Monthly water situation report: Thames Area

1 Summary - November 2025

Thames area received 102mm of rainfall in November, which was 122% of the long term average (LTA). Soil moisture deficits (SMD) decreased across Thames area from 123mm in October to 45mm by the end of November. The majority of monthly mean river flows were normal for the time of year. Groundwater levels decreased at 3 of the indicator sites, and increased at 8. The majority are normal for the time of year. Farmoor reservoir is above average for the time of year, while the Lower Thames reservoirs are below average.

1.1 Rainfall

Thames area received 102mm of rainfall in November, 122% of the LTA. Cherwell, and Cotswolds East areal units, in the north of Thames area, received exceptionally high rainfall, while the remainder of the areal units in the northern half of the area received notably high or above normal rainfall. All units in the southern half of Thames area were normal for the time of year. The wettest day was 14 November. Two rain gauges in Cotswolds West; Little Rissington and Bourton, received 57.2mm and 56mm respectively.

1.2 Soil moisture deficit and recharge

SMD decreased across Thames area, from 123mm in October to 45mm by the end of November. However, this is still above the average of 34mm usually expected at this time of year. Three areal units, Cotswolds East, Berkshire Downs, and Cherwell, are now below their respective low term averages, while, Cotswolds West SMD is at 0mm.

1.3 River flows

Monthly mean river flows increased at all indicator sites in November. All sites, apart from the groundwater fed Kennet at Marlborough, which is below normal, are normal for the time of year. By month end, daily mean flows at the rivers Ock at Abingdon, and the Cherwell at Banbury were above normal.

1.4 Groundwater levels

Groundwater levels declined at 3 indicator sites. Two in the Chalk (Gibbet Cottages and Stonor Estate), and one in the Lower Greensand (Frith Cottage). However, Frith Cottage remains notably high. Levels at 8 indicator sites increased in November, and the majority are normal for the time of year. Ampney Crucis (Great Oolite) is now notably high, Rockley (Chalk) is now notably low, while the Flashes (Lower Greensand) is now exceptionally high.

1.5 Reservoir stocks

Reservoir stocks in Farmoor increased from 87.1% to 92.6%, while the Lower Thames reservoirs also increased from 61.5% to 70.6%. Farmoor is now above the LTA for November, however the Lower Thames is still below.

1.6 Environmental impact

During November 19 flood alerts were issued on rivers in the Thames area. At the end of November, 3 abstraction licences were being constrained in the area to protect water resources and the environment.

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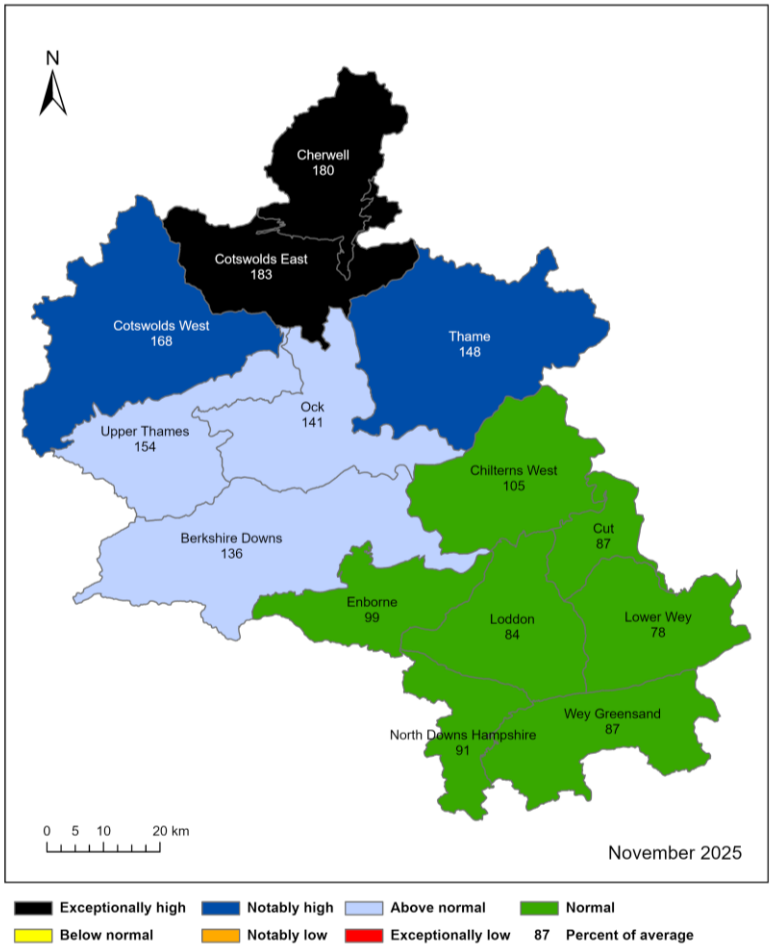
Contact Details: 030708 506 506

2 Rainfall

2.1 Rainfall map

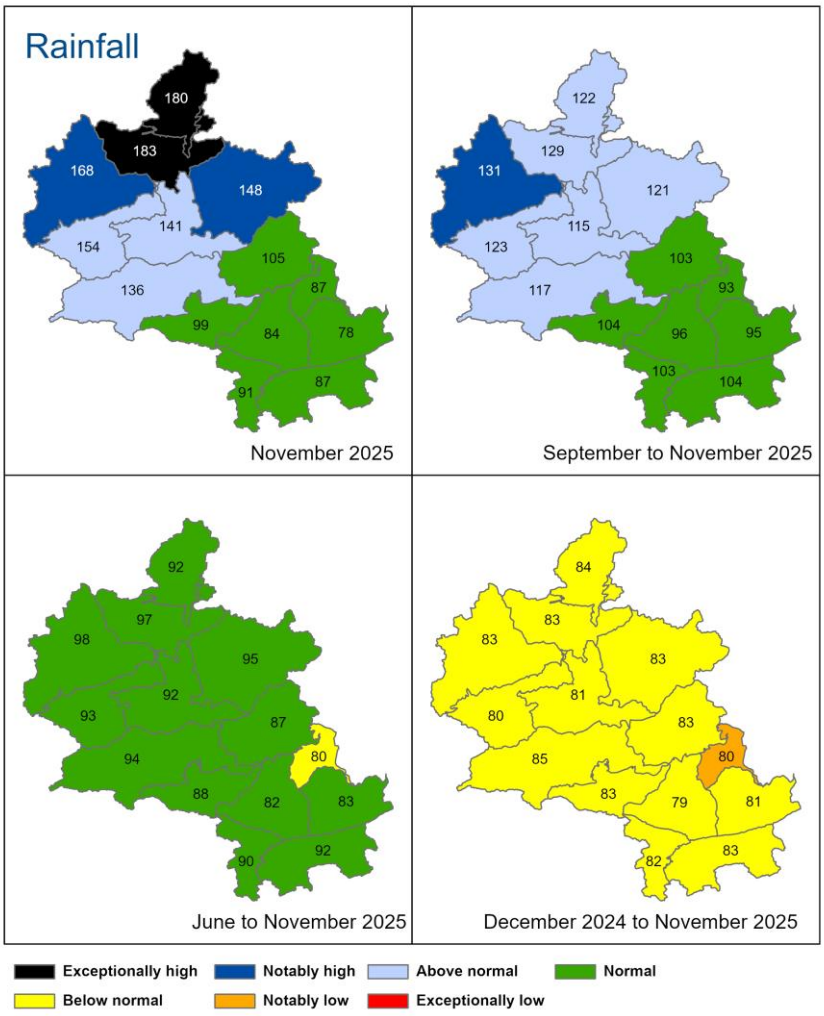
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 30 November 2025), classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



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, 2025). 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, 2025).

2.2 Rainfall map (2)

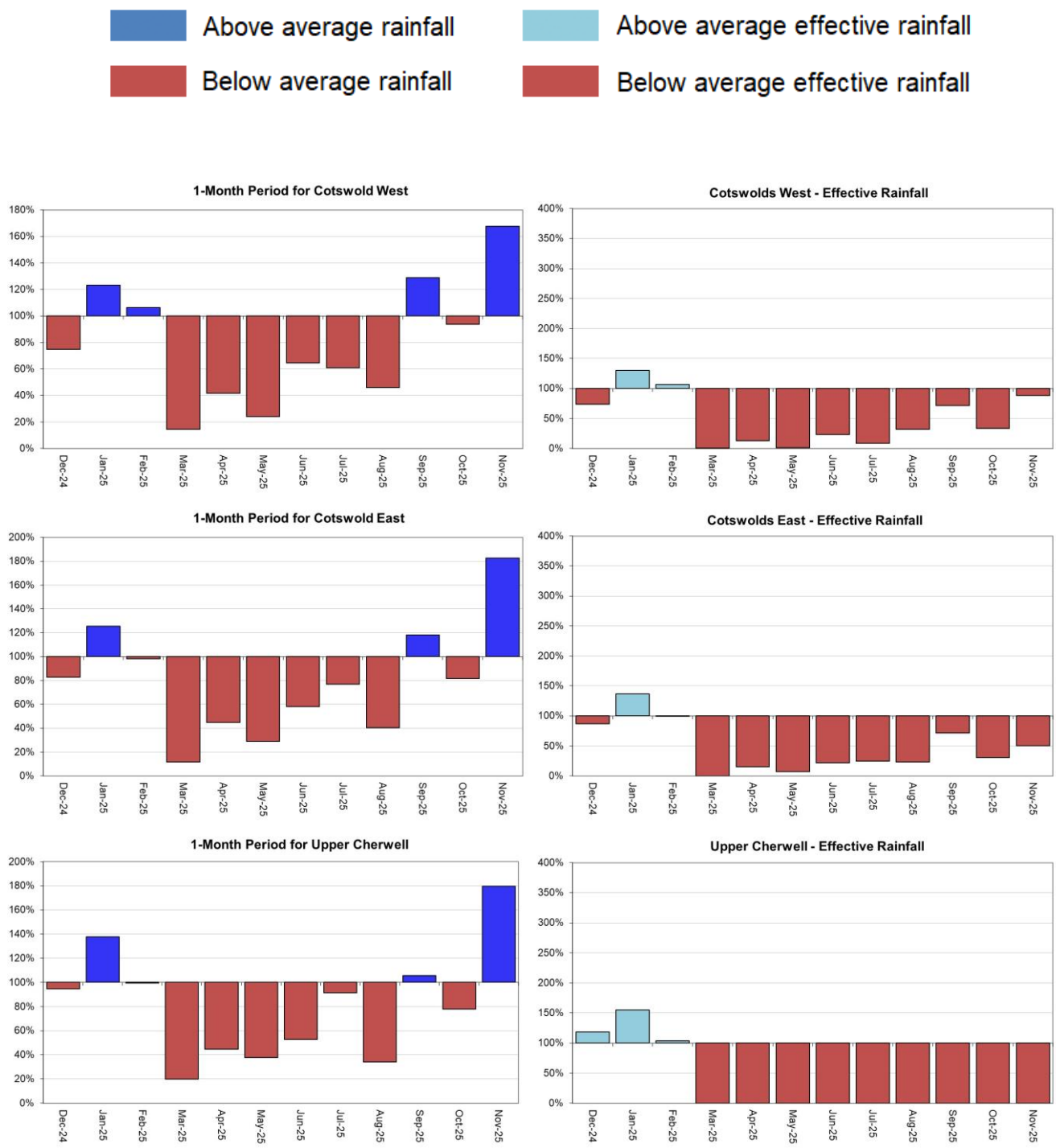
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 30 November 2025), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.

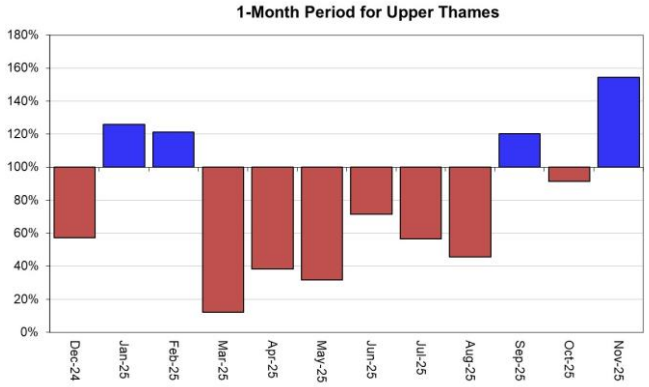


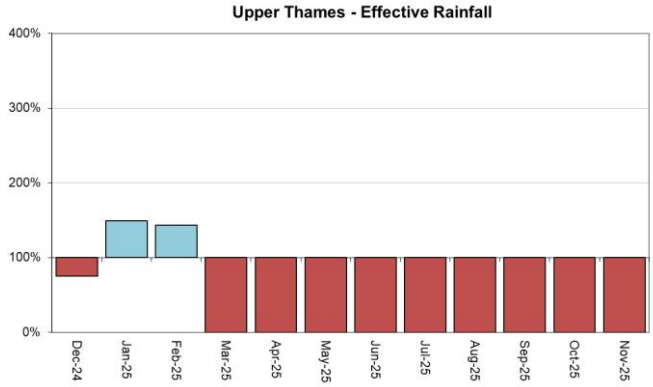
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency).

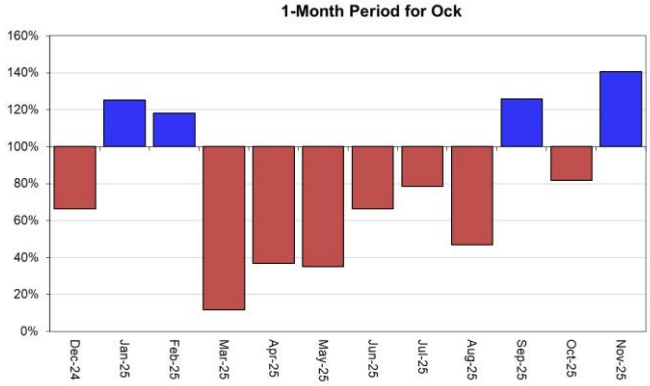
2.3 Rainfall charts

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.




1-Month Period for Upper Thames
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25


Upper Thames - Effective Rainfall
400%
300%
200%
100%
0%
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25


1-Month Period for Ock
160%
140%
120%
100%
80%
60%
40%
20%
0%
Dec-24
Jan-25
Feb-25
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May-25
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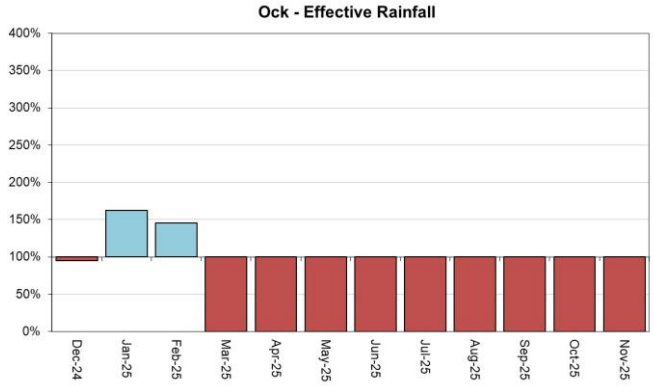
Nov-25


Ock - Effective Rainfall
400%
350%
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150%
100%
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Dec-24
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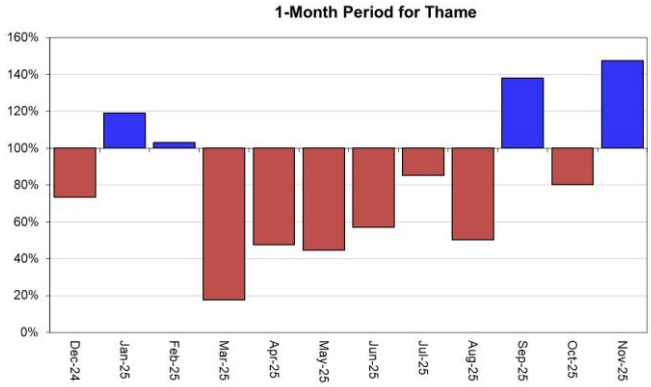
Nov-25


1-Month Period for Thame
160%
140%
120%
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80%
60%
40%
20%
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Dec-24
Jan-25
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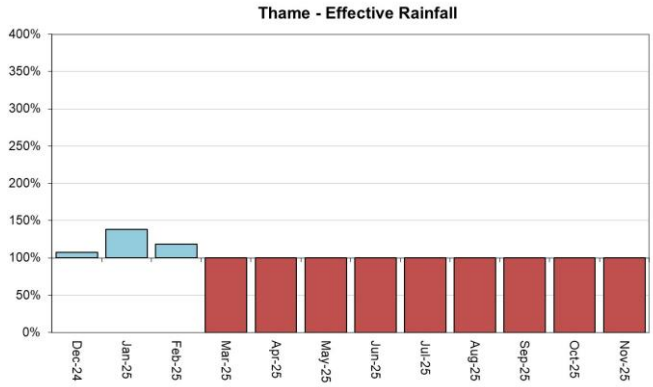
Sep-25
Oct-25
Nov-25


Thame - Effective Rainfall
400%
350%
300%
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200%
150%
100%
50%
0%
Dec-24
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Feb-25
Mar-25
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May-25
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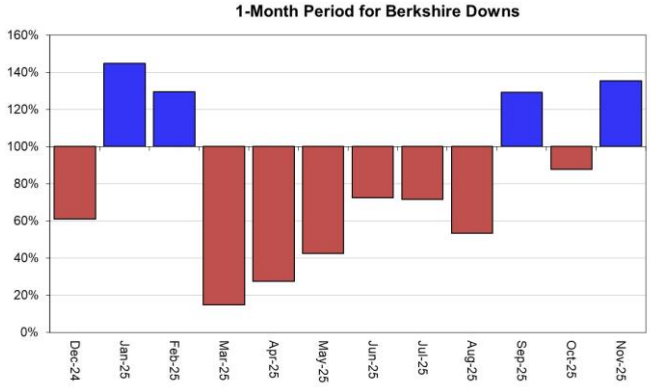
Nov-25


1-Month Period for Berkshire Downs
160%
140%
120%
100%
80%
60%
40%
20%
0%
Dec-24
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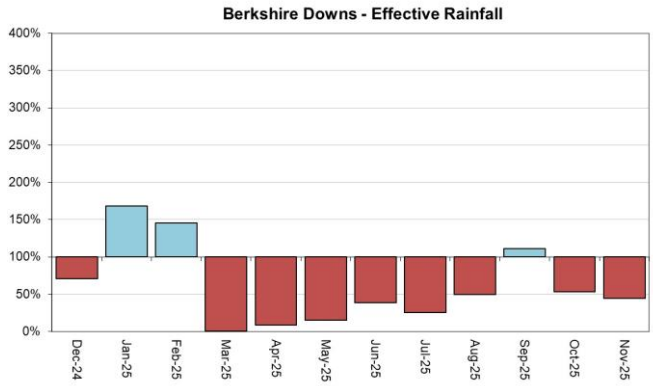
Oct-25
Nov-25


Berkshire Downs - Effective Rainfall
400%
350%
300%
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100%
50%
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Dec-24
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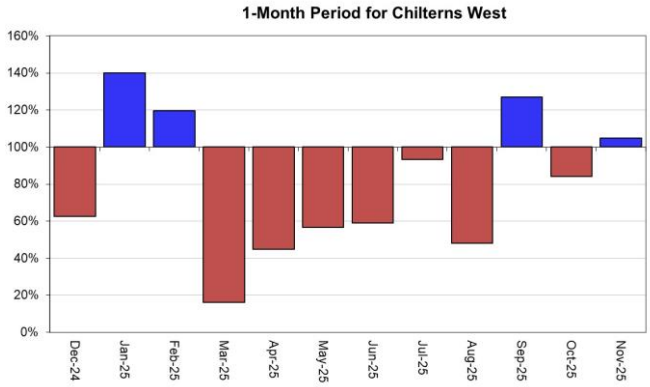
1-Month Period for Chilterns West
160%
140%
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80%
60%
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20%
0%
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Oct-25
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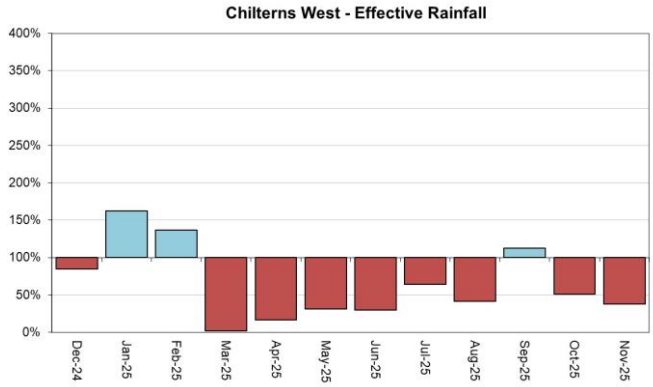
Chilterns West - Effective Rainfall
400%
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300%
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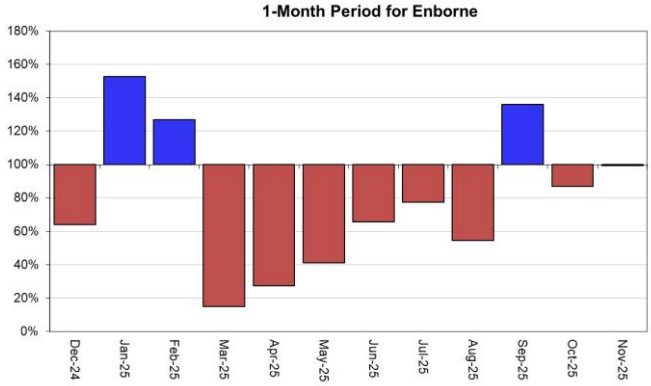
Oct-25
Nov-25


1-Month Period for Enborne
180%
160%
140%
120%
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80%
60%
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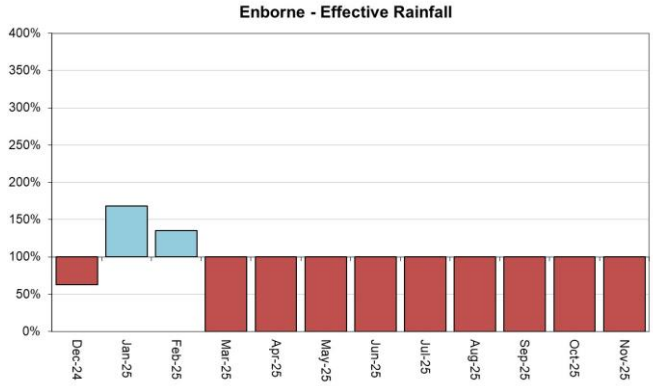
Nov-25


Enborne - Effective Rainfall
400%
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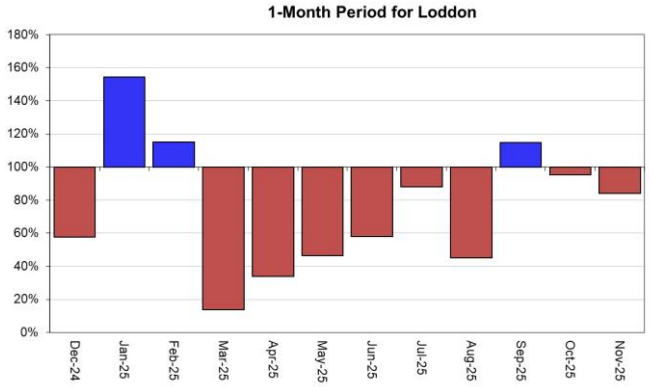
Oct-25
Nov-25


1-Month Period for Loddon
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
Dec-24
Jan-25
Feb-25
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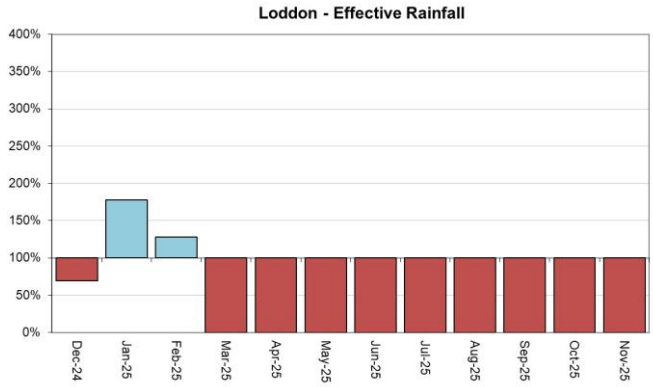
Aug-25
Sep-25
Oct-25
Nov-25


Loddon - Effective Rainfall
400%
350%
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200%
150%
100%
50%
0%
Dec-24
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May-25
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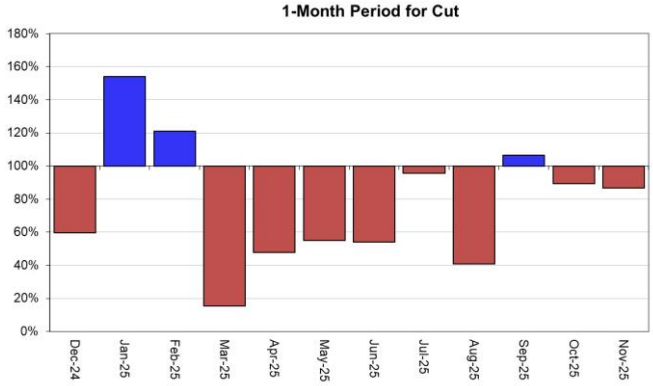
Sep-25
Oct-25
Nov-25


1-Month Period for Cut
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
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Jan-25
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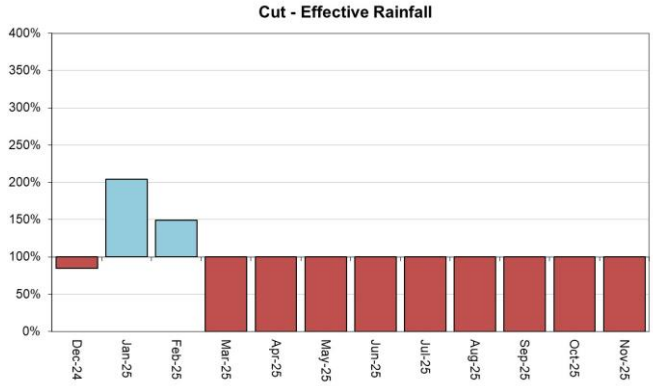
Aug-25
Sep-25
Oct-25
Nov-25


Cut - Effective Rainfall
400%
350%
300%
250%
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150%
100%
50%
0%
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
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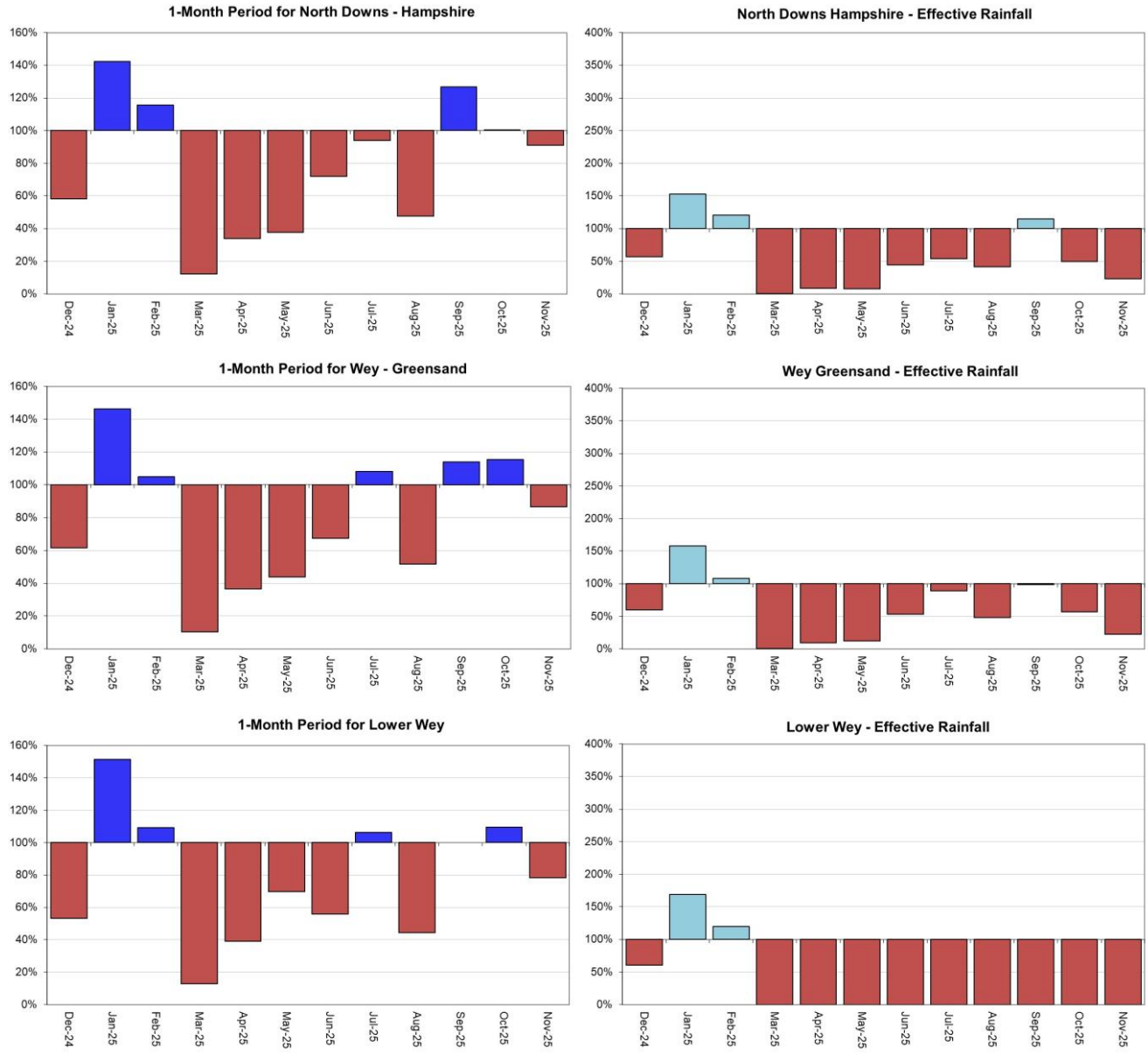
Sep-25
Oct-25
Nov-25



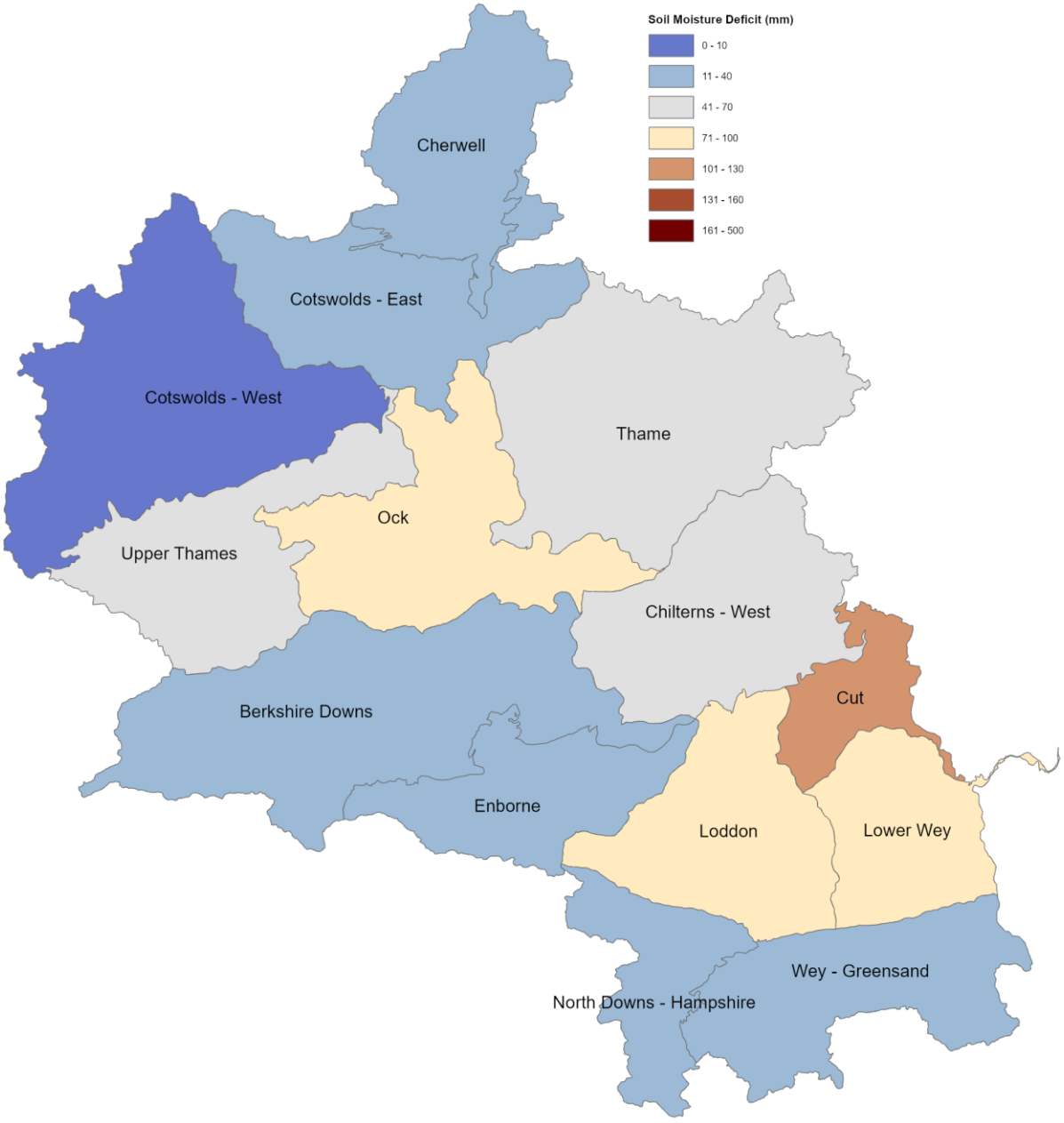
HadUK rainfall data. (Source: Met Office. Crown copyright, 2025).

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

3 Soil moisture deficit

3.1 Soil moisture deficit map

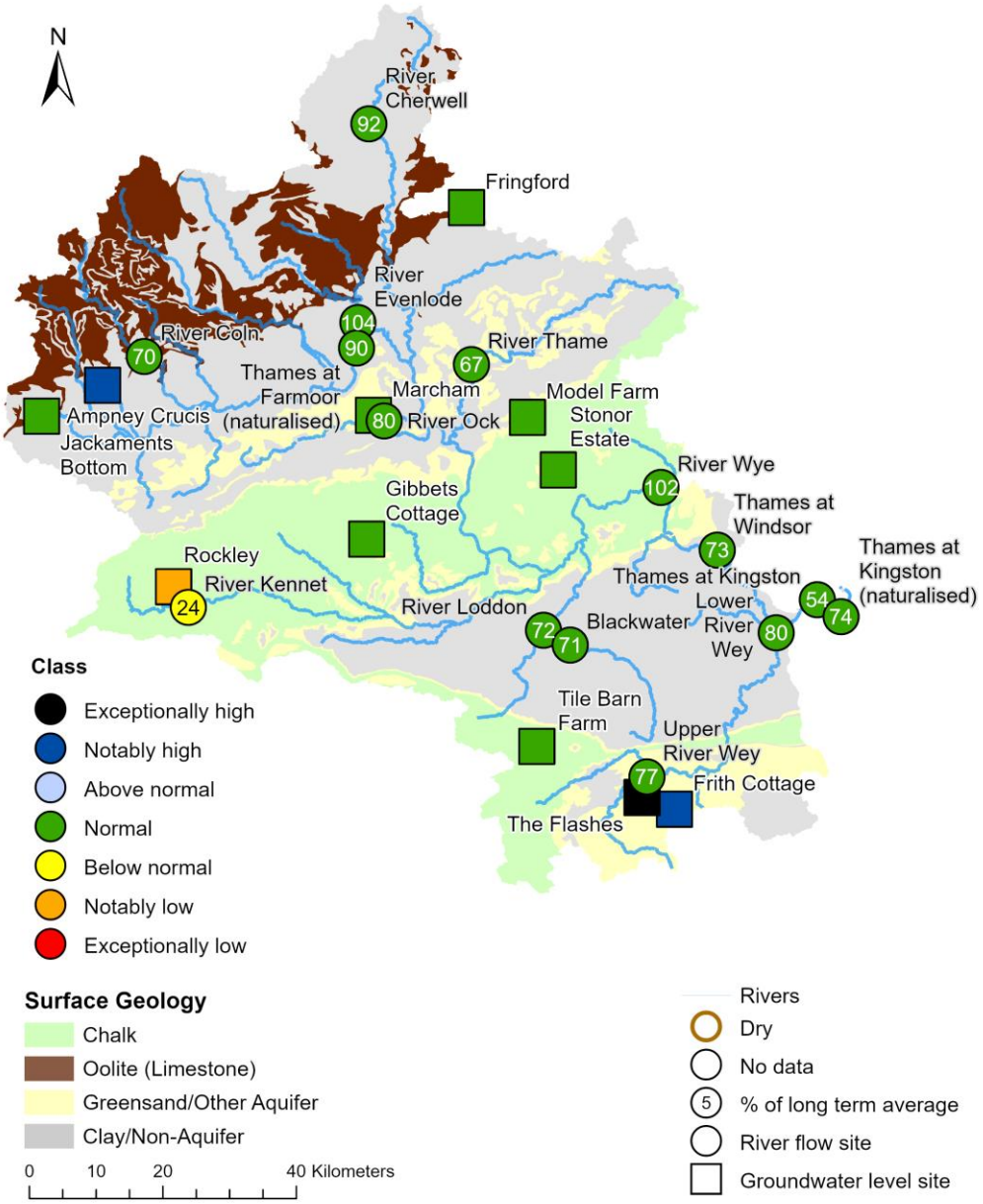
Figure 3.1: Soil moisture deficits for the week ending 30 November 2025. Shows the areal SMD estimate in millimetres.



4 River Flow and Groundwater Status

4.1 River flow and groundwater level map

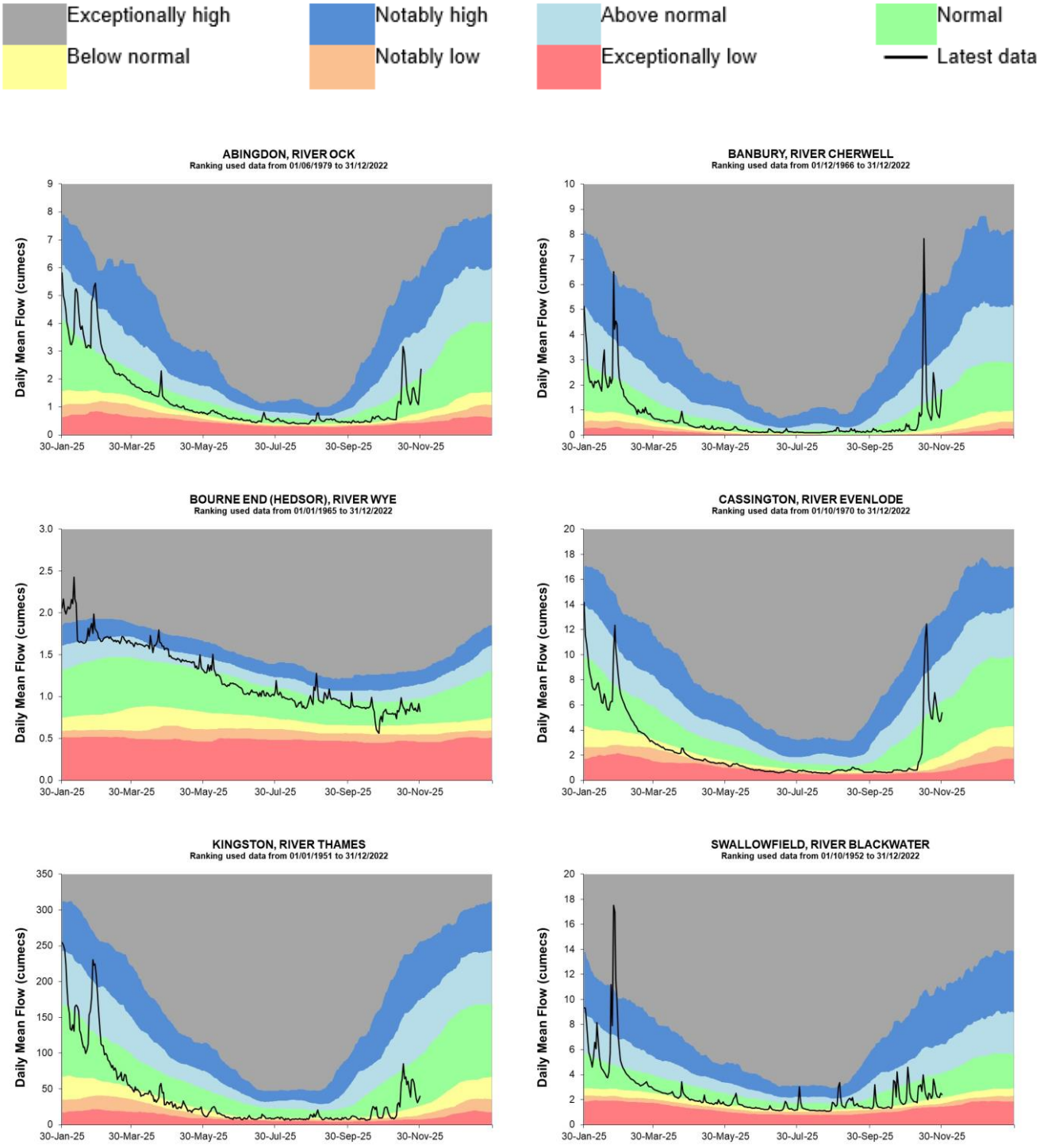
Figure 4.1: Monthly mean river flow for indicator sites and end of month groundwater levels for indicator sites for November 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic November means.



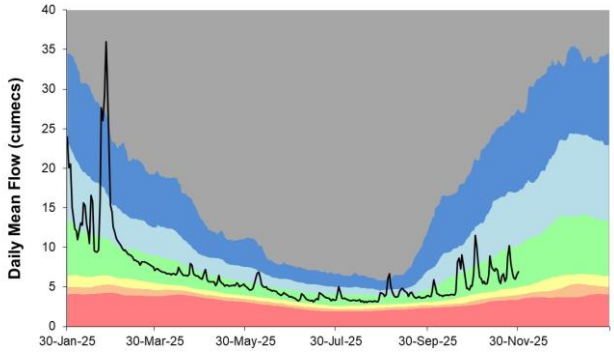
5 River flows

5.1 River flow charts

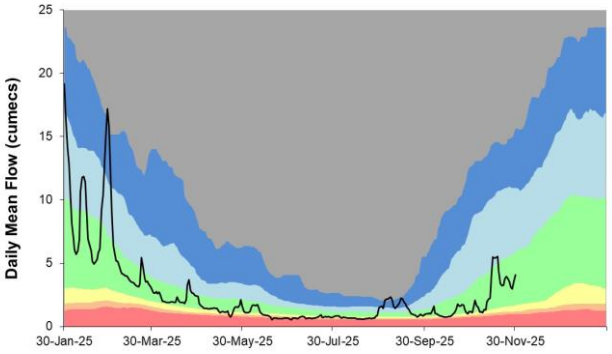
Figure 5.1: Daily mean river flows for indicator sites compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



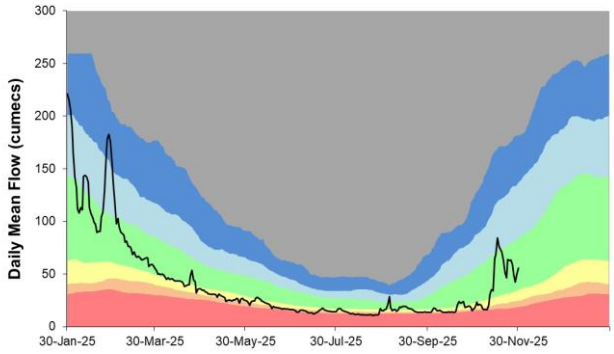
WEYBRIDGE, RIVER WEY
Ranking used data from 01/04/1979 to 31/12/2022



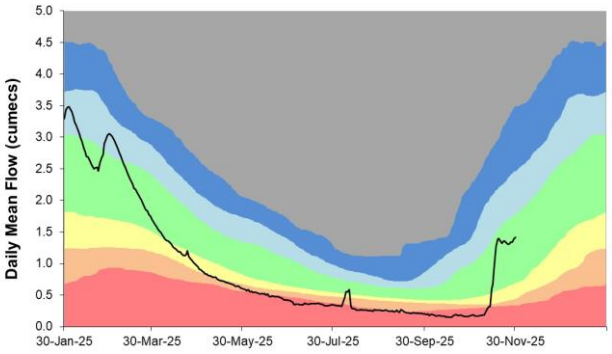
WHEATLEY, RIVER THAME
Ranking used data from 01/01/1990 to 31/12/2022



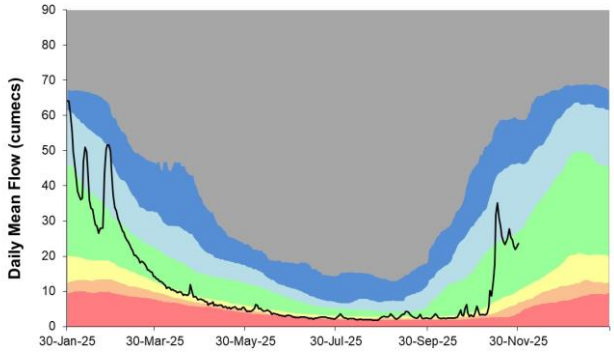
WINDSOR, RIVER THAMES
Ranking used data from 01/08/1979 to 31/12/2022



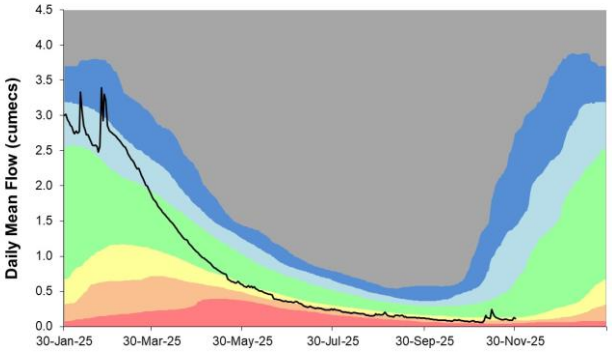
BIBURY, RIVER COLN
Ranking used data from 01/10/1963 to 31/12/2022

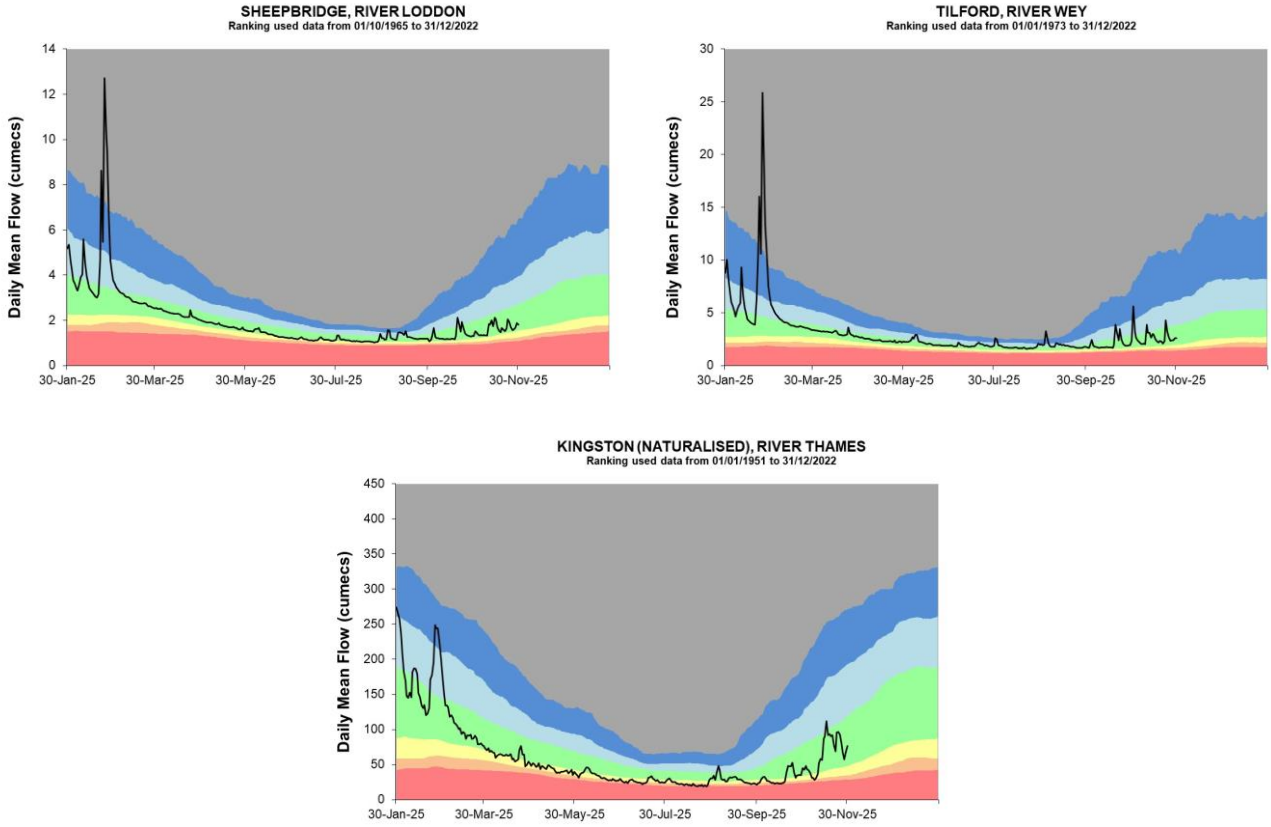


FARMOOR (NATURALISED), RIVER THAMES
Ranking used data from 01/10/1992 to 31/12/2022



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



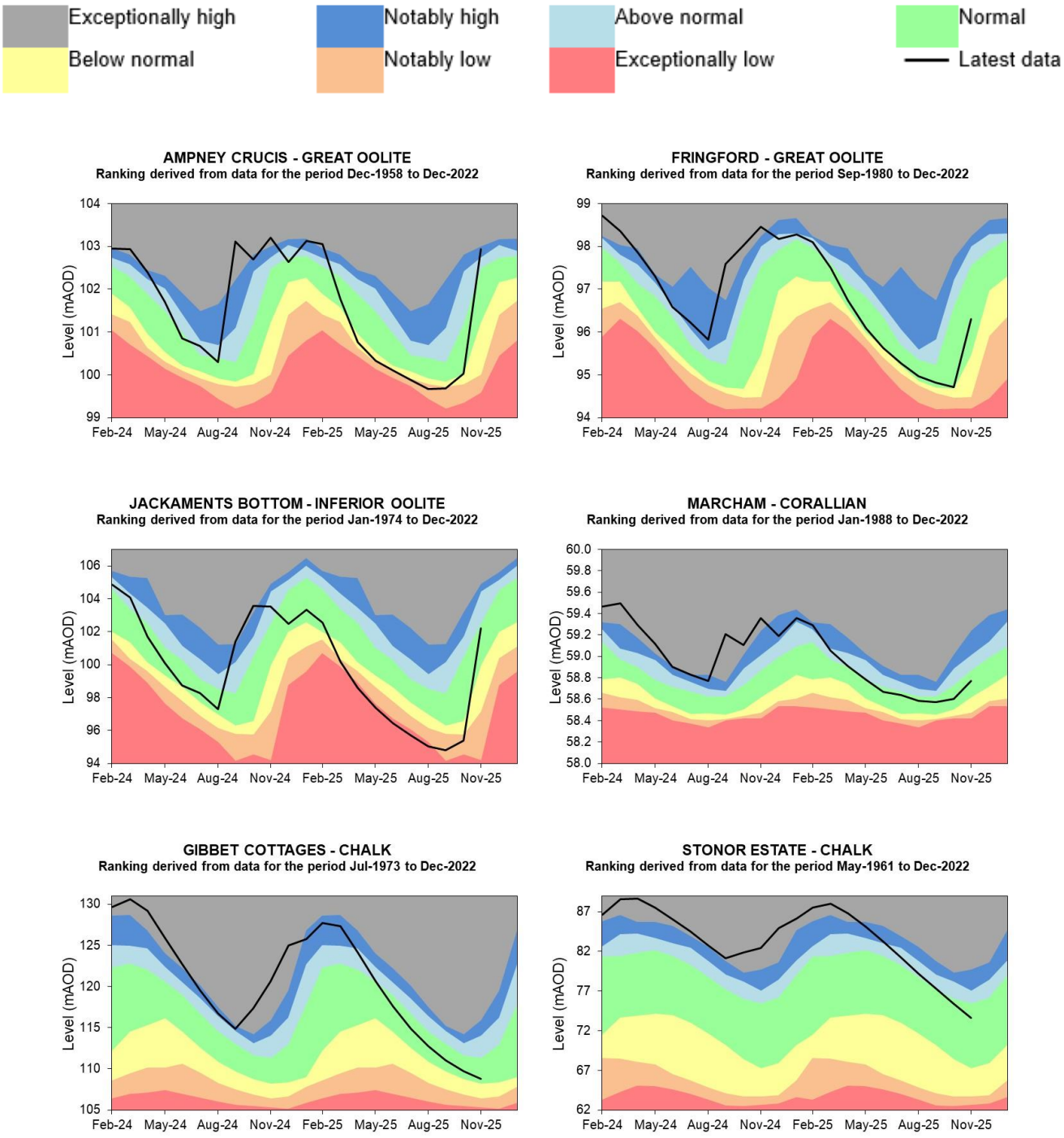


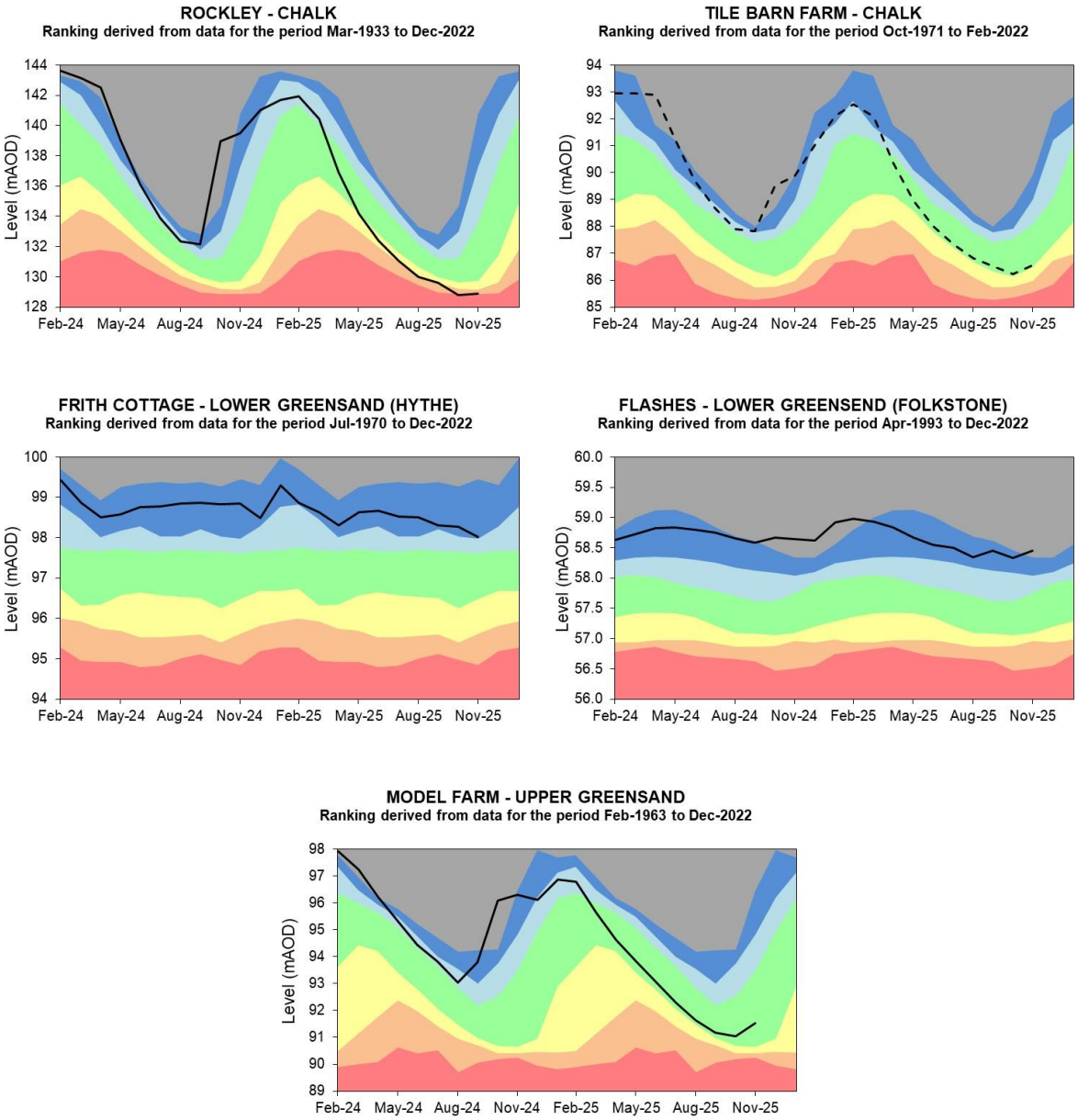
Source: Environment Agency.

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.



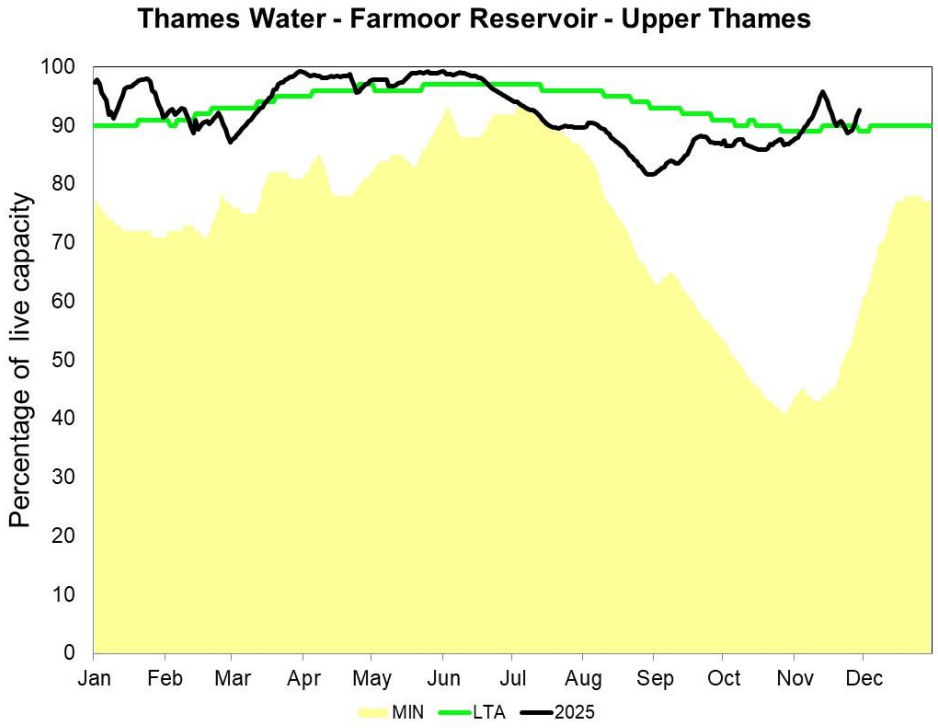


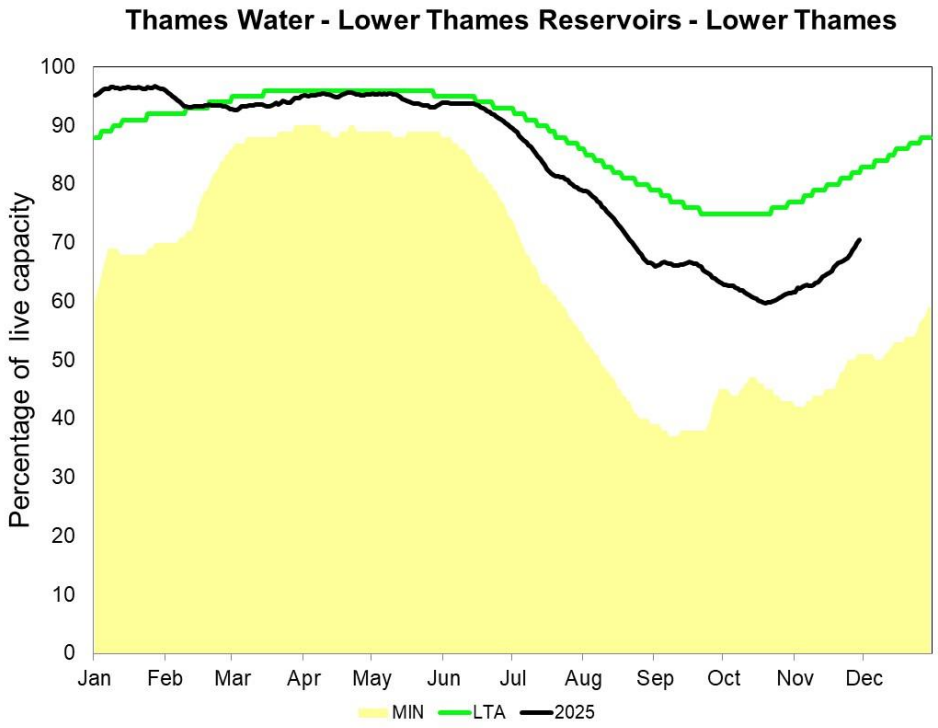
*Tile Barn Farm data has been estimated from two local sites since April 2022. A replacement is planned

Source: Environment Agency, 2025.

7 Reservoir stocks

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

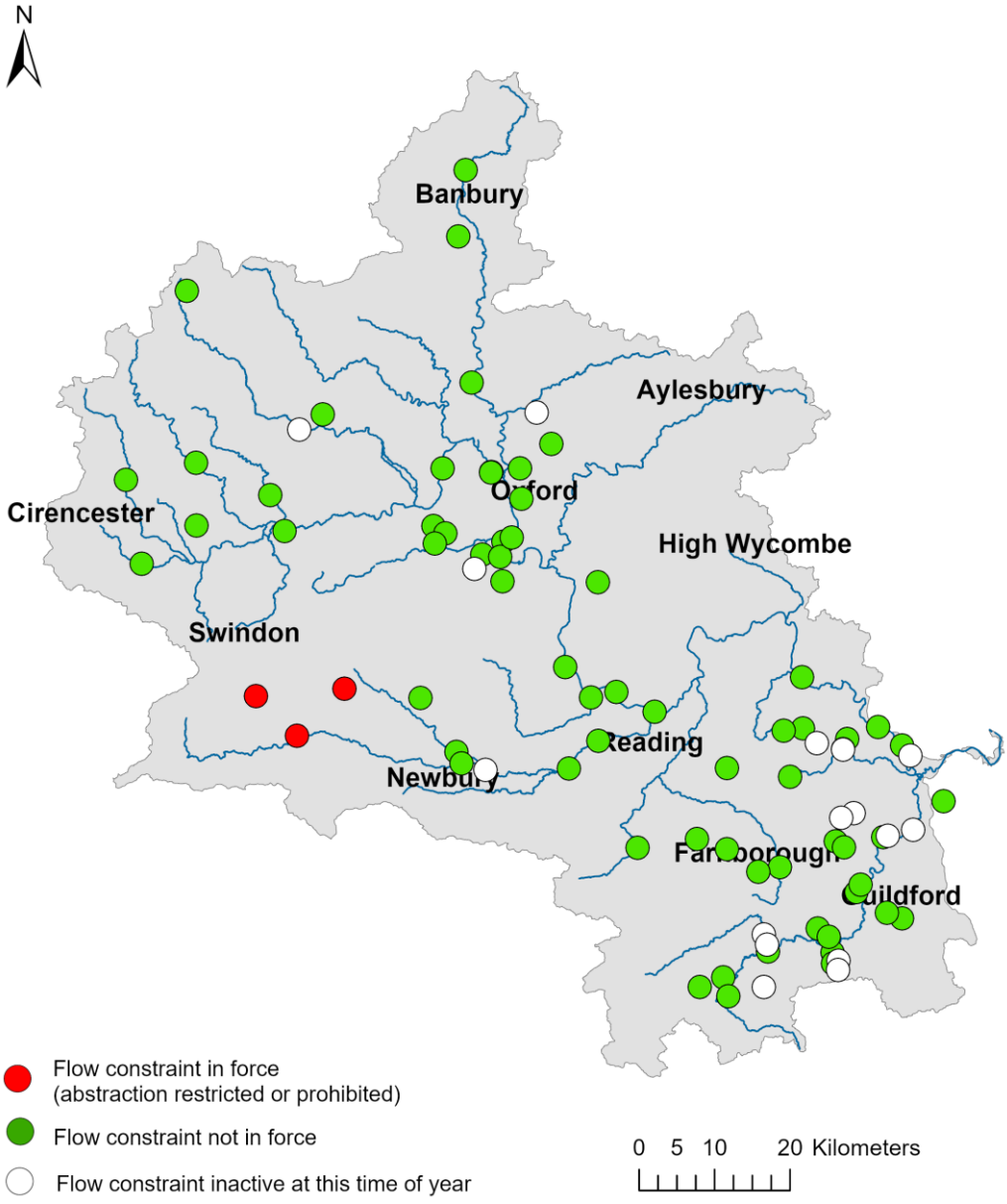




(Source: water companies).

8 Flow Constraints

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



8.2 Summary of flow constraints

Week ending	02/11/25	09/11/25	16/11/25	23/11/25	30/11/25
	21	39	3	4	3

9 Summary of rainfall, effective rainfall and soil moisture deficit

9.1 Rainfall and effective rainfall

Area	Rainfall (mm) 30 day Total	Rainfall (mm) November LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) 30 day total	Effective Rainfall (mm) November LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	152	91	168	48	55	88
Cotswolds - East	144	79	182	20	40	50
Berkshire Downs	122	90	136	17	37	45
Chilterns - West	88	84	105	12	31	38
North Downs - Hampshire	97	107	91	13	56	23
Wey - Greensand	89	103	87	11	51	22
Upper Thames	117	76	155	0	26	0
Cherwell	131	72	180	0	30	0
Thame	105	71	148	0	22	0
Loddon	69	82	84	0	25	0
Lower Wey	60	77	78	0	24	0
Ock	100	71	140	0	19	0
Enborne	88	89	98	0	35	0
Cut	64	73	87	0	16	0
Thames Area	**102**	**83**	**122**	**9**	**33**	**26**

HadUK rainfall data (Source: Met Office Crown copyright 2025)
EA effective rainfall data (Source: EA Soil Moisture Model)

9.2 Soil moisture deficit

Area	SMD (mm) Day 30	SMD (mm) LTA
Cotswolds - West	0	15
Cotswolds - East	13	23
Berkshire Downs	32	35
Chilterns - West	68	42
North Downs - Hampshire	24	21
Wey - Greensand	25	23
Upper Thames	41	41
Cherwell	27	31
Thame	43	42
Loddon	77	35
Lower Wey	70	34
Ock	71	50
Enborne	35	27
Cut	103	51
Thames Area	**45**	**34**

HadUK rainfall data (Source: Met Office Crown copyright 2025)
EA effective rainfall data (Source: EA Soil Moisture Model)

9.3 Winter rainfall and effective rainfall

Winter period: 01/10/2025 to 30/11/2025						
Area	Rainfall (mm) Total	Rainfall (mm) LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) Total	Effective Rainfall (mm) LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	235	179	131	59	86	69
Cotswolds - East	208	157	132	28	65	43
Berkshire Downs	196	175	113	26	55	48
Chilterns - West	156	165	95	20	47	43
North Downs - Hampshire	196	206	95	26	82	32
Wey - Greensand	201	199	101	27	78	35
Upper Thames	184	149	123	0	33	0
Cherwell	188	147	128	0	41	0
Thame	162	141	114	0	29	0
Loddon	144	160	89	0	32	0
Lower Wey	144	153	94	0	34	0
Ock	156	140	111	0	23	0
Enborne	161	174	93	0	46	0
Cut	127	144	88	0	22	0
Thames Area	**176**	**164**	**107**	**13**	**48**	**28**

HadUK rainfall data (Source: Met Office Crown copyright 2025)
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	Nov 2025 rainfall % of long term average 1991 to 2020	Nov 2025 band	Sep 2025 to November cumulative band	Jun 2025 to November cumulative band	Dec 2024 to November cumulative band
Berkshire Downs	136	Above Normal	Above normal	Normal	Below normal
Chilterns West	105	Normal	Normal	Normal	Below normal
Cotswold East	183	Exceptionally High	Above normal	Normal	Below normal
Cotswold West	168	Notably High	Notably high	Normal	Below normal
Cut	87	Normal	Normal	Below normal	Notably low
Enborne	99	Normal	Normal	Normal	Below normal
Loddon	84	Normal	Normal	Normal	Below normal
Lower Wey	78	Normal	Normal	Normal	Below normal
North Downs - Hampshire	91	Normal	Normal	Normal	Below normal
Ock	141	Above Normal	Above normal	Normal	Below normal
Thame	148	Notably High	Above normal	Normal	Below normal
Upper Cherwell	180	Exceptionally High	Above normal	Normal	Below normal
Upper Thames	154	Above Normal	Above normal	Normal	Below normal
Wey - Greensand	87	Normal	Normal	Normal	Below normal

11.2 River flows table

Site name	River	Catchment	Nov 2025 band	Oct 2025 band
Abingdon	River Ock	Ock	Normal	Normal
Banbury	River Cherwell	Cherwell Upper	Normal	Normal
Bibury	River Coln	Coln	Normal	Exceptionally low
Bourne End (Hedsor)	River Wye	Wye Bucks	Normal	Normal
Cassington	River Evenlode	Evenlode	Normal	Below normal
Farmoor (naturalised)	River Thames	Thames	Normal	Below normal
Kingston	River Thames	Thames North Bank	Normal	Below normal
Marlborough	River Kennet	Kennet	Below normal	Notably low
Sheepbridge	River Loddon	Loddon	Normal	Normal
Swallowfield	River Blackwater	Loddon	Normal	Normal
Tilford	River Wey	Wey Addleston Bourne	Normal	Normal
Weybridge	River Wey	Wey Addleston Bourne	Normal	Normal
Wheatley	River Thame	Thame	Normal	Normal
Windsor	River Thames	Thames	Normal	Notably low
Kingston (naturalised)	River Thames	Thames North Bank	Normal	Below normal

11.3 Groundwater table

Site name	Aquifer	End of Nov 2025 band	End of Oct 2025 band
Ampney Crucis OBH	Burford Oolitic Limestone (great)	Notably high	Normal
Frith Cottage	Godalming Lower Greensand	Notably high	Notably high
Gibbet Cottages OBH	Berkshire Downs Chalk	Normal	Normal
Jackaments Bottom OBH	Burford Oolitic Limestone (inferior)	Normal	Notably low
Marcham OBH	Shrivenham Corallian	Normal	Normal
Model Farm	Chiltern Upper Greensand	Normal	Normal
Rockley OBH	Berkshire Downs Chalk	Notably low	Exceptionally low
Stonor Estate	South-west Chilterns Chalk	Normal	Normal
The Flashes OBH	Godalming Lower Greensand	Exceptionally high	Notably high
Tile Barn Farm	Basingstoke Chalk	Normal	Normal
Fringford P.S.	Upper Bedford Ouse Oolitic Limestone (great)	Normal	Normal