

Monthly water situation report: Thames Area

1 Summary - May 2026

Another dry month saw Thames area receive 25mm of rainfall in May, 47% of the long-term average (LTA). Rainfall over the meteorological spring (March to May) was exceptionally low across the majority of the area, and soil moisture deficits (SMDs) increased significantly in response. Monthly mean river flows decreased at all of our indicator sites and were mostly below normal. Groundwater levels continued their seasonal decline – with the majority ending the month normal for the time of the year.

1.1 Rainfall

Thames area received 25 mm of rainfall in May, 47% of the LTA. The majority of our areal units in the area were notably low, with only the Cotswolds West unit ending the month normal. The meteorological spring (March to May) ended very dry, as the majority of Thames area received exceptionally low rainfall over the last three months. The 3 highest daily totals were all recorded in the Cotswolds West unit on the third and eighth of the month and ranged between 12 and 14 mm.

1.2 Soil moisture deficit and recharge

Below average rainfall and warm temperatures during the month allowed the soil moisture deficit (SMD) to grow significantly and end the month at 89mm, much higher than the LTA (49mm). The highest SMD was calculated in the Cut catchment (99mm) and the lowest in the Cotswolds West (56mm). Due to the prevailing dry conditions, there was no significant effective rainfall across most of our areal units.

1.3 River flows

Monthly mean rivers flows across Thames area reflected the drier conditions of previous months and decreased at all our indicator sites in May. By the end of the month, 11 out of 15 sites were below normal or lower. Flows on the River Wey, supported by the Lower Greensand aquifer, remained resilient.

1.4 Groundwater levels

Groundwater levels continued their seasonal decline at all our indicator sites in May, although they mostly remained normal for the time of the year. The exceptions were Jackaments Bottom (notably low, Inferior Oolite), Frith Cottage (above normal, Lower Greensand) and Flashes (notably high, Lower Greensand).

1.5 Reservoir stocks

Farmoor Reservoir ended the month at 98.6%, above the LTA for the time of the year whereas the Lower Thames Reservoirs ended the month at 89.7%, below the LTA.

1.6 Environmental impact

At the end of May, 8 abstraction licences were having their flow constrained in order to protect the environment.

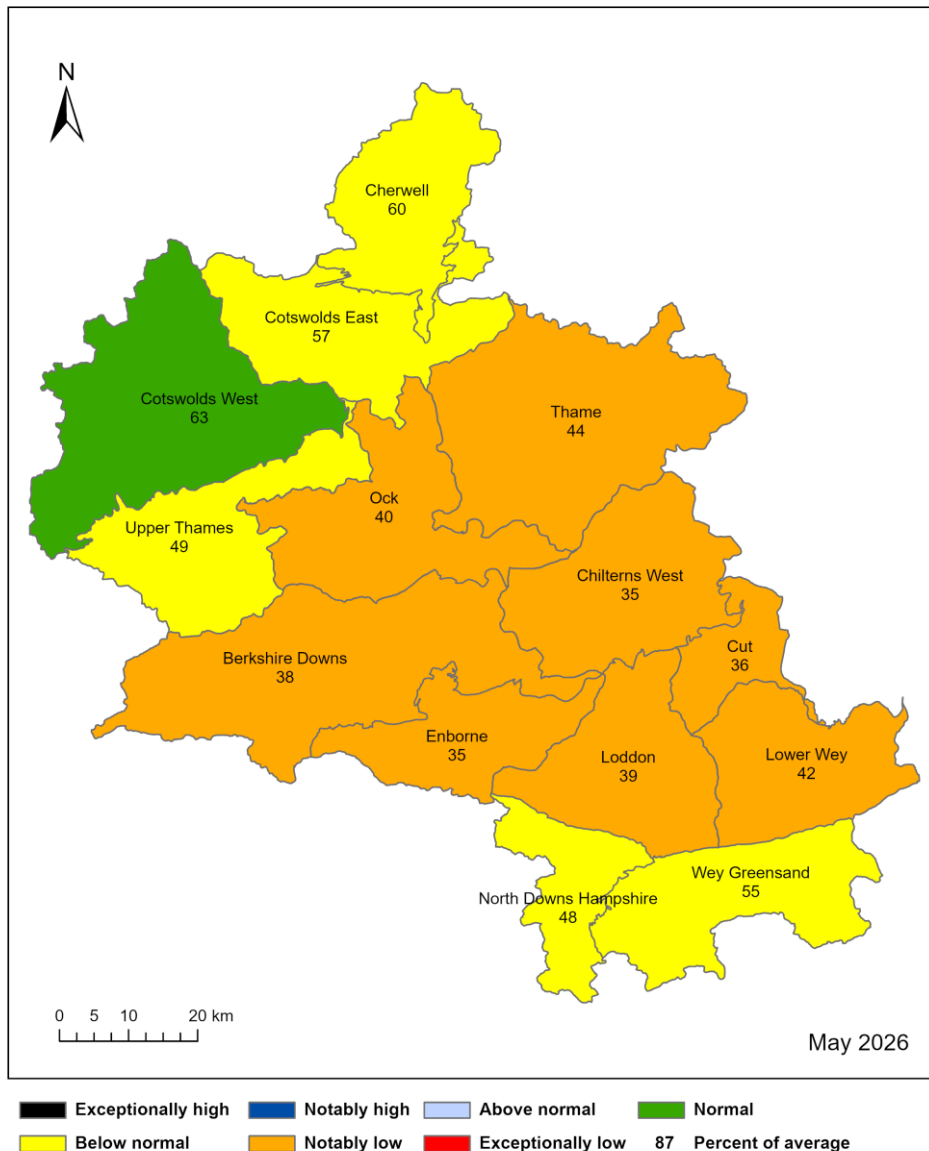
Author: Thames Area Groundwater Resources and Hydrology, enquiriesWT@environment-agency.gov.uk

Contact Details: 030708 506 506

2 Rainfall

2.1 Rainfall map

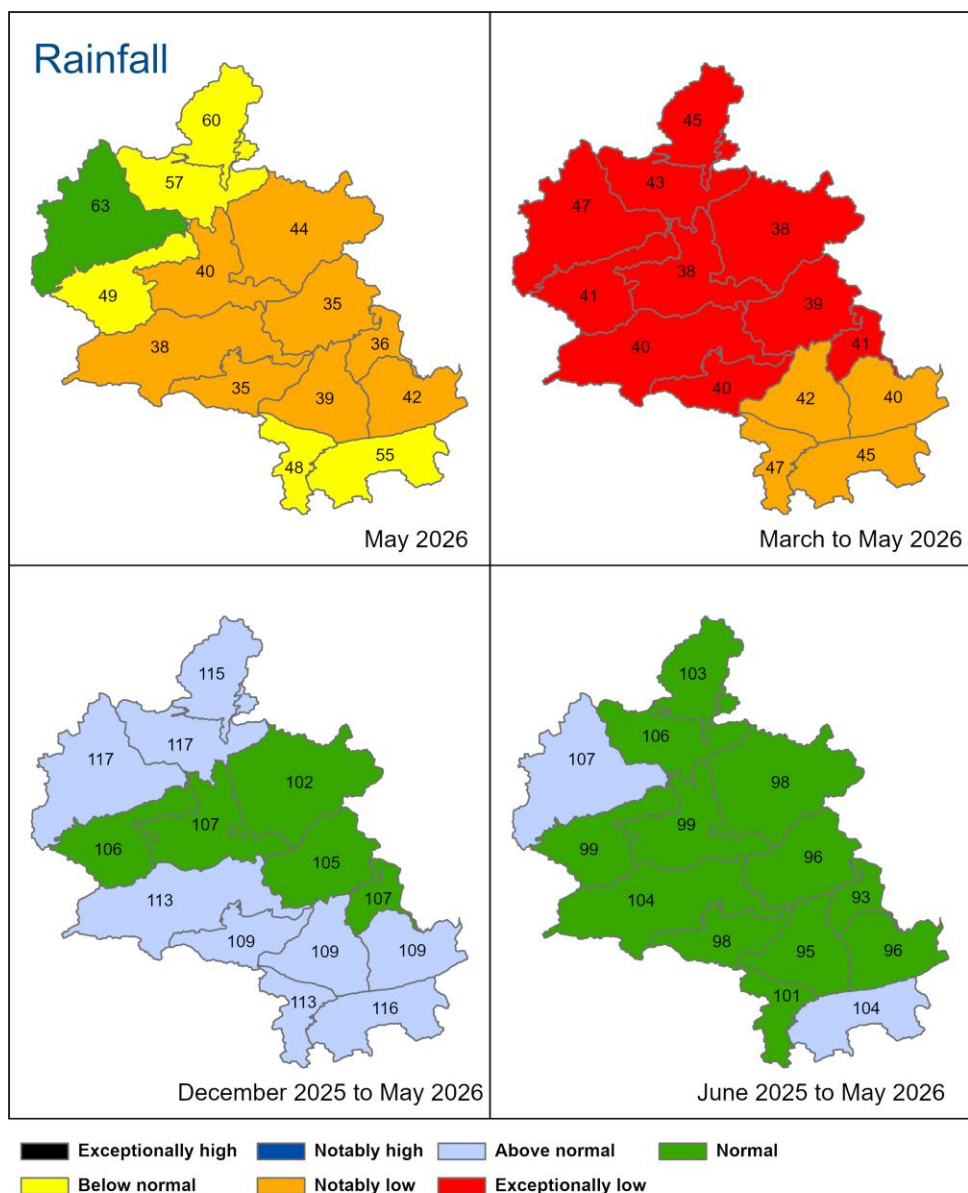
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 31 May 2026), classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



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)

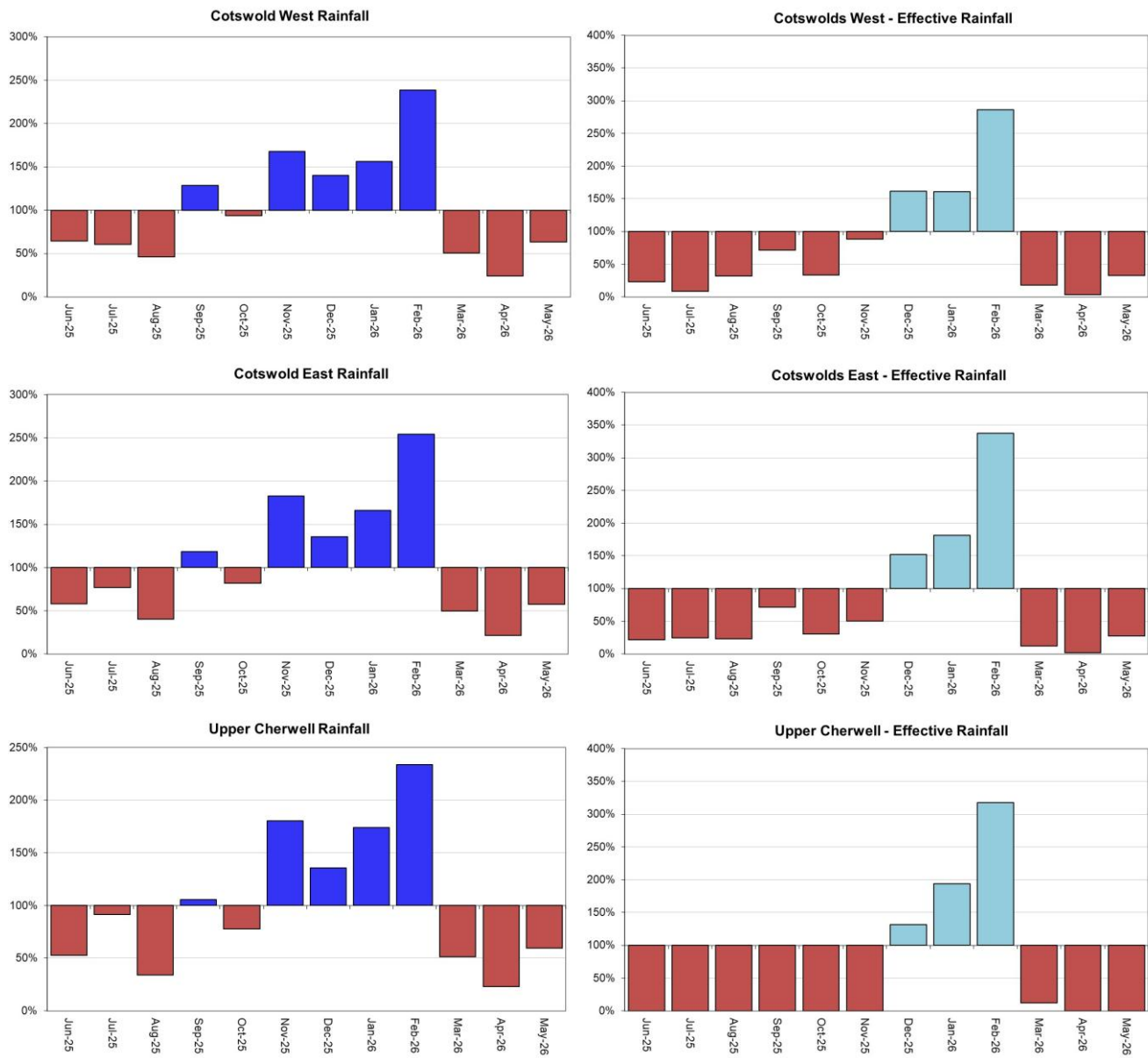
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 31 May 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



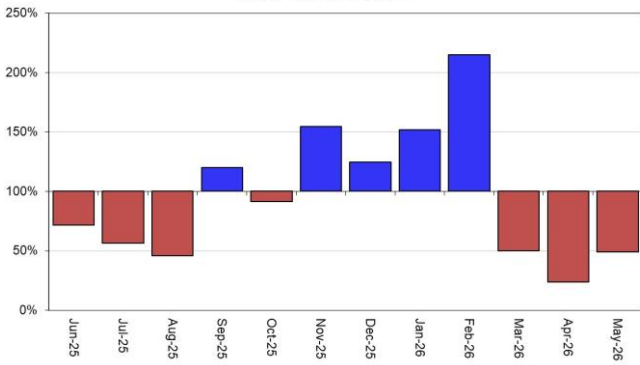
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency). © Ordnance Survey Crown Copyright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

2.3 Rainfall charts

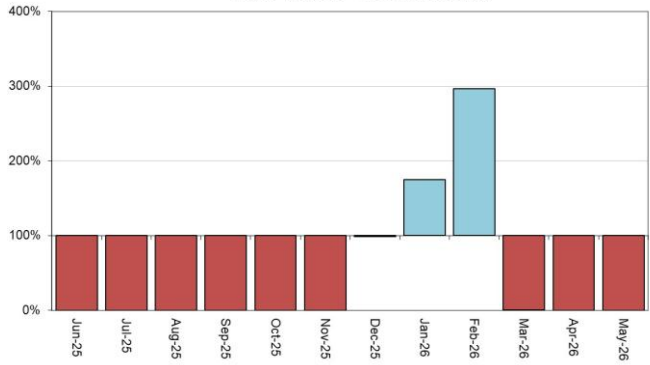
Figure 2.3: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each areal unit.



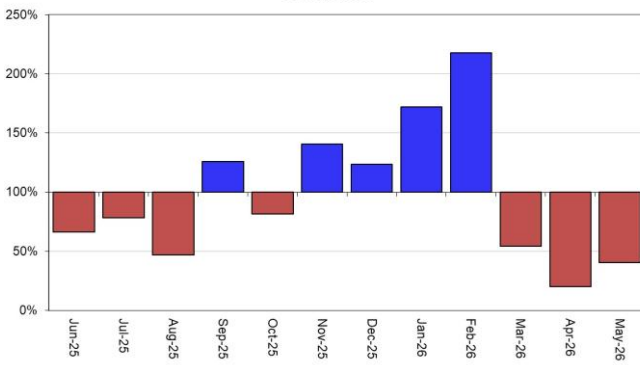
Upper Thames Rainfall



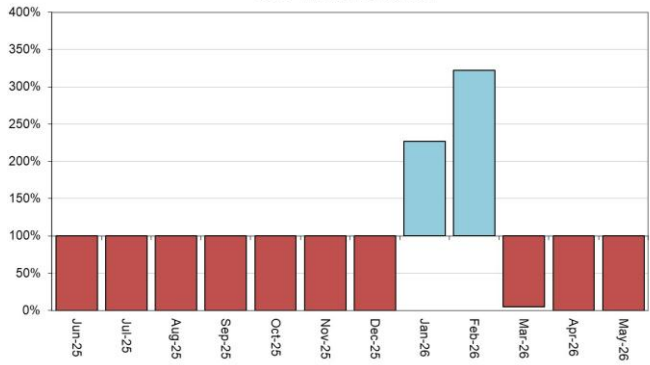
Upper Thames - Effective Rainfall



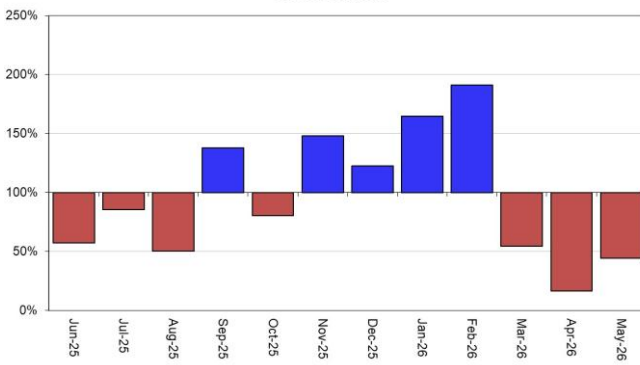
Ock Rainfall



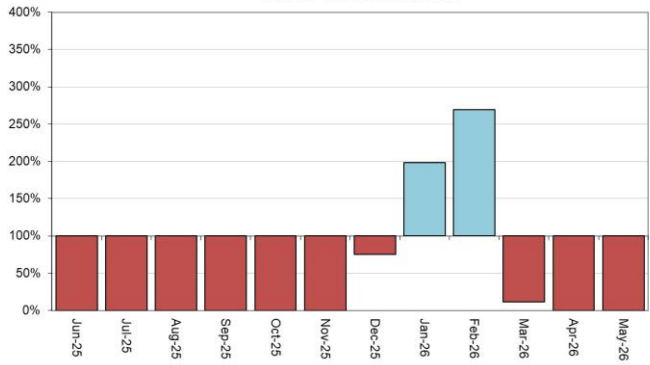
Ock - Effective Rainfall



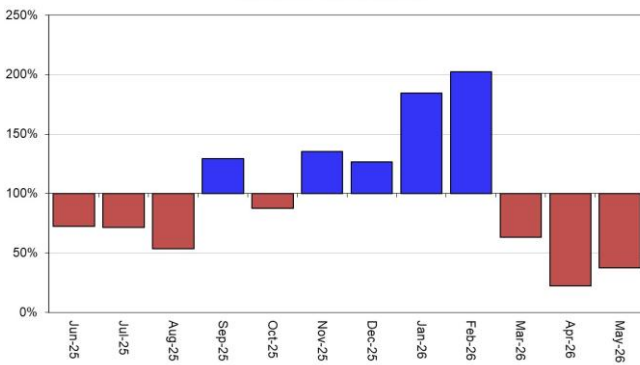
Thame Rainfall



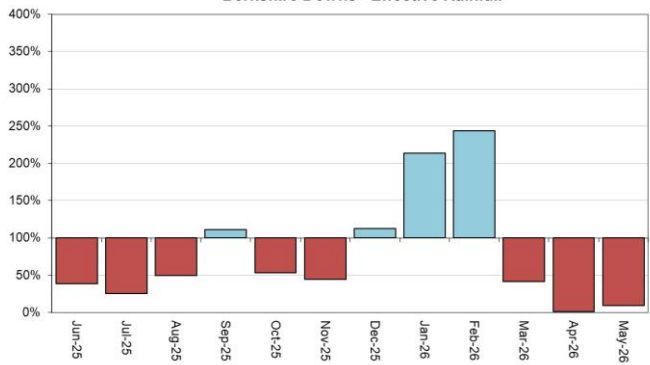
Thame - Effective Rainfall



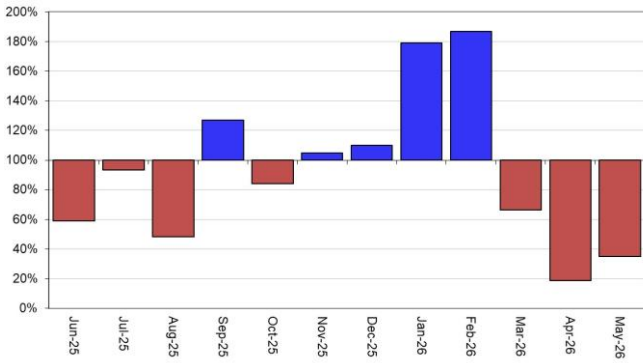
Berkshire Downs Rainfall



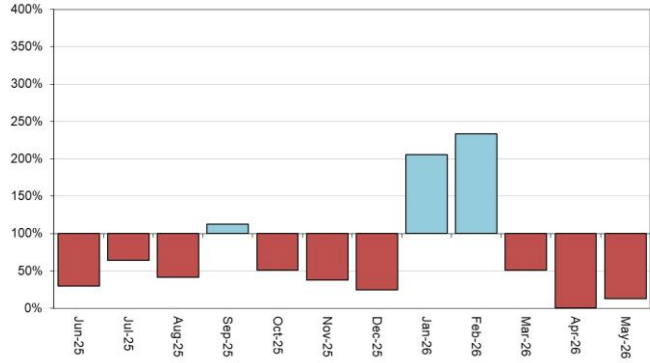
Berkshire Downs - Effective Rainfall



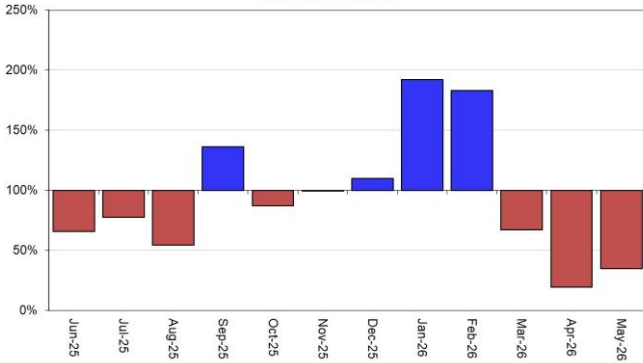
Chilterns West Rainfall



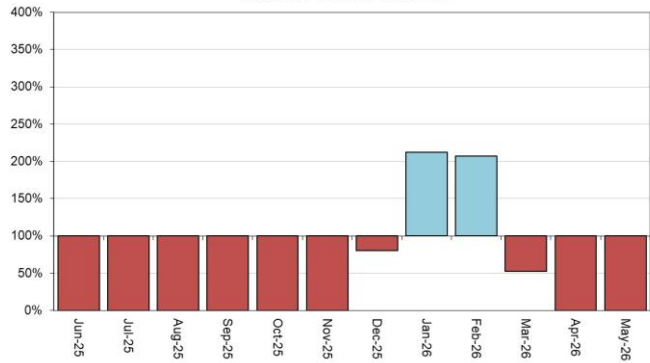
Chilterns West - Effective Rainfall



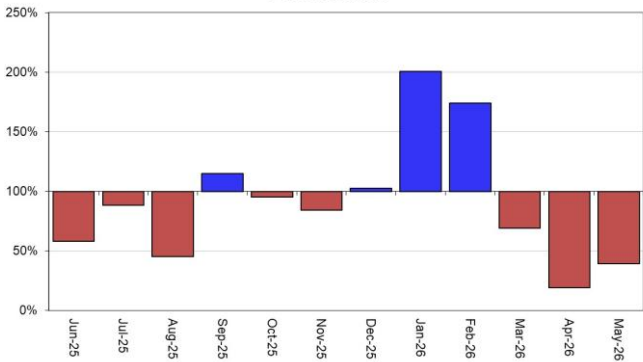
Enborne Rainfall



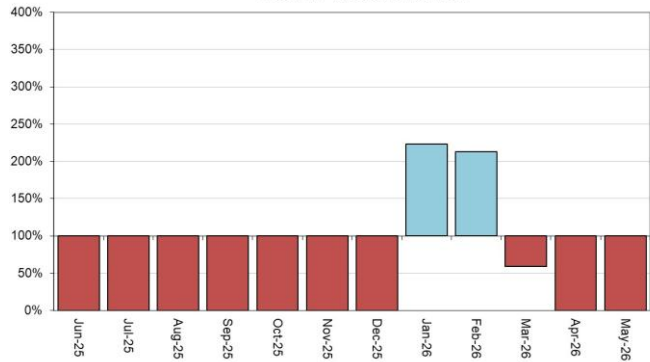
Enborne - Effective Rainfall



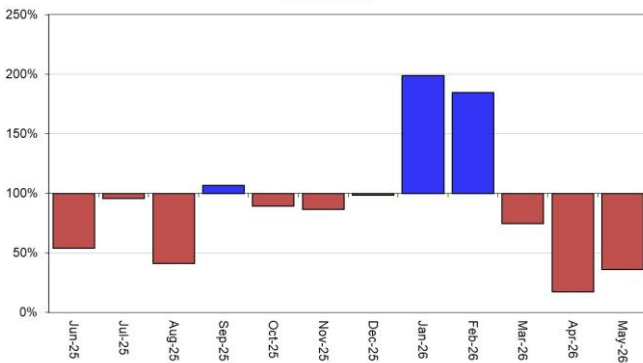
Loddon Rainfall



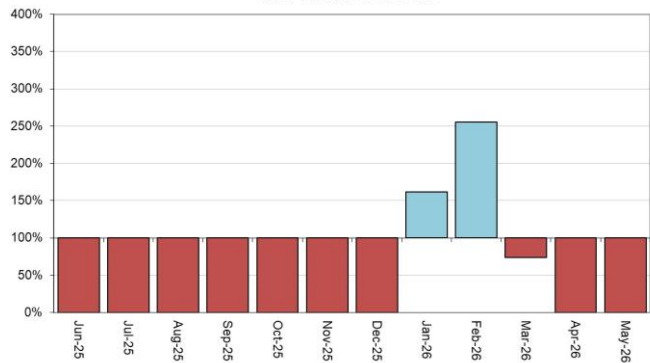
Loddon - Effective Rainfall

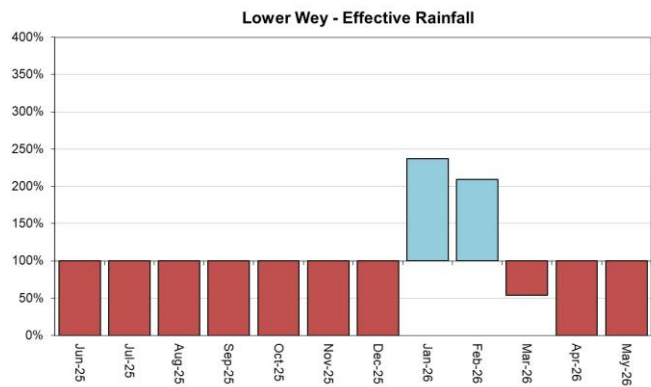
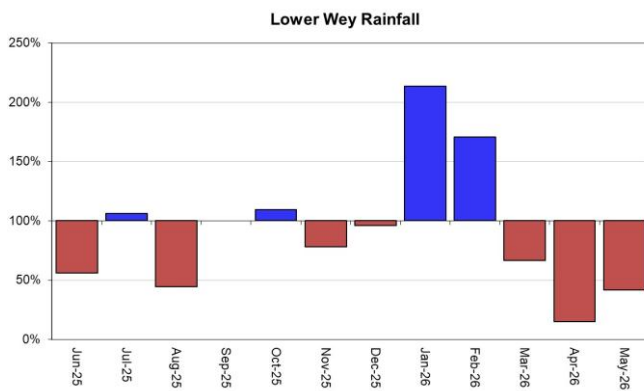
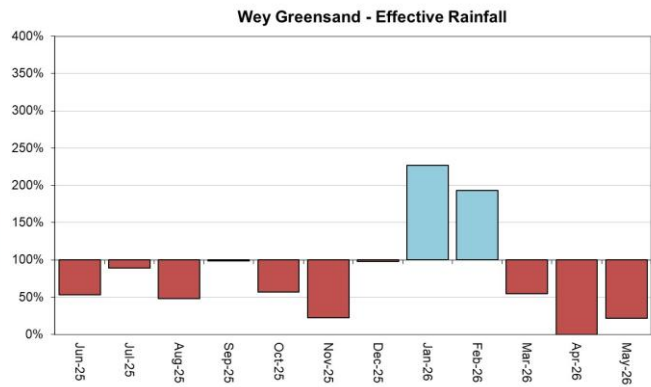
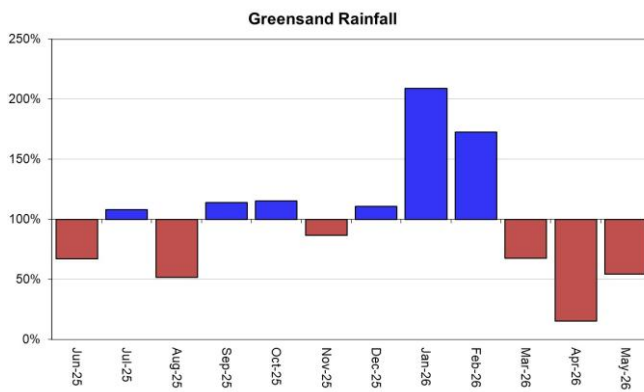
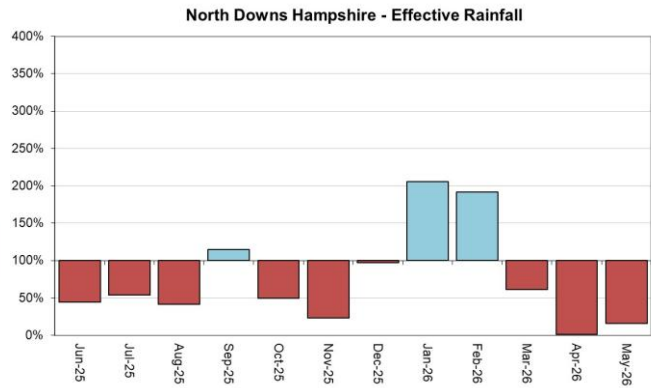
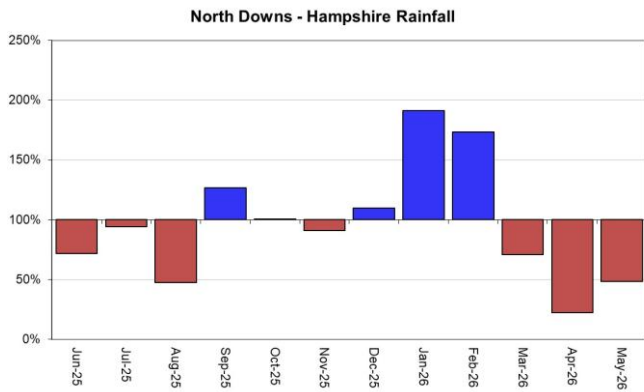


Cut Rainfall



Cut - Effective Rainfall





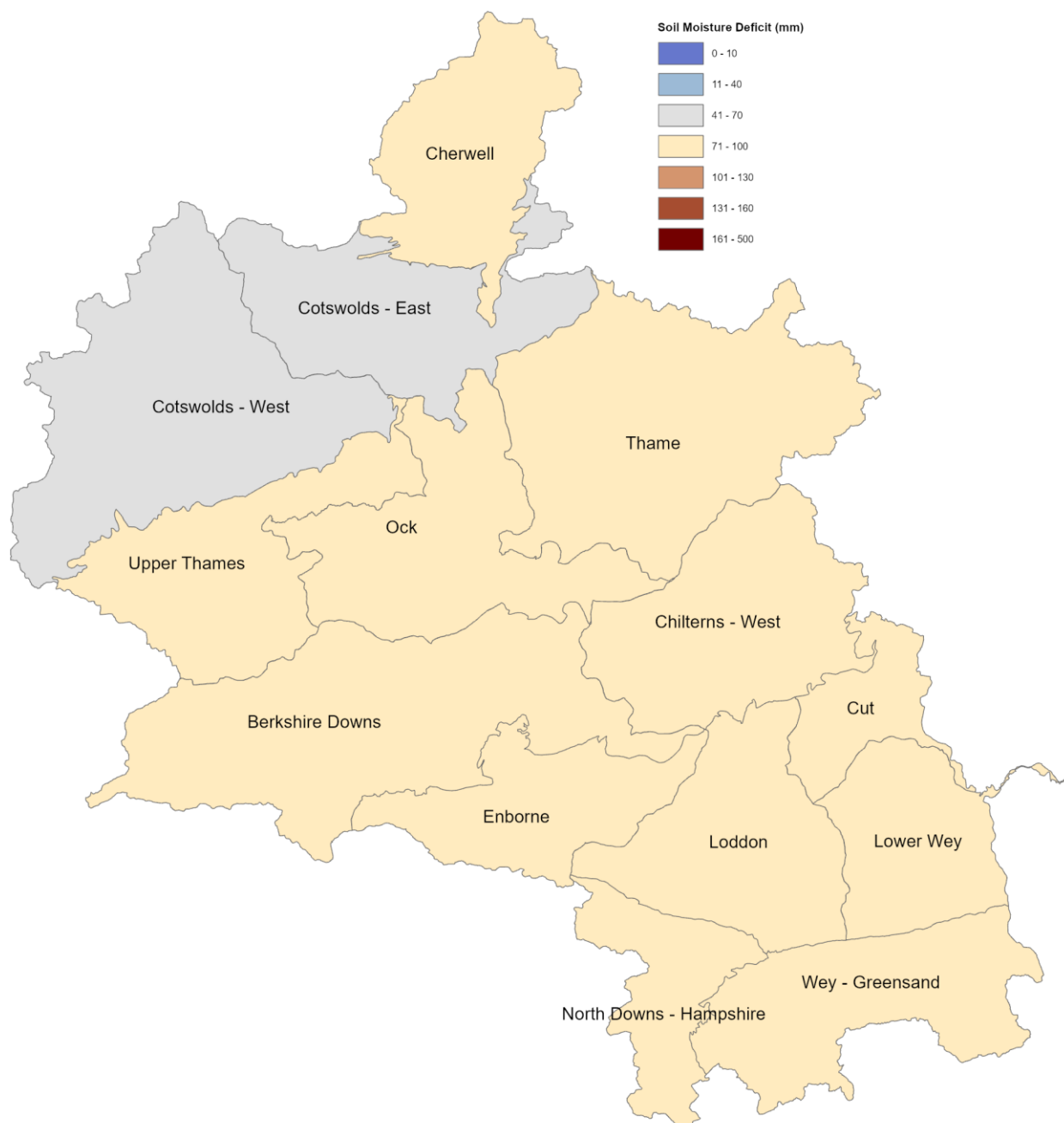
HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

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 May 2026. Shows the areal SMD estimate in millimetres.

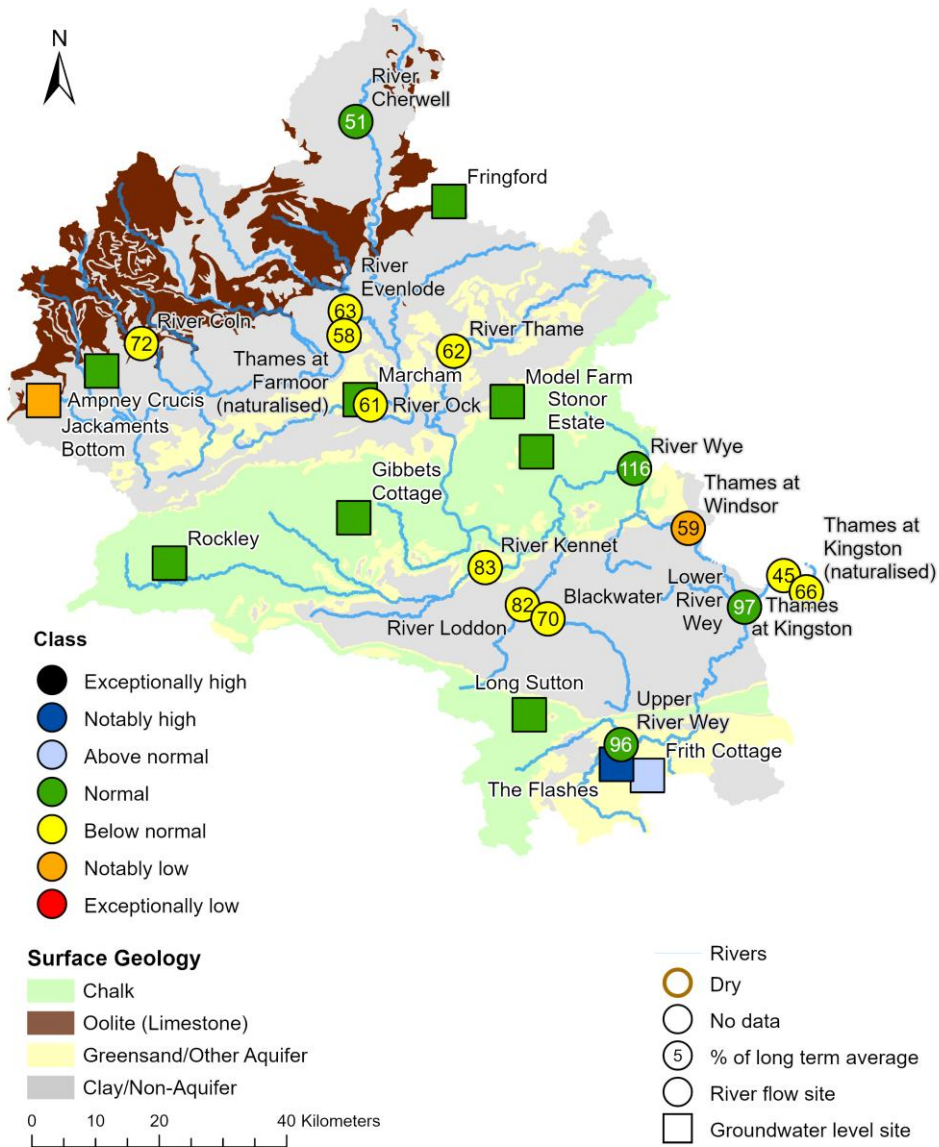


(Source: Environment Agency). © Ordnance Survey Crown Copyright and Database Rights 2026 – AC0000807064.

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 May 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic May means.

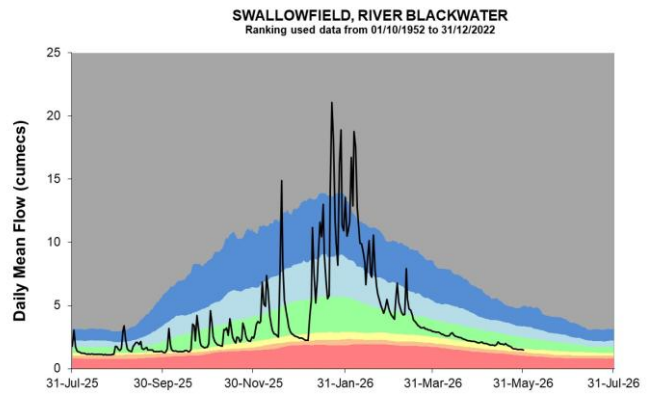
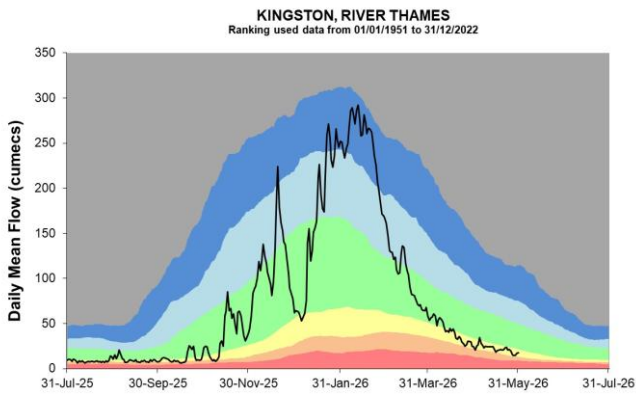
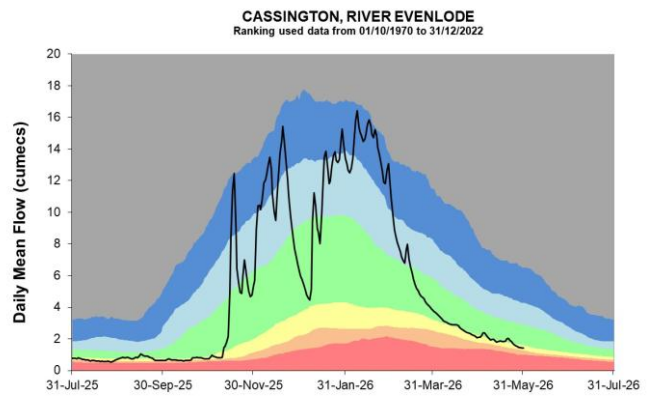
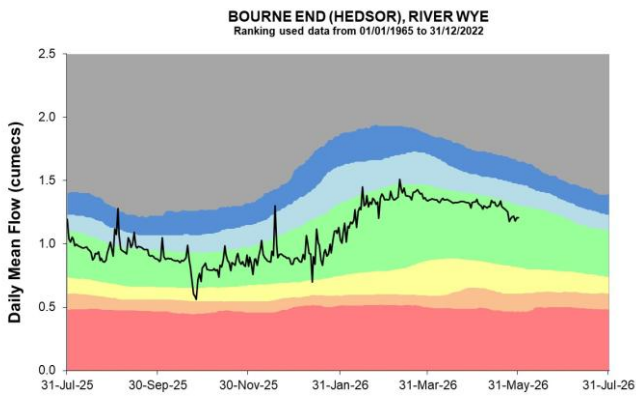
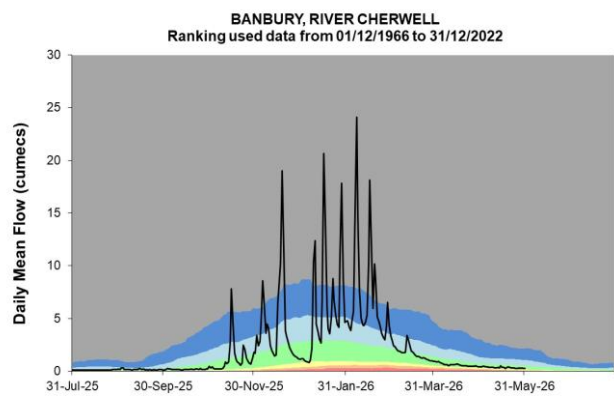
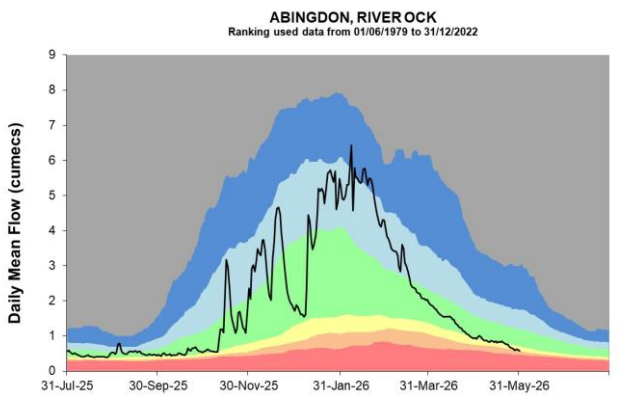
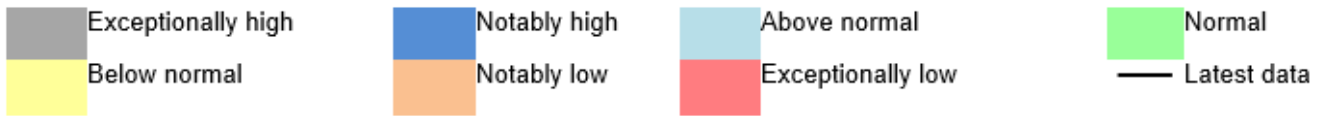


(Source: Environment Agency). © Ordnance Survey Crown Copyright and Database Rights 2026 – AC0000807064.

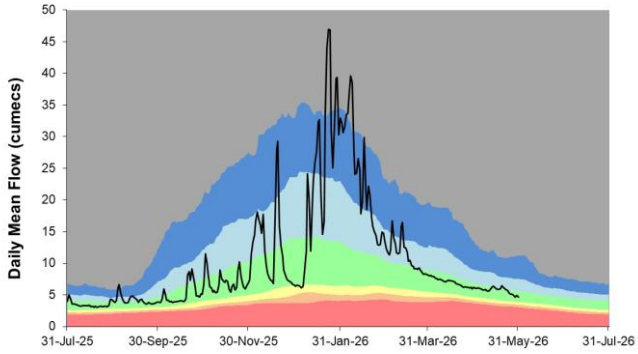
5 River flows

5.1 River flow charts

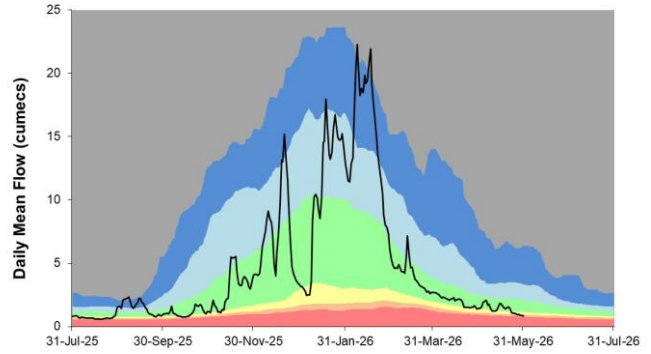
Figure 5.1: Daily mean river flows for indicator sites compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



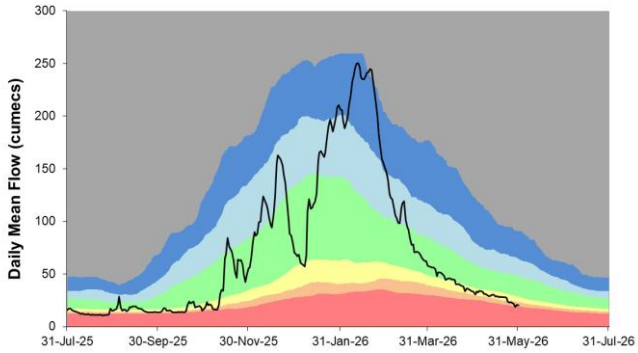
WEYBRIDGE, RIVER WEY
Ranking used data from 01/04/1979 to 31/12/2022



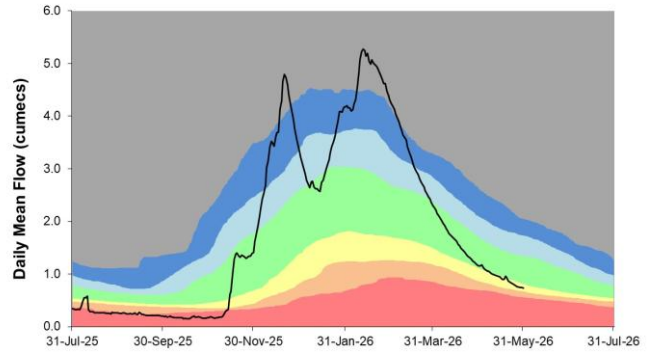
WHEATLEY, RIVER THAME
Ranking used data from 01/01/1990 to 31/12/2022



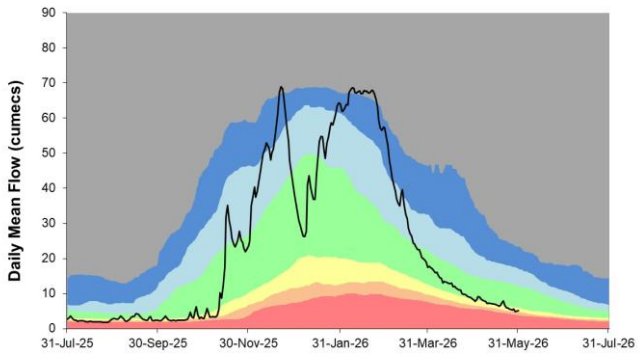
WINDSOR, RIVER THAMES
Ranking used data from 01/08/1979 to 31/12/2022



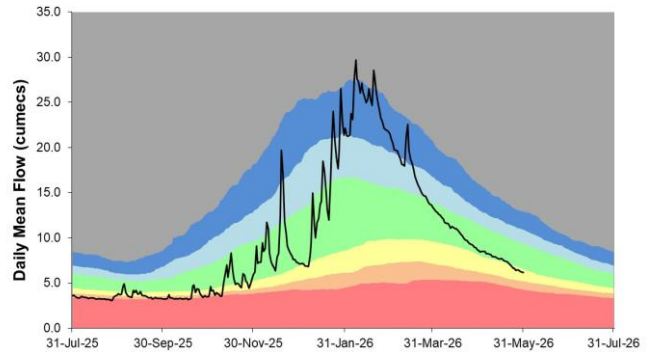
BIBURY, RIVER COLN
Ranking used data from 01/10/1963 to 31/12/2022

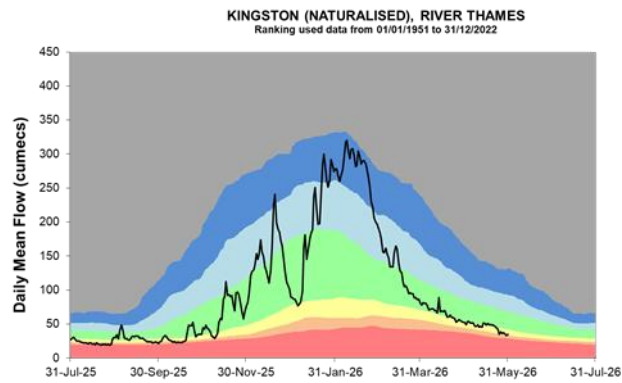
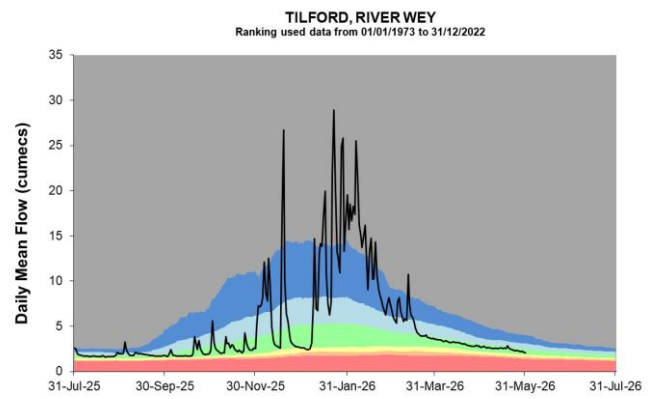
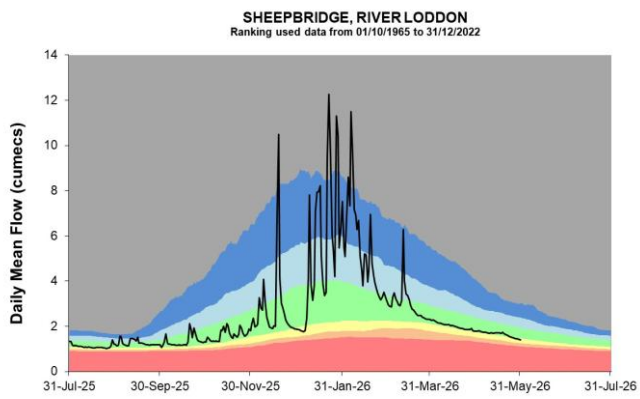


FARMOOR (NATURALISED), RIVER THAMES
Ranking used data from 01/10/1992 to 31/12/2022



CALCOT, RIVER KENNET
Ranking used data from 01/02/1972 to 31/12/2022



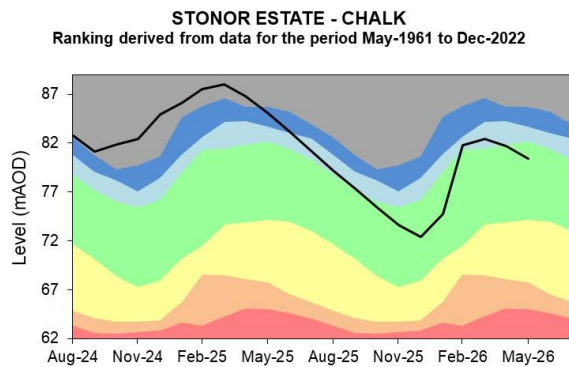
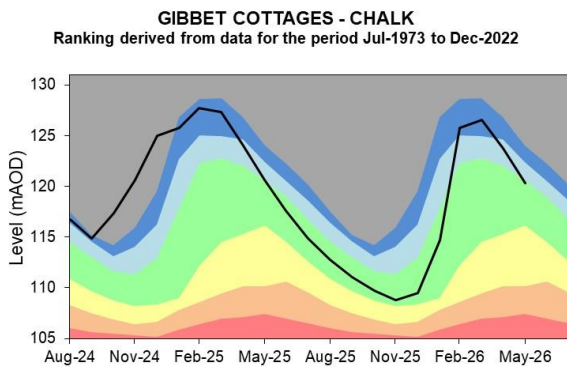
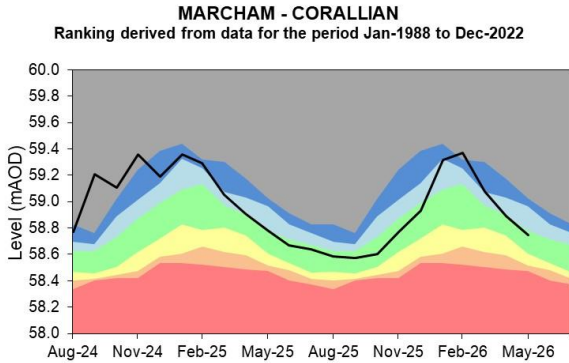
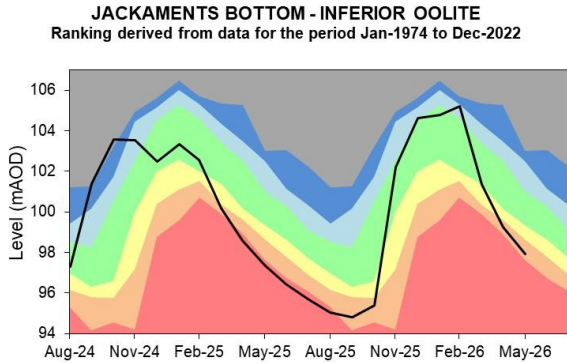
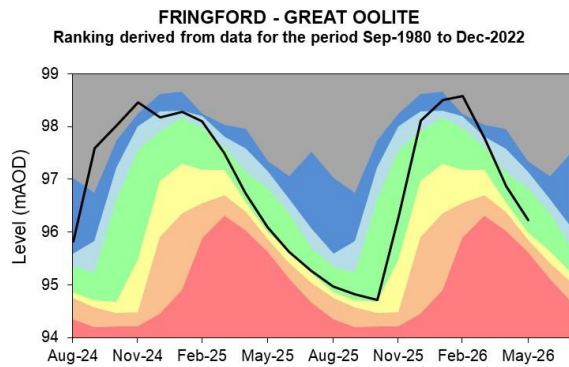
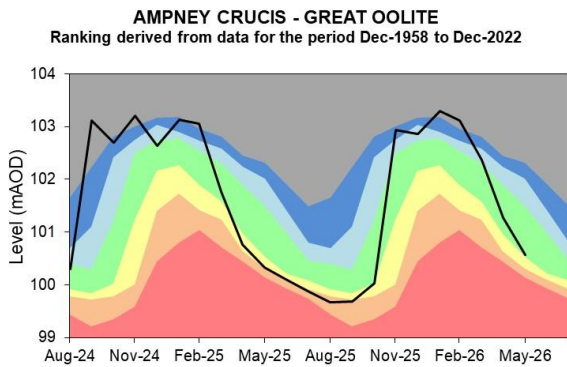
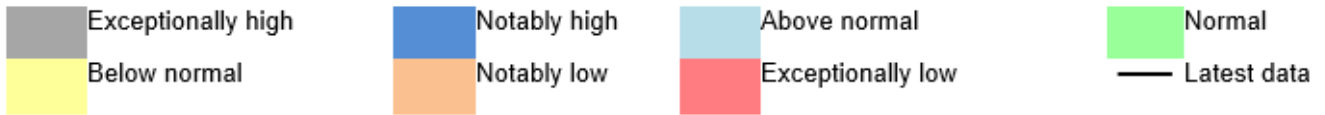


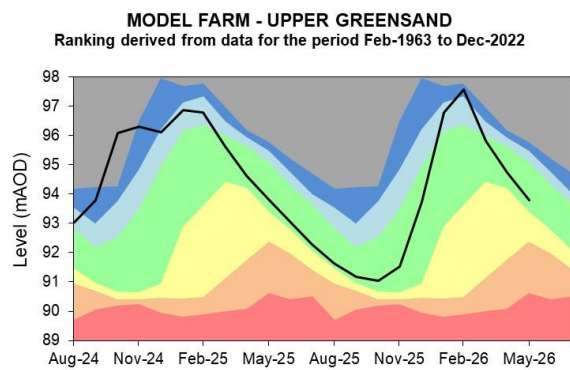
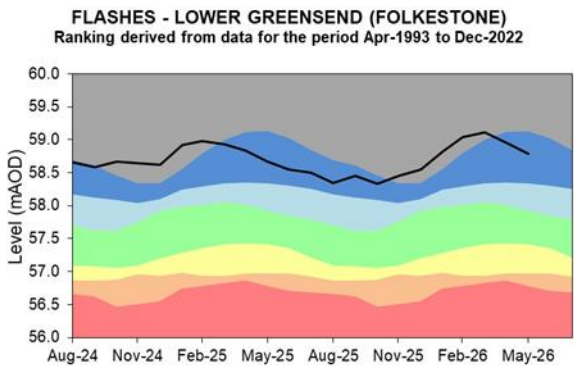
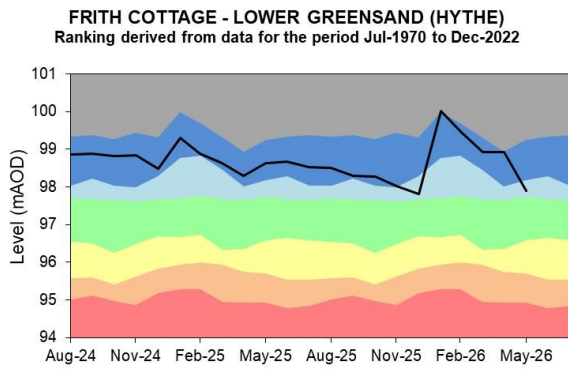
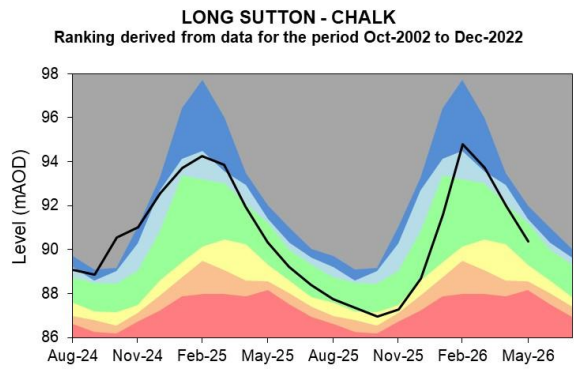
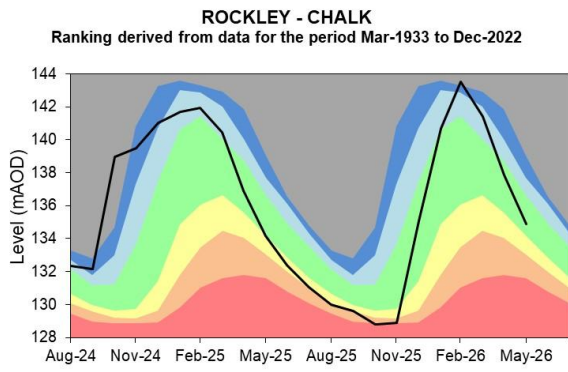
Source: Environment Agency.

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, and long term maximum and minimum levels.

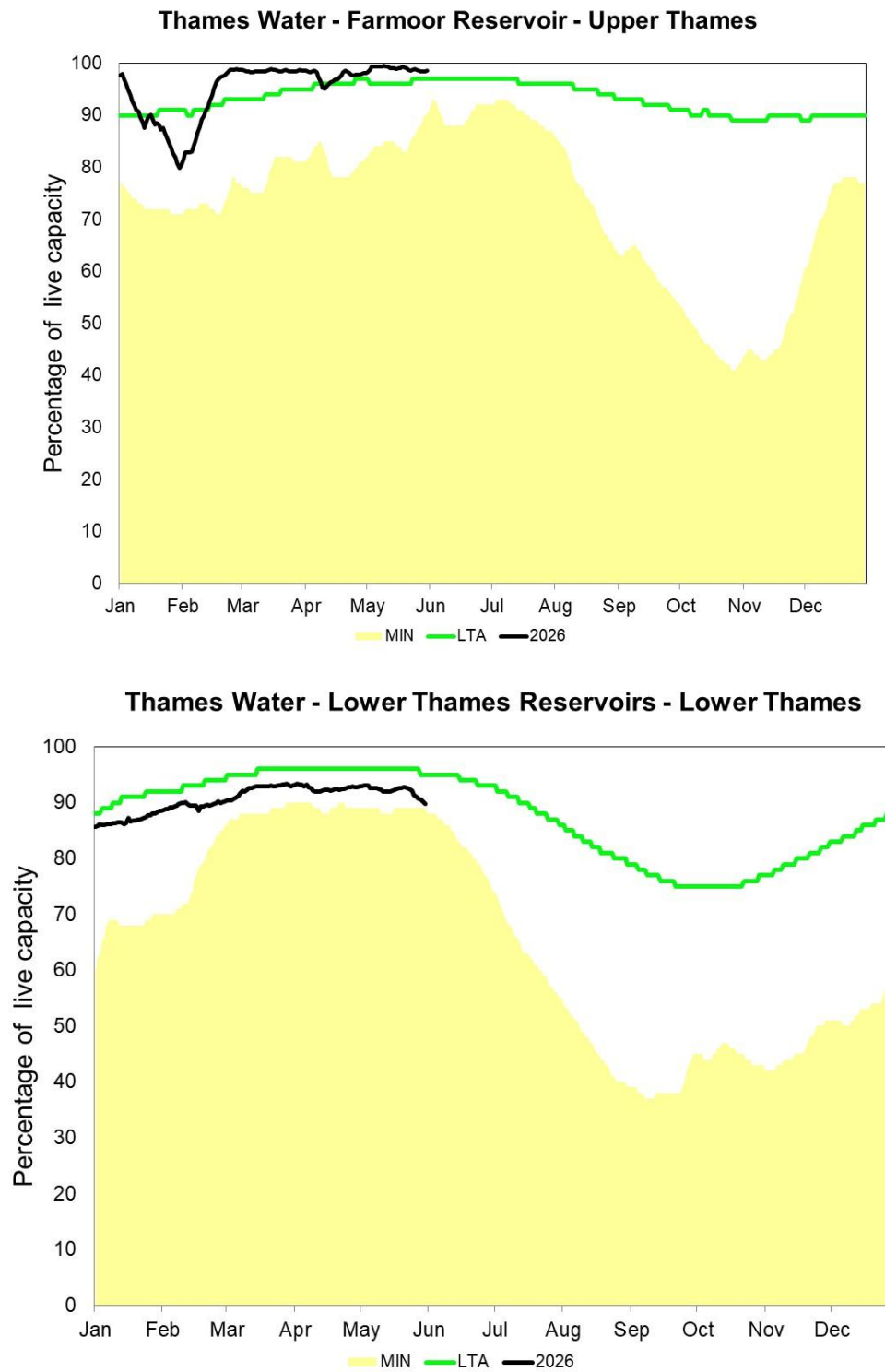




Source: Environment Agency, 2026.

7 Reservoir stocks

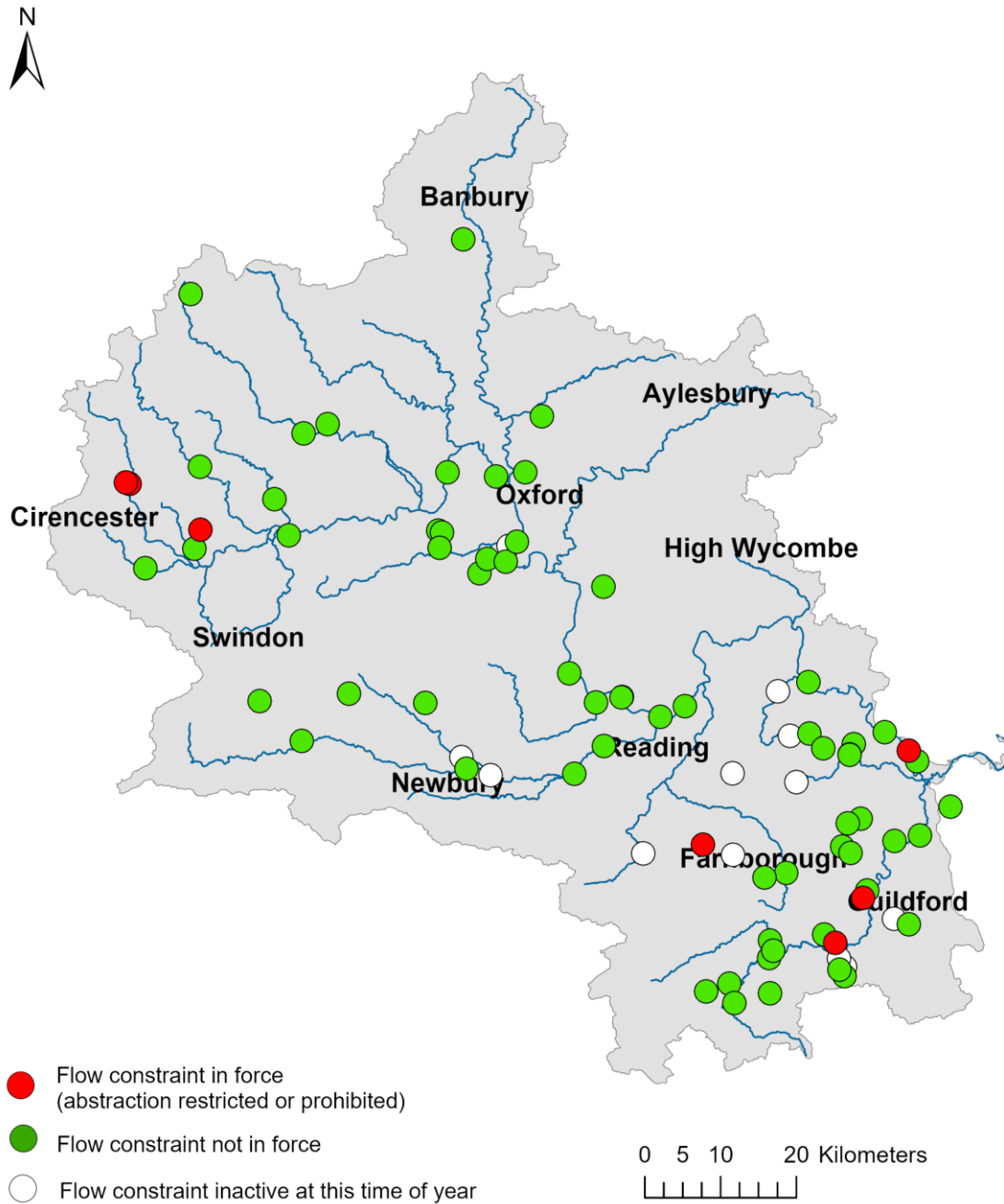
Figure 7.1: End of month regional reservoir stocks compared to minimum and average stocks.



(Source: water companies).

8 Flow Constraints

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



8.2 Summary of flow constraints

Week ending	03/05/26	10/05/26	17/05/26	24/05/26	31/05/26
	3	5	5	7	8

9 Summary of rainfall, effective rainfall and soil moisture deficit

9.1 Rainfall and effective rainfall

Area	Rainfall (mm) 31 day Total	Rainfall (mm) May LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) 31 day total	Effective Rainfall (mm) May LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	42	66	63	3	9	32
Cotswolds - East	35	62	57	2	7	28
Berkshire Downs	22	58	38	1	6	9
Chilterns - West	19	54	35	1	5	13
North Downs - Hampshire	27	55	48	1	7	16
Wey - Greensand	30	54	55	2	7	22
Upper Thames	28	58	49	0	1	0
Cherwell	35	59	59	0	2	0
Thame	24	54	44	0	1	0
Loddon	18	47	39	0	1	0
Lower Wey	20	47	42	0	1	0
Ock	22	54	40	0	0	0
Enborne	18	52	35	0	1	0
Cut	17	46	36	0	1	0
Thames Area	25	55	47	1	4	18

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

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

9.2 Soil moisture deficit

Area	SMD (mm) Day 31	SMD (mm) LTA
Cotswolds - West	56	30
Cotswolds - East	58	31
Berkshire Downs	92	49
Chilterns - West	95	52
North Downs - Hampshire	91	51
Wey - Greensand	91	52
Upper Thames	93	52
Cherwell	88	46
Thame	94	50
Loddon	97	55
Lower Wey	96	54
Ock	96	56
Enborne	95	50
Cut	99	60
Thames Area	89	49

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

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

9.3 Summer rainfall and effective rainfall

Summer period: 01/04/2026 to 31/05/2026						
Area	Rainfall (mm) Total	Rainfall (mm) LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) Total	Effective Rainfall (mm) LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	56	125	45	4	27	13
Cotswolds - East	47	115	41	2	23	10
Berkshire Downs	35	117	30	1	23	3
Chilterns - West	29	108	27	1	19	4
North Downs - Hampshire	40	117	34	1	28	5
Wey - Greensand	39	113	34	2	26	6
Upper Thames	40	108	37	0	10	0
Cherwell	47	111	42	0	14	0
Thame	32	103	31	0	9	0
Loddon	28	98	29	0	10	0
Lower Wey	27	95	28	0	10	0
Ock	31	102	31	0	7	0
Enborne	29	109	27	0	15	0
Cut	25	93	26	0	7	0
Thames Area	36	108	33	1	16	5

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

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

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 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).

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	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
Berkshire Downs	38	Notably Low	Exceptionally low	Above normal	Normal
Chilterns West	35	Notably Low	Exceptionally low	Normal	Normal
Cotswold East	57	Below Normal	Exceptionally low	Above normal	Normal
Cotswold West	63	Normal	Exceptionally low	Above normal	Above normal
Cut	36	Notably Low	Exceptionally low	Normal	Normal
Enborne	35	Notably Low	Exceptionally low	Above normal	Normal
Loddon	39	Notably Low	Notably low	Above normal	Normal
Lower Wey	42	Notably Low	Notably low	Above normal	Normal
North Downs - Hampshire	48	Below Normal	Notably low	Above normal	Normal
Ock	40	Notably Low	Exceptionally low	Normal	Normal
Thame	44	Notably Low	Exceptionally low	Normal	Normal
Upper Cherwell	60	Below Normal	Exceptionally low	Above normal	Normal
Upper Thames	49	Below Normal	Exceptionally low	Normal	Normal
Wey - Greensand	55	Below Normal	Notably low	Above normal	Above normal

11.2 River flows table

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

11.3 Groundwater table

Site name	Aquifer	End of May 2026 band	End of Apr 2026 band
Ampney Crucis OBH	Burford Oolitic Limestone (great)	Normal	Normal
Frith Cottage	Godalming Lower Greensand	Above normal	No data
Gibbet Cottages OBH	Berkshire Downs Chalk	Normal	Above normal
Jackaments Bottom OBH	Burford Oolitic Limestone (inferior)	Notably low	Notably low
Long Sutton	North Downs Chalk	Normal	Normal
Marcham OBH	Shrivenham Corallian	Normal	Normal
Model Farm	Chiltern Upper Greensand	Normal	Normal
Rockley OBH	Berkshire Downs Chalk	Normal	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