sites, compared to an analysis of historic end of month levels.



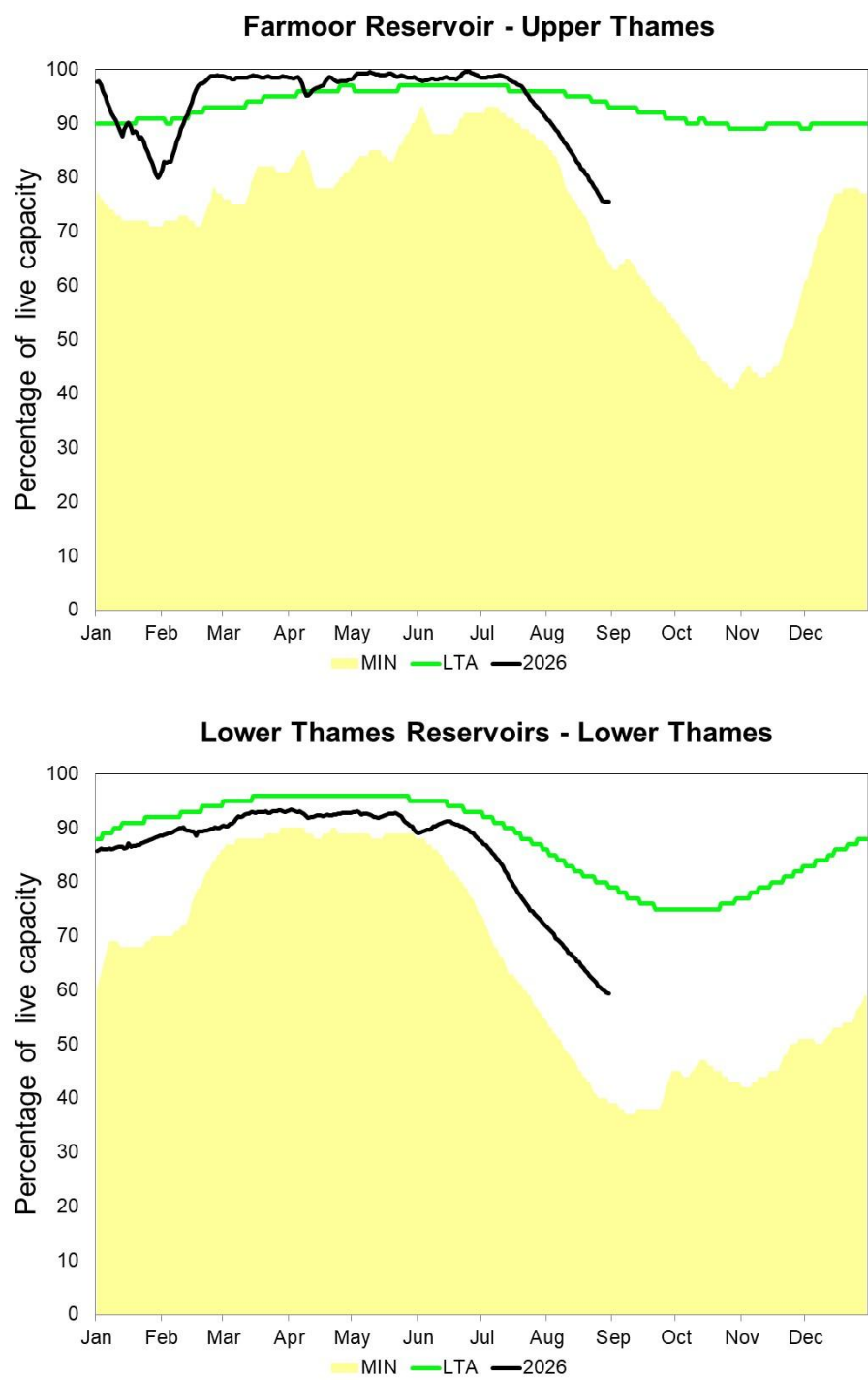


Source: Environment Agency, 2026.

No data available for Frith Cottage

7 Reservoir stocks

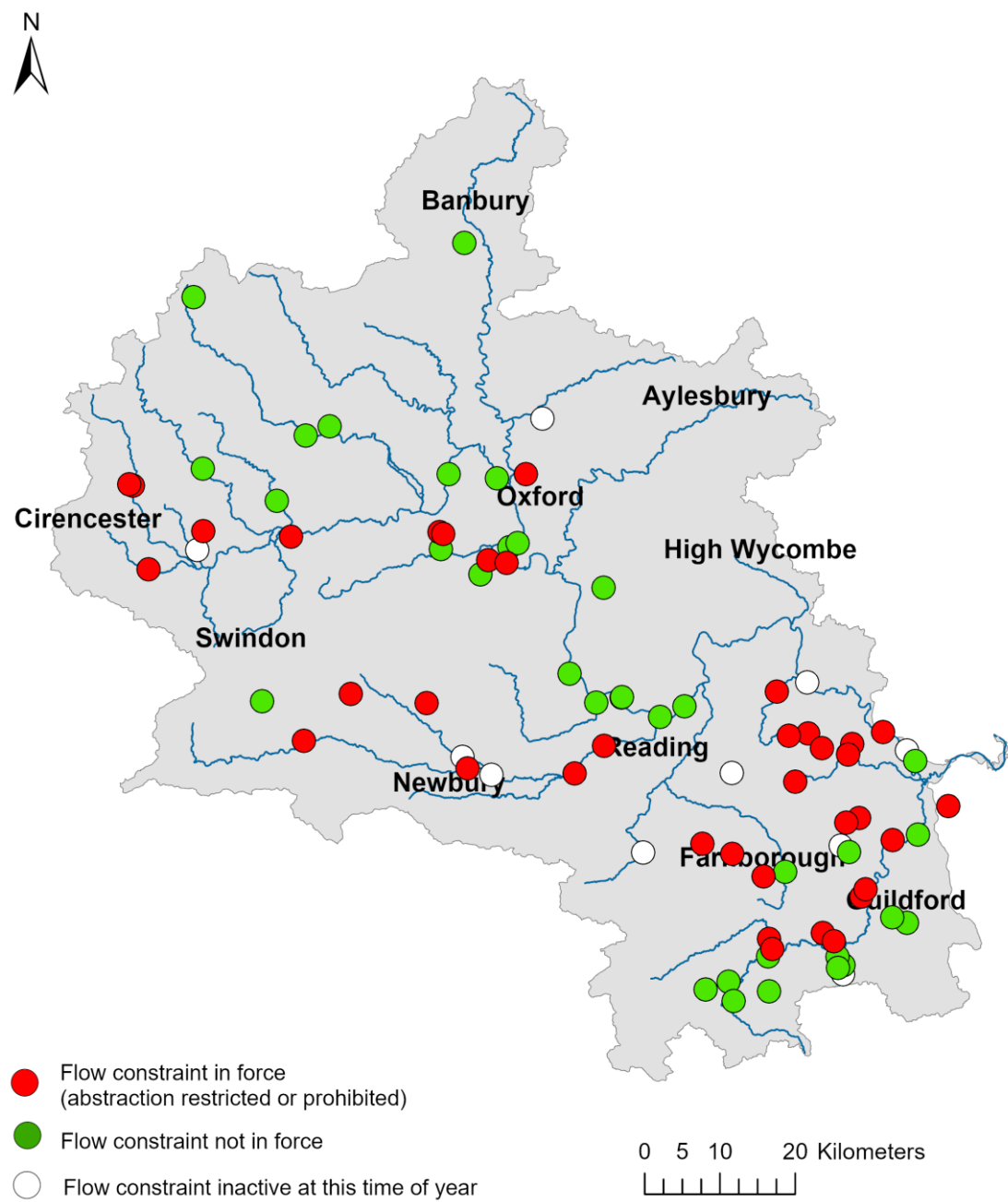
Figure 7.1: End of month regional reservoir stocks compared to minimum and average stocks.



(Source: Thames Water).

8 Flow Constraints

8.1 Figure 8.1: End of month flow constraints in Thames Area.



8.2 Summary of flow constraints

Week ending	02/08/26	09/08/26	16/08/26	23/08/26	30/08/26
Number of constraints active	48	54	54	51	41

9 Summary of rainfall, effective rainfall and soil moisture deficit

9.1 Rainfall and effective rainfall

Hydrological Area	Rainfall (mm) August Total	Rainfall (mm) August LTA	Rainfall (mm) % LTA	Effective rainfall (mm) August total	Effective rainfall (mm) August LTA	Effective rainfall (mm) % LTA
Cotswolds - West	42	69	61	3	7	45
Cotswolds - East	36	66	54	3	7	39
Berkshire Downs	33	64	52	2	6	39
Chilterns - West	28	63	44	2	6	31
North Downs - Hampshire	30	67	45	2	7	34
Wey - Greensand	24	66	36	1	6	21
Upper Thames	33	62	53	0	0	-
Cherwell	32	68	47	0	0	-
Thame	26	59	45	0	0	-
Loddon	21	57	36	0	0	-
Lower Wey	16	59	27	0	0	-
Ock	29	57	50	0	0	-
Enborne	28	60	46	0	0	-
Cut	15	57	26	0	0	-
Thames Area	28	62	45	1	3	35

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

EA effective rainfall and soil moisture deficit data (Source: EA Soil Moisture Model 2026)

9.2 Soil moisture deficit

Hydrological Area	SMD (mm) End August	SMD (mm) End August LTA
Cotswolds - West	133	63
Cotswolds - East	140	67
Berkshire Downs	180	100
Chilterns - West	183	104
North Downs - Hampshire	180	100
Wey - Greensand	181	101
Upper Thames	176	100
Cherwell	168	91
Thame	180	101
Loddon	197	108
Lower Wey	192	104
Ock	185	109
Enborne	190	101
Cut	197	115
Thames Area	177	97

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

EA effective rainfall and soil moisture deficit data (Source: EA Soil Moisture Model 2026)

9.3 Summer rainfall and effective rainfall

Summer period: 01/04/2026 to 31/08/2026						
Hydrological Area	Rainfall (mm) Total	Rainfall (mm) LTA	Rainfall (mm) % LTA	Effective rainfall (mm) Total	Effective rainfall (mm) LTA	Effective rainfall (mm) % LTA
Cotswolds - West	174	317	55	12	54	22
Cotswolds - East	155	293	53	10	45	22
Berkshire Downs	133	294	45	8	42	18
Chilterns - West	128	275	46	8	34	23
North Downs - Hampshire	153	302	51	11	48	23
Wey - Greensand	148	289	51	11	43	25
Upper Thames	145	278	52	0	14	0
Cherwell	143	288	50	0	19	0
Thame	133	261	51	0	11	0
Loddon	109	257	42	0	11	0
Lower Wey	110	254	43	0	10	0
Ock	127	258	49	0	10	0
Enborne	112	274	41	0	19	0
Cut	110	245	45	0	7	0
Thames Area	134	277	48	4	26	16

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

EA effective rainfall and soil moisture deficit data (Source: EA Soil Moisture Model 2026)

10 Glossary

10.1 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 1 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).

10.2 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.

11 Appendices

11.1 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
Berkshire Downs	52	Below Normal	Notably low	Exceptionally low	Normal
Chilterns West	45	Below Normal	Below normal	Exceptionally low	Normal
Cotswold East	55	Below Normal	Below normal	Exceptionally low	Above normal
Cotswold West	61	Below Normal	Below normal	Exceptionally low	Above normal
Cut	28	Exceptionally Low	Notably low	Exceptionally low	Normal
Enborne	46	Below Normal	Notably low	Exceptionally low	Normal
Loddon	37	Notably Low	Notably low	Exceptionally low	Normal
Lower Wey	28	Exceptionally Low	Notably low	Exceptionally low	Normal
North Downs - Hampshire	44	Notably Low	Below normal	Exceptionally low	Normal
Ock	51	Below Normal	Below normal	Exceptionally low	Normal
Thame	45	Notably Low	Below normal	Exceptionally low	Normal
Upper Cherwell	49	Below Normal	Notably low	Exceptionally low	Normal
Upper Thames	53	Below Normal	Below normal	Exceptionally low	Normal
Wey - Greensand	36	Notably Low	Below normal	Exceptionally low	Normal

11.2 River flows table

Site name	River	Catchment	Aug 2026 band	Jul 2026 band
Abingdon	River Ock	Ock	Normal	Below normal
Banbury	River Cherwell	Cherwell Upper	Normal	Normal
Bibury	River Coln	Coln	Exceptionally low	Exceptionally low
Bourne End (Hedsor)	River Wye	Wye Bucks	Normal	Normal
Calcot	River Kennet	River Kennet	Exceptionally low	Exceptionally low
Cassington	River Evenlode	Evenlode	Notably low	Notably low
Farmoor (naturalised)	River Thames	Thames	Notably low	Notably low
Kingston	River Thames	Thames	Exceptionally low	Notably low
Sheepbridge	River Loddon	Loddon	Notably low	Notably low
Swallowfield	River Blackwater	Loddon	Notably low	Notably low
Tilford	River Wey	Wey Addlestone Bourne	Normal	Normal
Weybridge	River Wey	Wey Addlestone Bourne	Normal	Normal
Wheatley	River Thame	Thame	Exceptionally low	Exceptionally low
Windsor	River Thames	Thames	Exceptionally low	Exceptionally low
Kingston (naturalised)	River Thames	Thames North Bank	Exceptionally low	Exceptionally low

11.3 Groundwater table

Site name	Aquifer	End of Aug 2026 band	End of Jul 2026 band
Ampney Crucis OBH	Burford Oolitic Limestone (great)	Below normal	Below normal
Frith Cottage	Godalming Lower Greensand	No data	Above normal
Gibbet Cottages OBH	Berkshire Downs Chalk	Normal	Normal
Jackaments Bottom OBH	Burford Oolitic Limestone (inferior)	Exceptionally low	Notably low
Long Sutton	North Downs Chalk	Normal	Normal
Marcham OBH	Shrivenham Corallian	Normal	Normal
Model Farm	Chiltern Upper Greensand	Below normal	Below normal
Rockley OBH	Berkshire Downs Chalk	Below normal	Below normal
Stonor Estate	South-west Chilterns Chalk	Normal	Normal
The Flashes OBH	Godalming Lower Greensand	Notably high	Notably high
Fringford P.S.	Upper Bedford Ouse Oolitic Limestone (great)	Normal	Normal