Monthly water situation report: Thames Area

1 Summary - December 2025

Thames area received 90mm of rainfall in December, which was 118% of the long term average (LTA). Soil moisture deficits (SMD) decreased across Thames area to 9mm, which is below average for the time of year. The majority of monthly mean river flows were normal for the time of year. Groundwater levels have risen at 8 of our indicator sites. The majority are normal for the time of year however levels range from normal to exceptionally high. Farmoor reservoir is above average for the time of year, while the Lower Thames reservoirs are below average.

1.1 Rainfall

Thames area received 90mm of rainfall in December, 118% of the LTA. Thames area had a north-west, south-east split, where areal units towards the north and west had above normal rainfall, while units in the south and east received normal rainfall. The majority of the month's rain fell in the first three weeks of December, with the Christmas period being relatively drier. The wettest day was 18 December where just under a quarter of the month's rain fell. So far this winter period (October to December) 111% of expected rain has fallen.

1.2 Soil moisture deficit and recharge

SMD decreased to 9mm in December, which is below the average of 12mm. Effective rainfall across Thames area is 84%, with 4 areal units (Cotswolds West, Cotswolds East, Berkshire Downs, and Cherwell) having greater than 100% effective rainfall. However, 4 areal units (Loddon, Lower Wey, Ock, and Cut) still have not had any effective rainfall due to higher SMD's.

1.3 River flows

Monthly mean river flows increased at all indicator sites in December. The majority of sites are normal for the time of year, while, 2 are above normal (Wey at Tilford and Thames at Kingston (Naturalised)), and 4 are notably high (Cherwell at Banbury, Evenlode at Cassington, Coln at Bibury, and the Thames at Farmoor (Naturalised)).

1.4 Groundwater levels

Groundwater levels increased at 8 of our indicator sites in December, with the majority at normal levels for the time of year. Fringford (Great Oolite) and Jackaments Bottom (Inferior Oolite) are now above normal, Rockley (Chalk) has returned to normal, while the Flashes (Lower Greensand) remains at exceptionally high. Levels continued to decline at Stonor Estate (Chalk), but remain normal for the time of year. Levels at Frith Cottage (Lower

Greensand) and Ampney Crucis (Great Oolite) have slightly declined, however both sites are above normal.

1.5 Reservoir stocks

Reservoir stocks in Farmoor increased from 92.6% to 97.2%, while the Lower Thames reservoirs also increased from 70.6% to 85.4%. Farmoor was above the LTA for December, however the Lower Thames was still below.

1.6 Environmental impact

During December 51 flood alerts, and 1 flood warning were issued on rivers in the Thames area. At the end of December, 0 abstraction licences were being constrained in the area to protect water resources and the environment.

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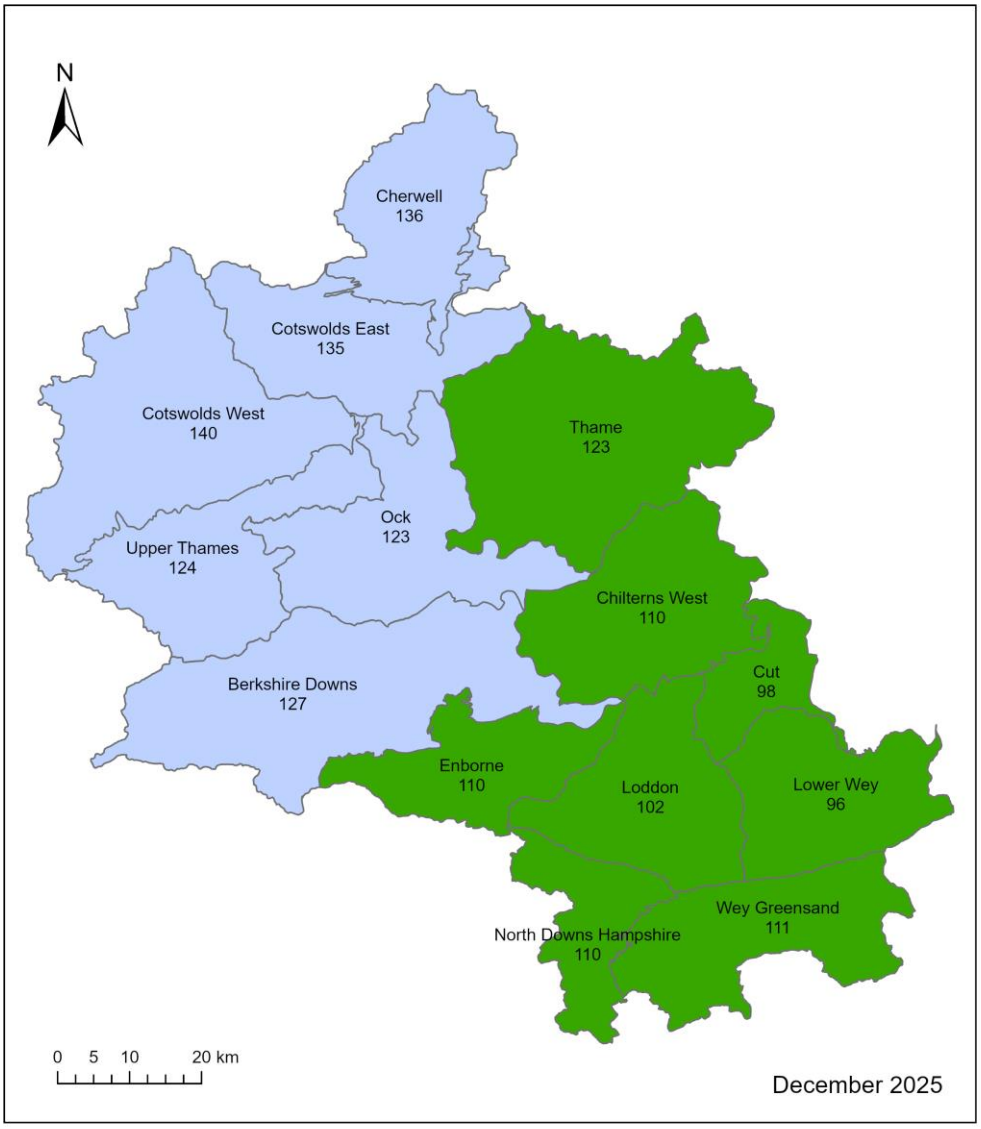
2 Rainfall

2.1 Rainfall map

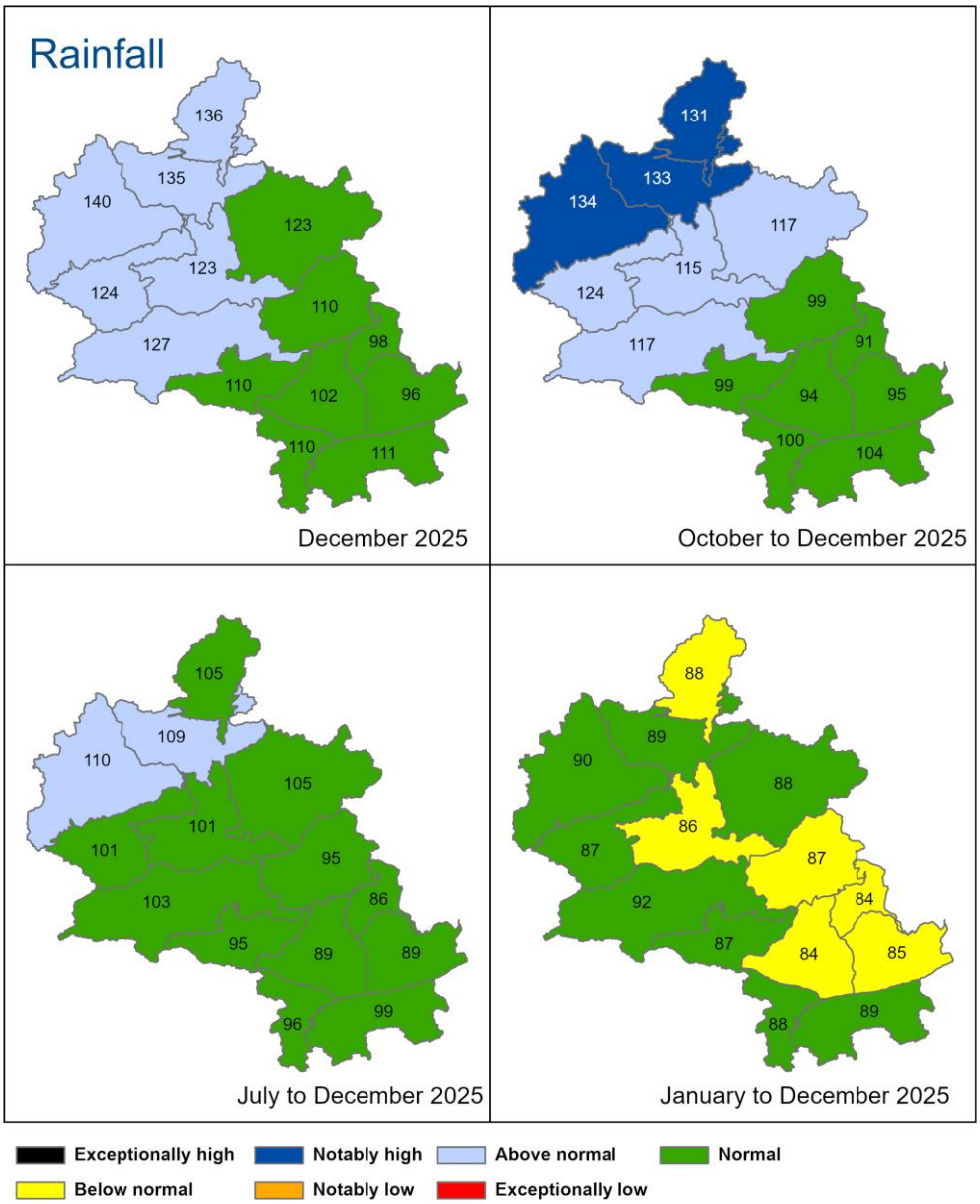
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 31 December 2025), classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



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, 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)

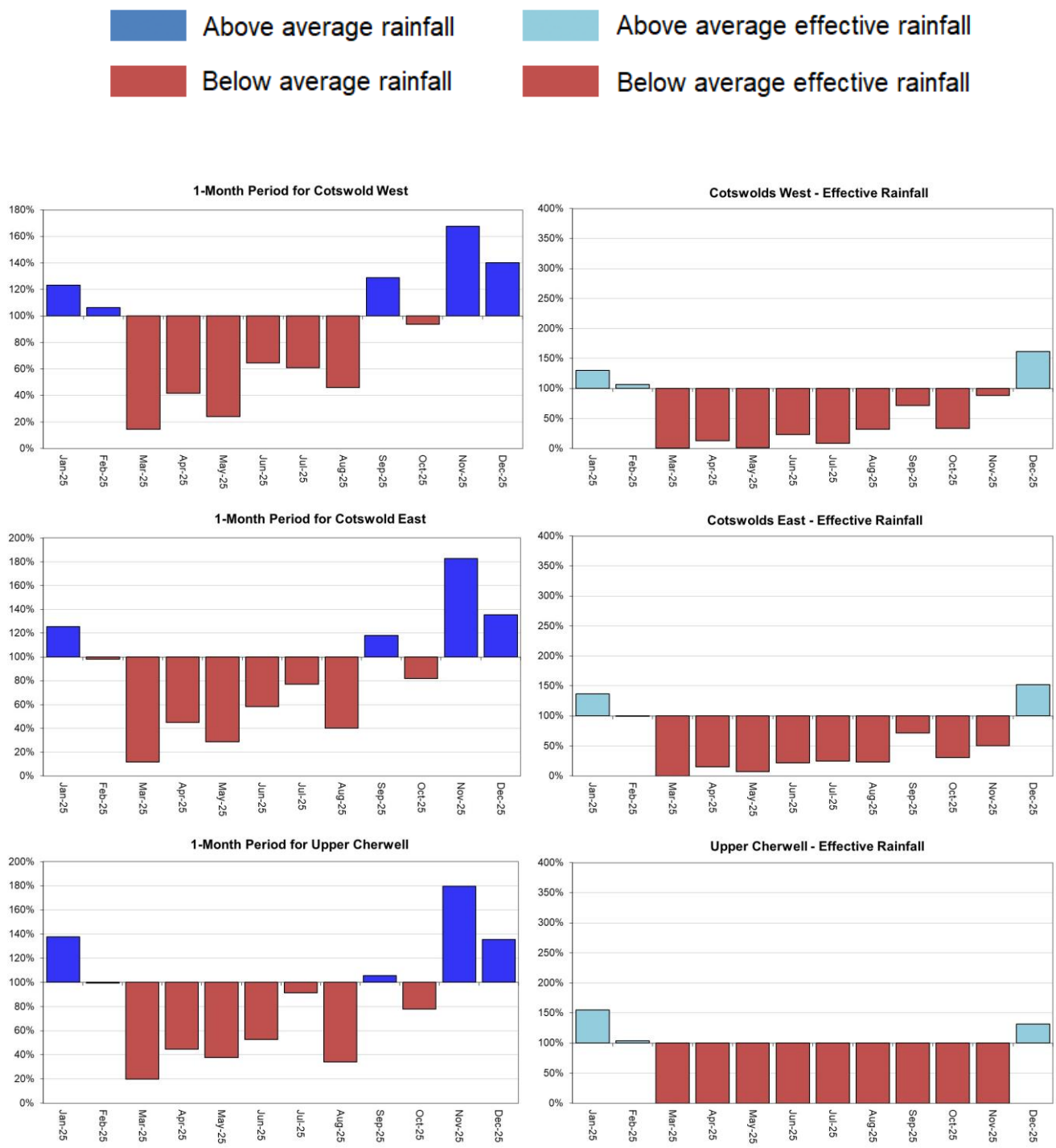
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 31 December 2025), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.

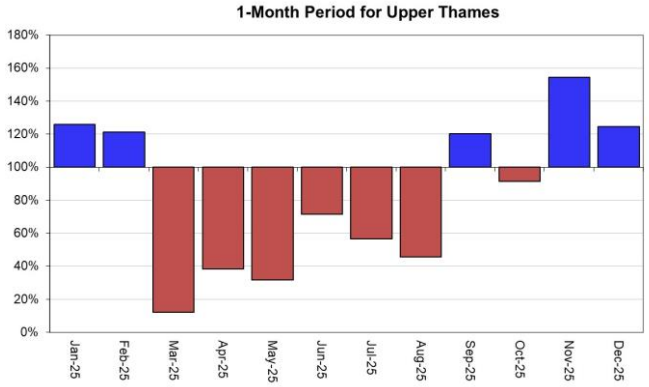


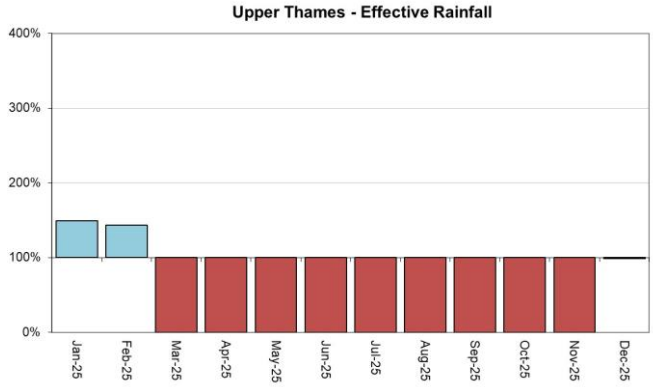
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency).

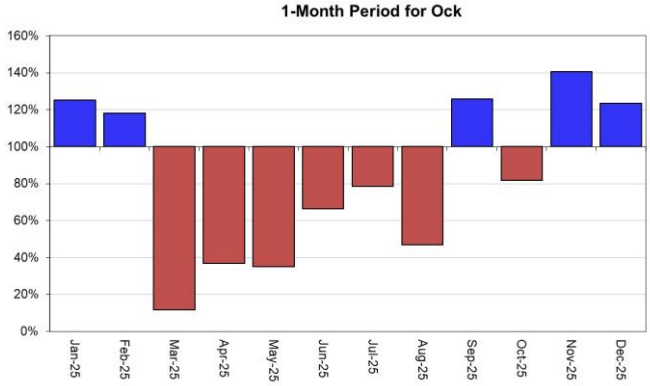
2.3 Rainfall charts

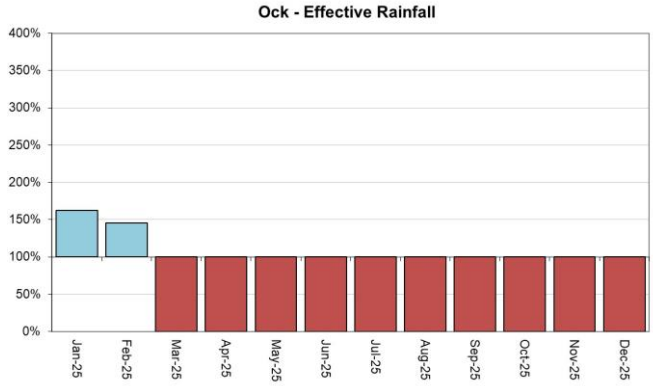
Figure 2.3: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each areal unit.

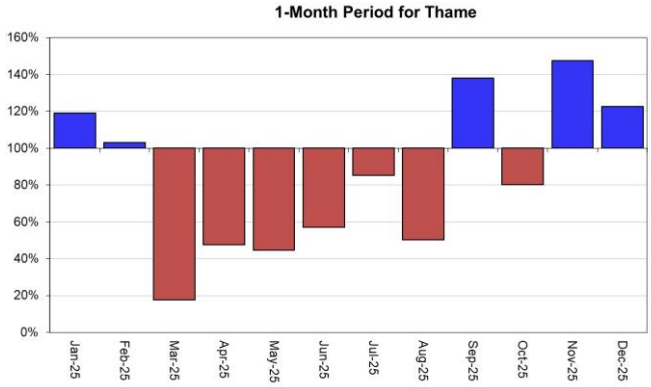


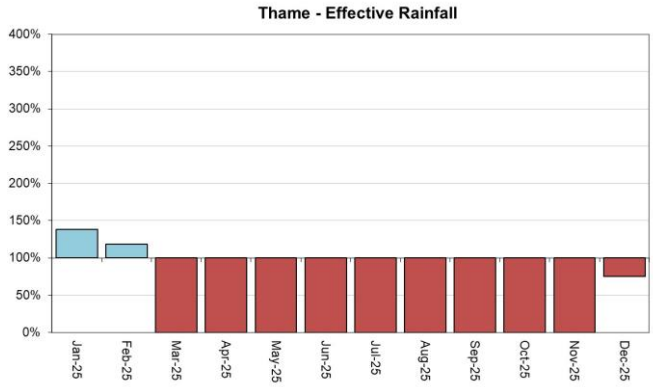

1-Month Period for Upper Thames
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

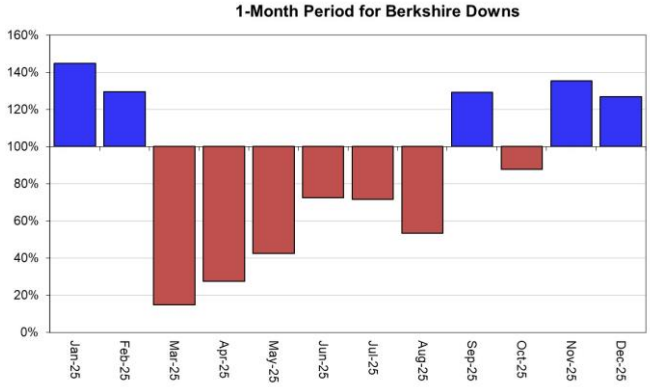

Upper Thames - Effective Rainfall
400%
300%
200%
100%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

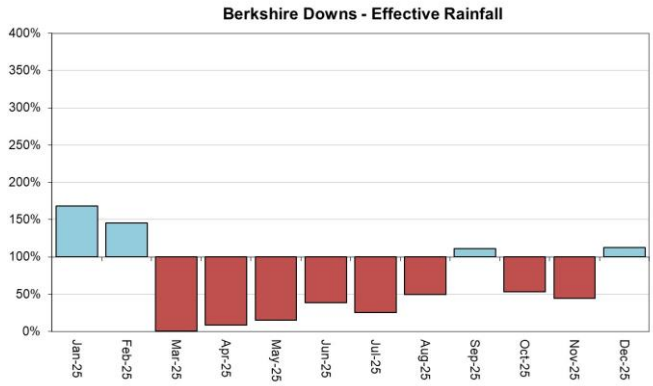

1-Month Period for Ock
160%
140%
120%
100%
80%
60%
40%
20%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

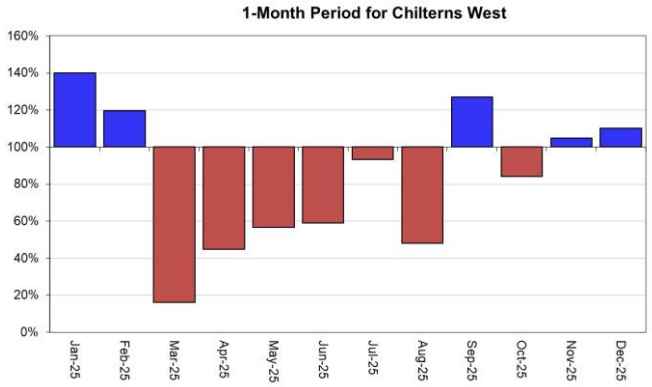

Ock - Effective Rainfall
400%
350%
300%
250%
200%
150%
100%
50%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

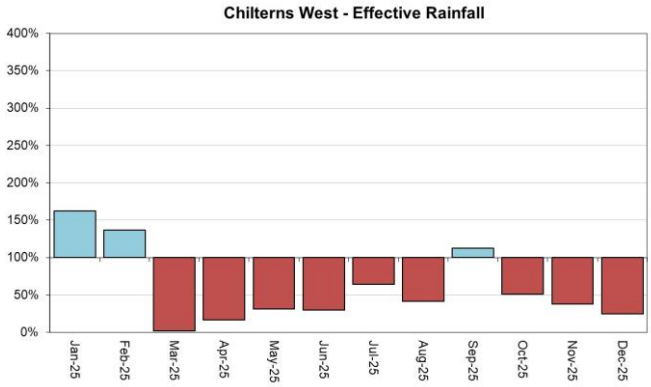

1-Month Period for Thame
160%
140%
120%
100%
80%
60%
40%
20%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

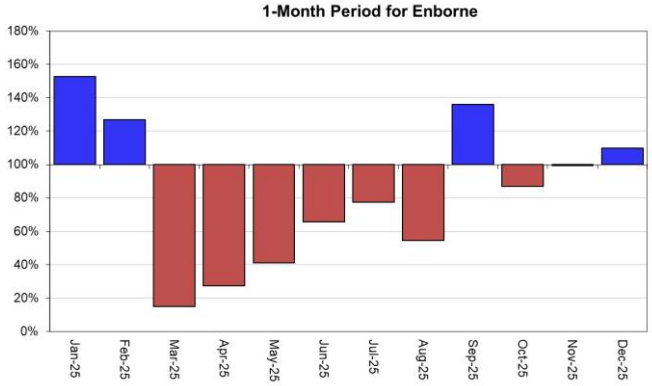

Thame - Effective Rainfall
400%
350%
300%
250%
200%
150%
100%
50%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

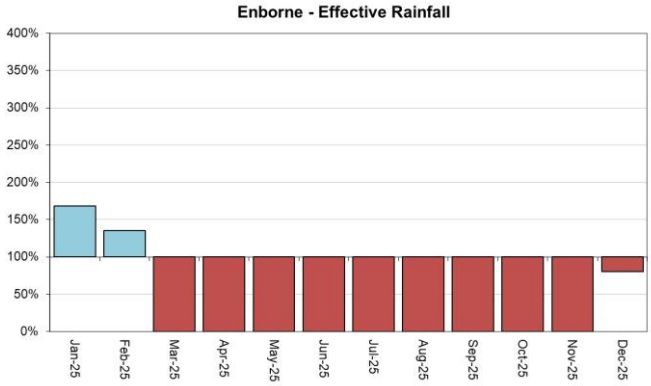

1-Month Period for Berkshire Downs
160%
140%
120%
100%
80%
60%
40%
20%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

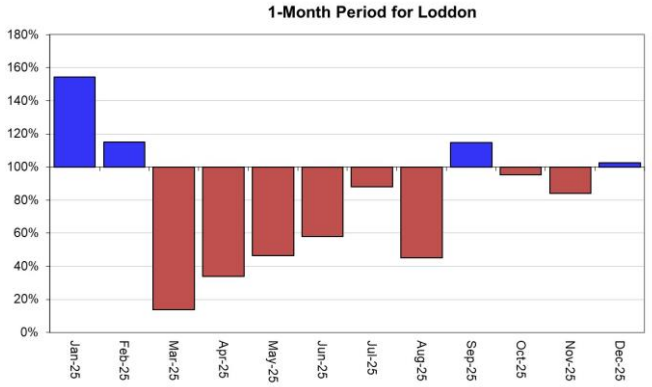

Berkshire Downs - Effective Rainfall
400%
350%
300%
250%
200%
150%
100%
50%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

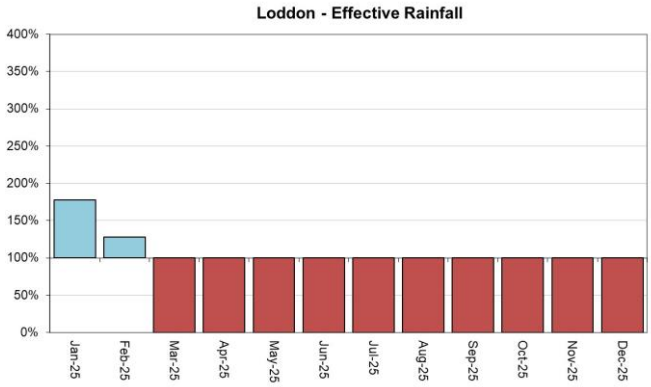

1-Month Period for Chilterns West
160%
140%
120%
100%
80%
60%
40%
20%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

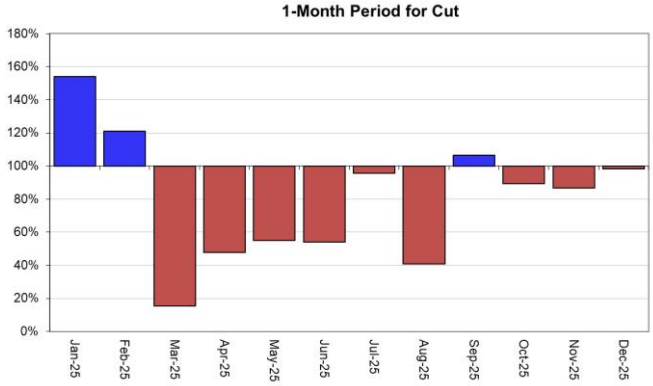

Chilterns West - Effective Rainfall
400%
350%
300%
250%
200%
150%
100%
50%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

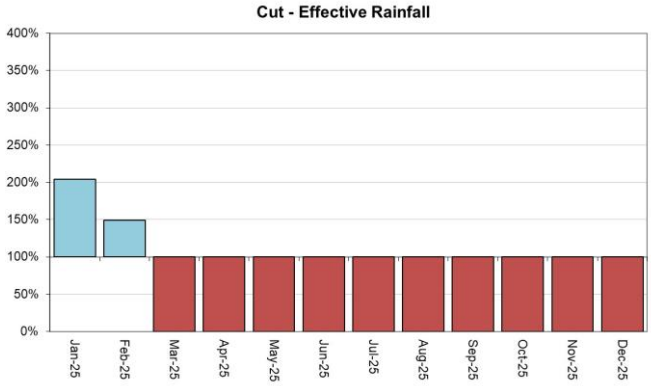

1-Month Period for Enborne
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25

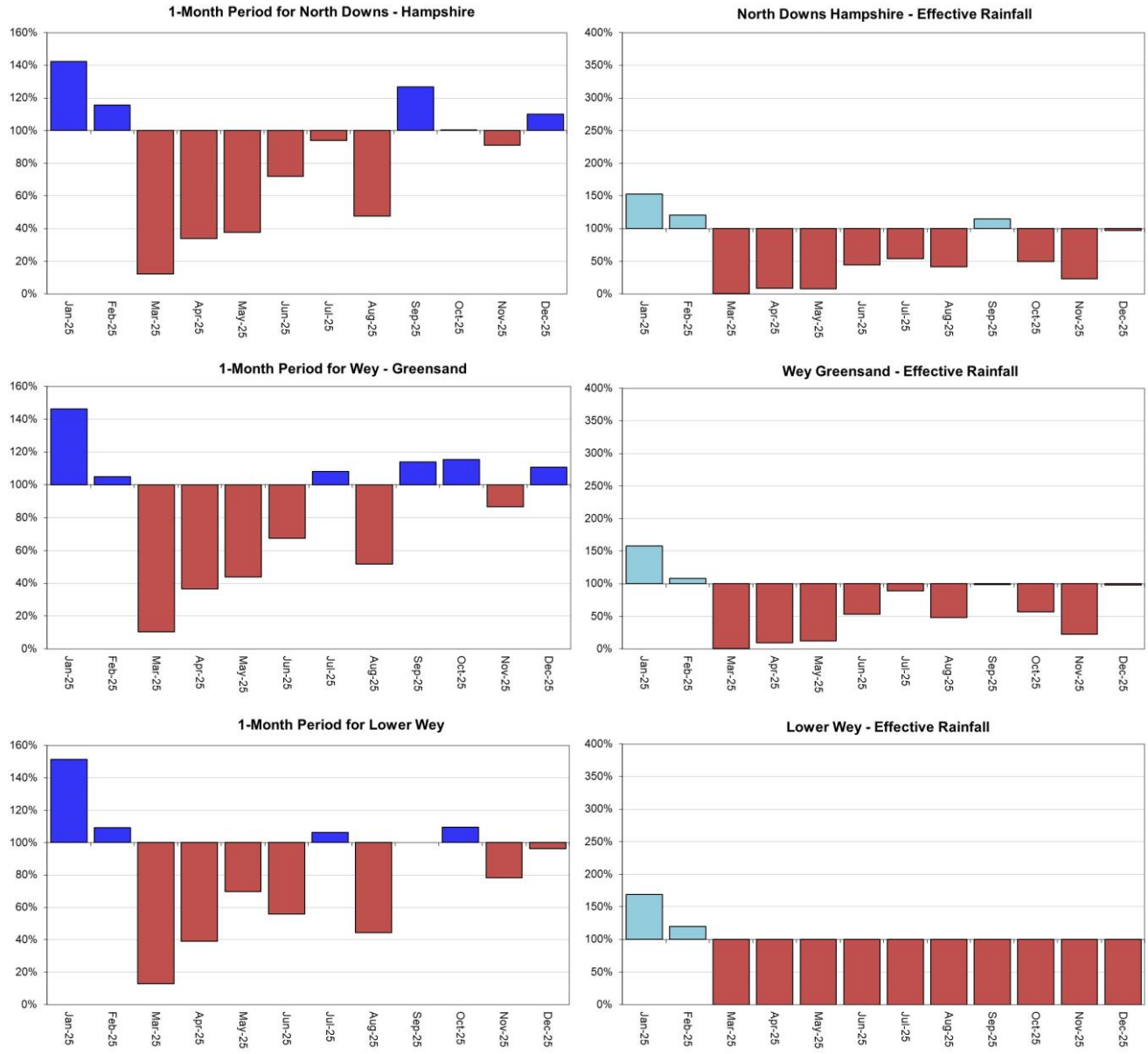

Enborne - Effective Rainfall
400%
350%
300%
250%
200%
150%
100%
50%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25


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


Loddon - Effective Rainfall
400%
350%
300%
250%
200%
150%
100%
50%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25


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


Cut - Effective Rainfall
400%
350%
300%
250%
200%
150%
100%
50%
0%
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25



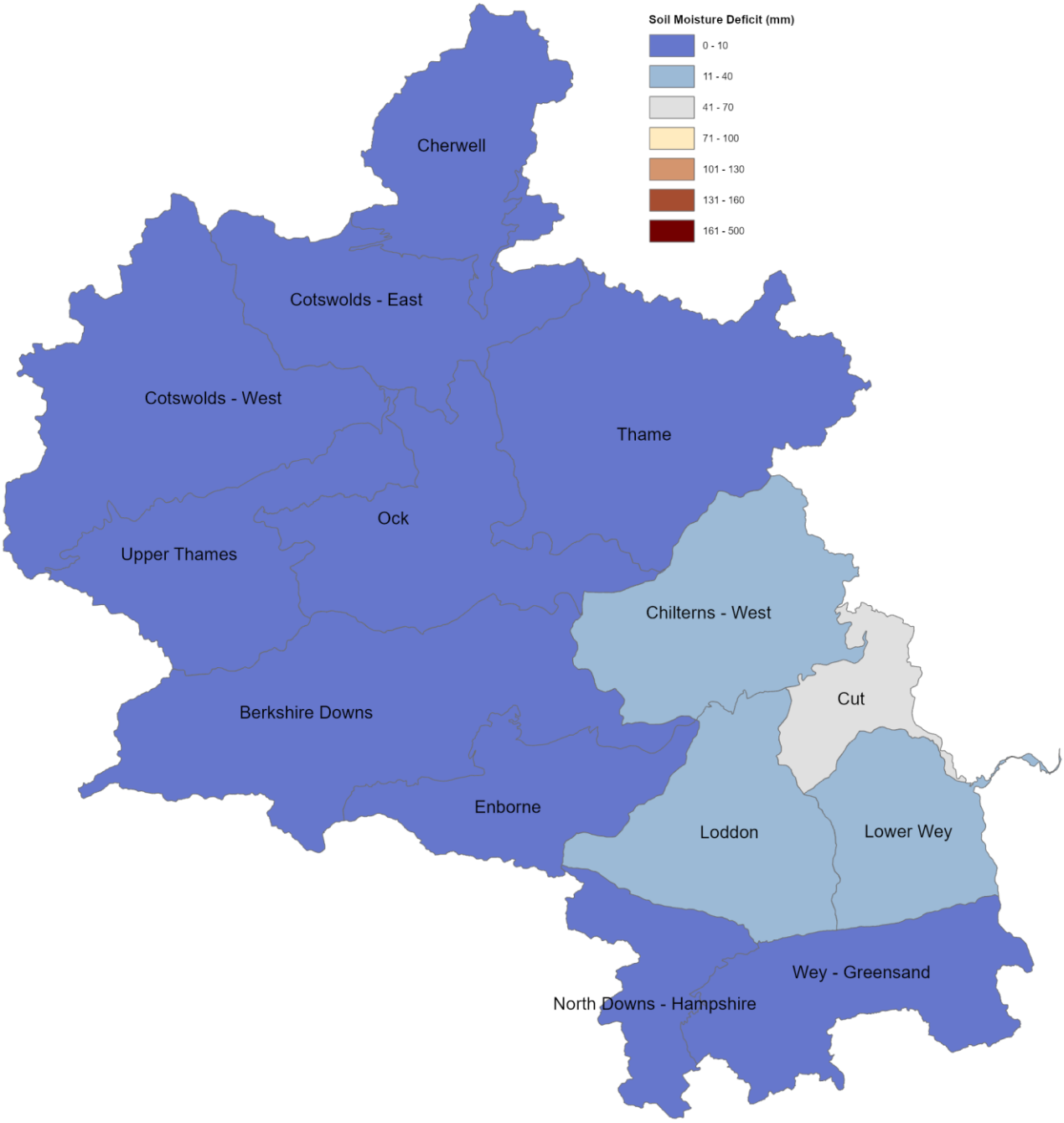
HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

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

3 Soil moisture deficit

3.1 Soil moisture deficit map

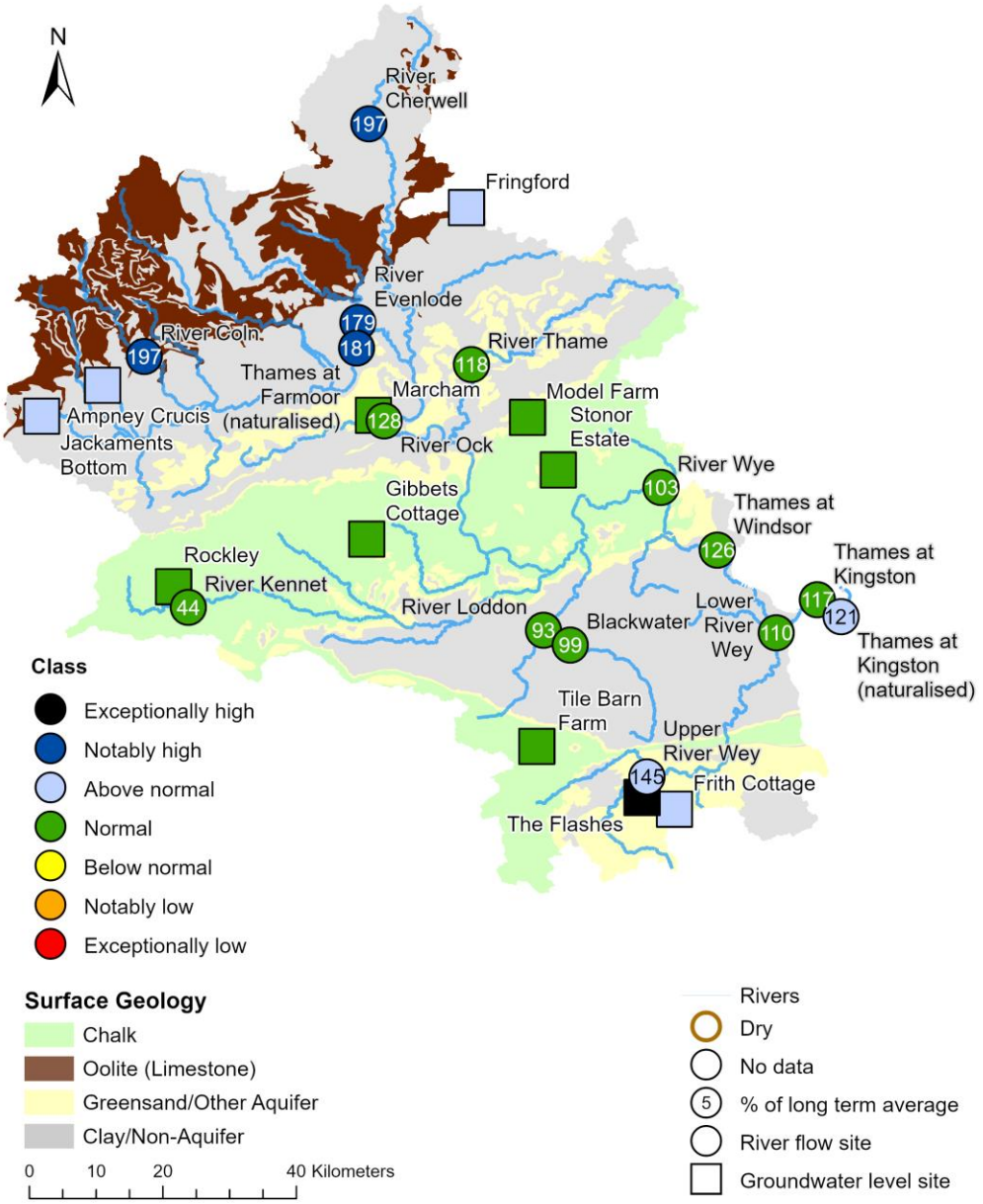
Figure 3.1: Soil moisture deficits for the week ending 31 December 2025. Shows the areal SMD estimate in millimetres.



4 River Flow and Groundwater Status

4.1 River flow and groundwater level map

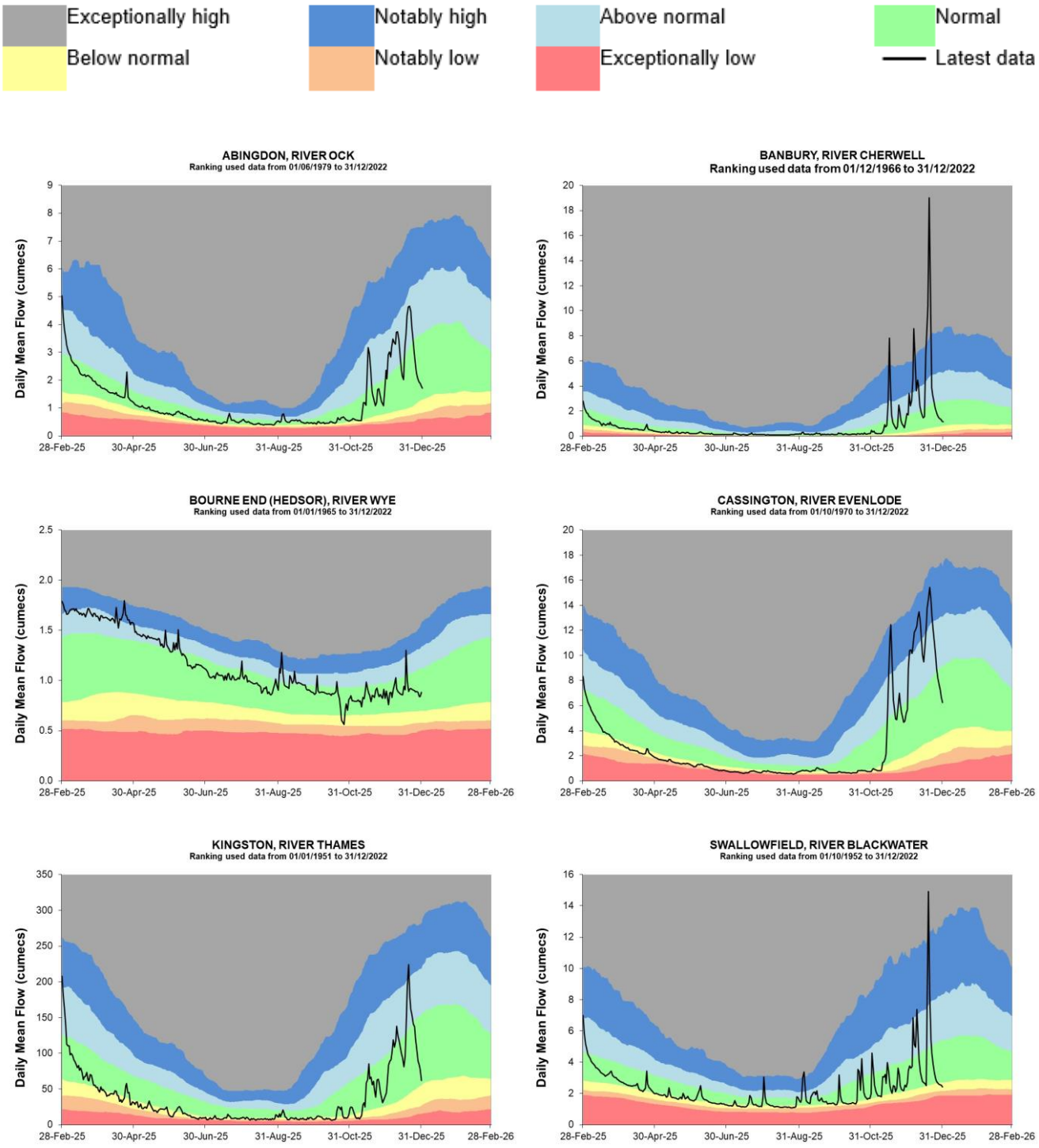
Figure 4.1: Monthly mean river flow for indicator sites and end of month groundwater levels for indicator sites for December 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic December means.

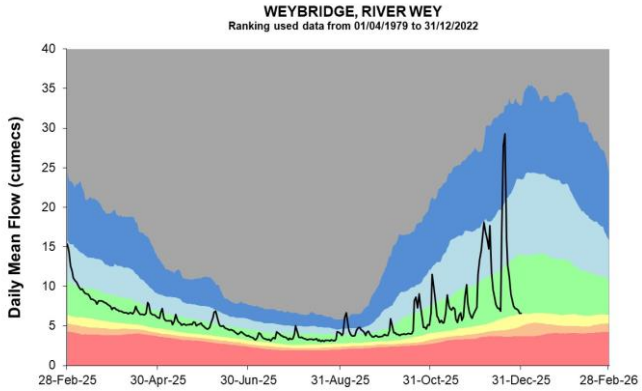


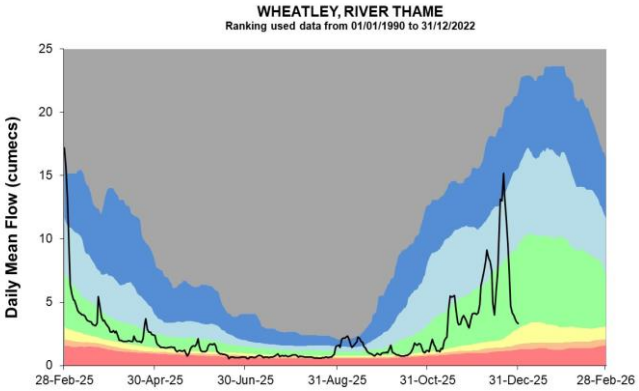
5 River flows

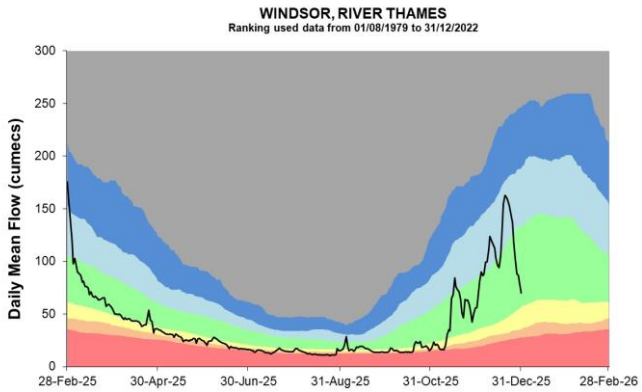
5.1 River flow charts

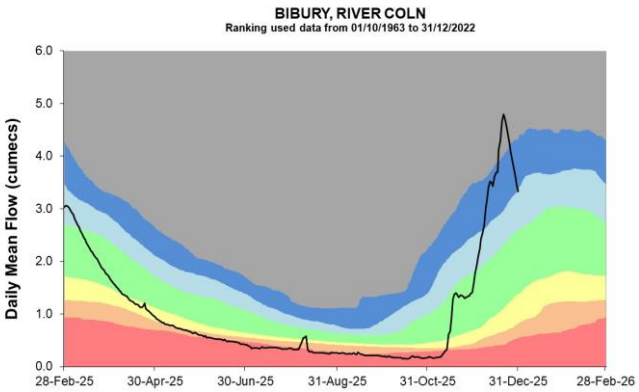
Figure 5.1: Daily mean river flows for indicator sites compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

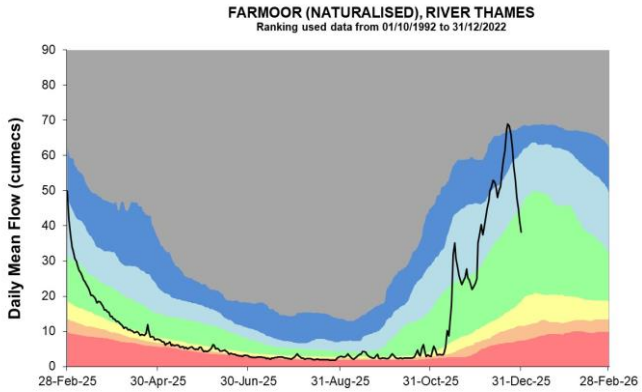


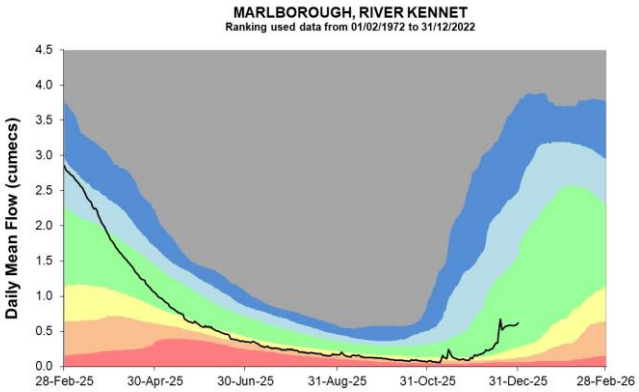

WEYBRIDGE, RIVER WEY
Ranking used data from 01/04/1979 to 31/12/2022
Daily Mean Flow (cumecs)
0
5
10
15
20
25
30
35
40
28-Feb-25
30-Apr-25
30-Jun-25
31-Aug-25
31-Oct-25
31-Dec-25
28-Feb-26

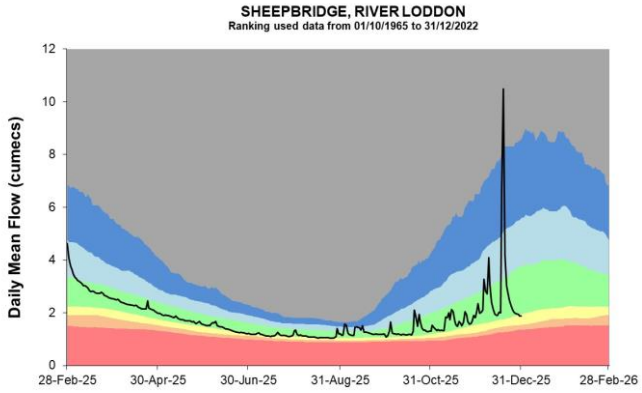

WHEATLEY, RIVER THAME
Ranking used data from 01/01/1990 to 31/12/2022
Daily Mean Flow (cumecs)
0
5
10
15
20
25
28-Feb-25
30-Apr-25
30-Jun-25
31-Aug-25
31-Oct-25
31-Dec-25
28-Feb-26

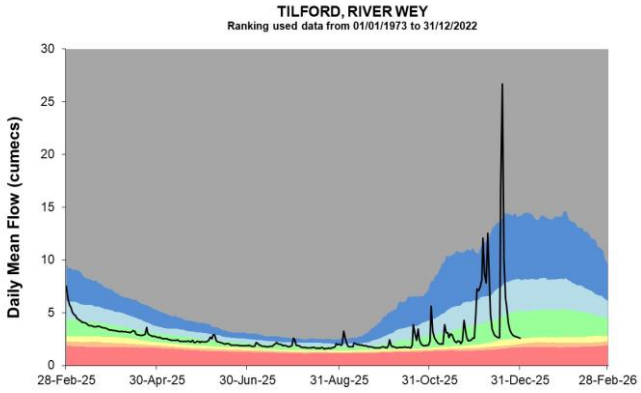

WINDSOR, RIVER THAMES
Ranking used data from 01/08/1979 to 31/12/2022
Daily Mean Flow (cumecs)
0
50
100
150
200
250
300
28-Feb-25
30-Apr-25
30-Jun-25
31-Aug-25
31-Oct-25
31-Dec-25
28-Feb-26

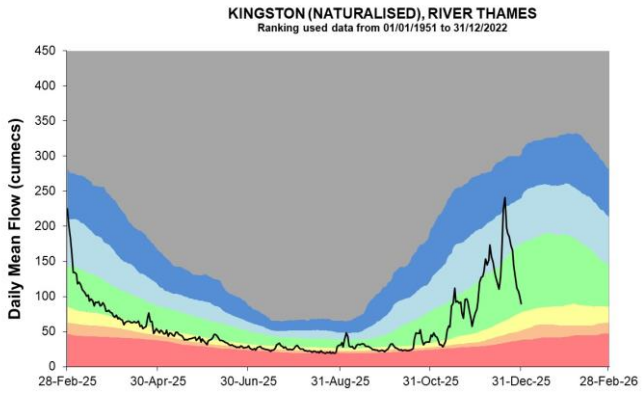

BIBURY, RIVER COLN
Ranking used data from 01/10/1963 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
28-Feb-25
30-Apr-25
30-Jun-25
31-Aug-25
31-Oct-25
31-Dec-25
28-Feb-26


FARMOOR (NATURALISED), RIVER THAMES
Ranking used data from 01/10/1992 to 31/12/2022
Daily Mean Flow (cumecs)
0
10
20
30
40
50
60
70
80
90
28-Feb-25
30-Apr-25
30-Jun-25
31-Aug-25
31-Oct-25
31-Dec-25
28-Feb-26


MARLBOROUGH, RIVER KENNET
Ranking used data from 01/02/1972 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
28-Feb-25
30-Apr-25
30-Jun-25
31-Aug-25
31-Oct-25
31-Dec-25
28-Feb-26





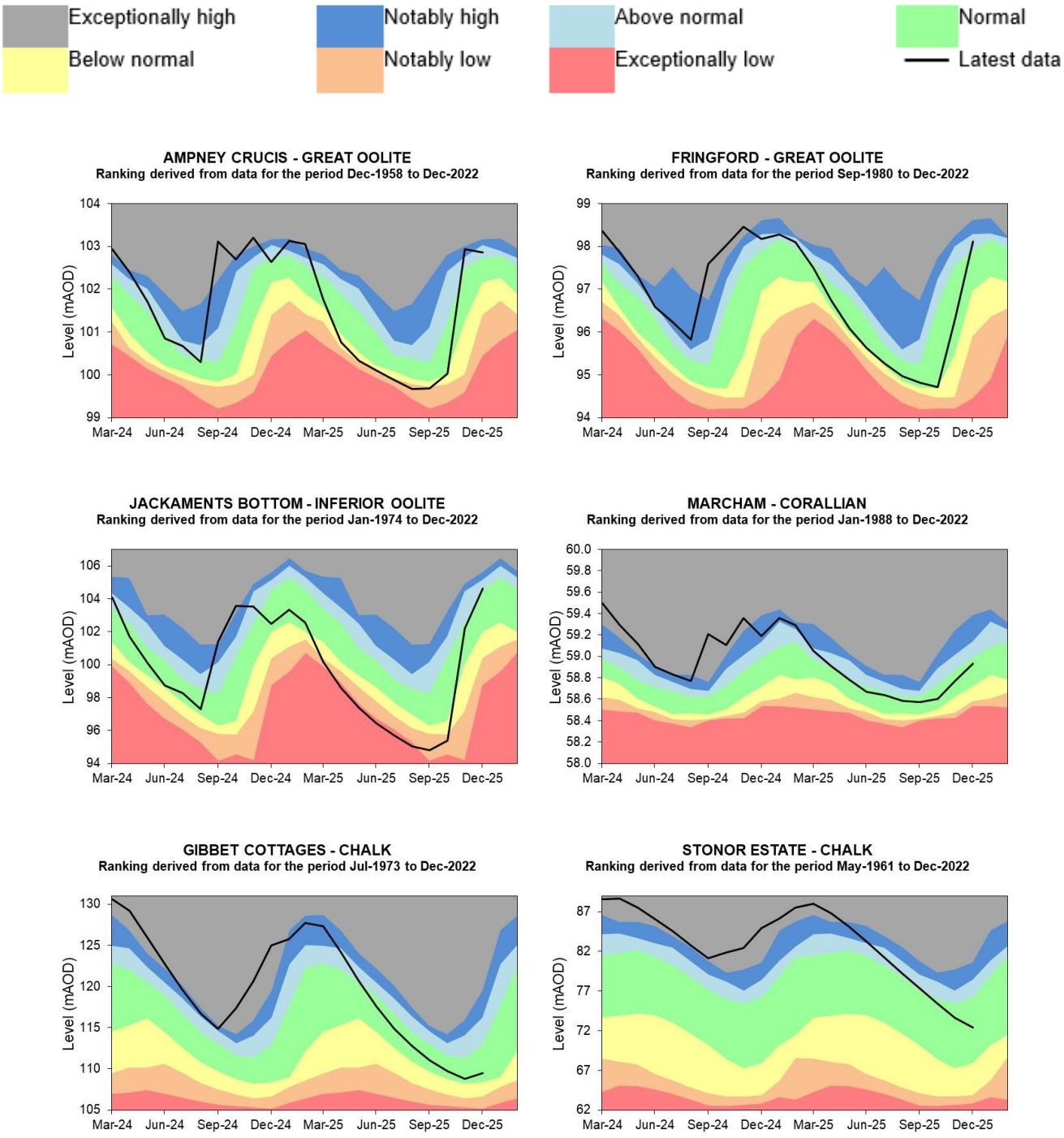


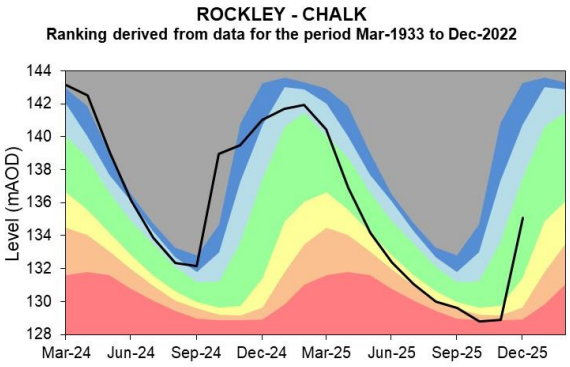
Source: Environment Agency.

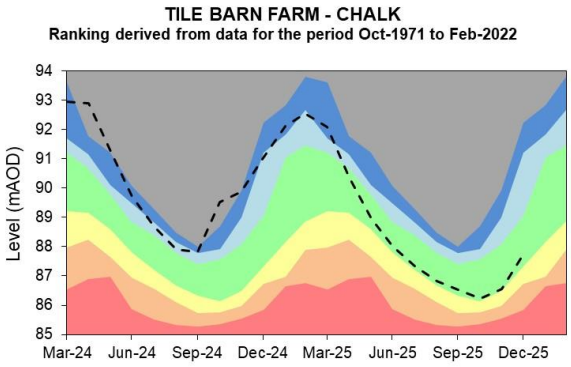
6 Groundwater levels

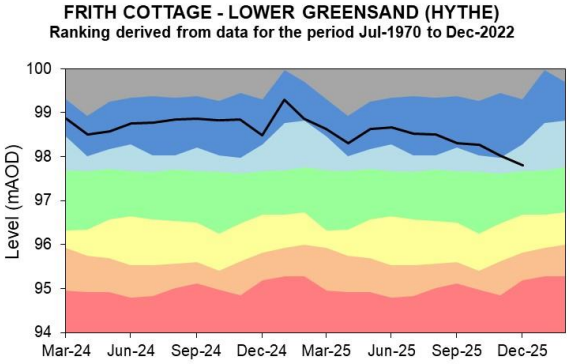
6.1 Groundwater level charts

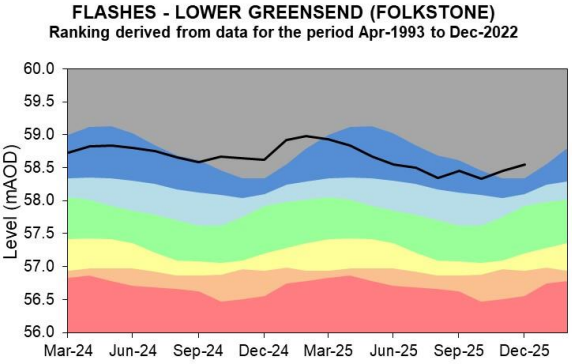
Figure 6.1: End of month groundwater levels for indicator sites, compared to an analysis of historic end of month levels, and long term maximum and minimum levels.

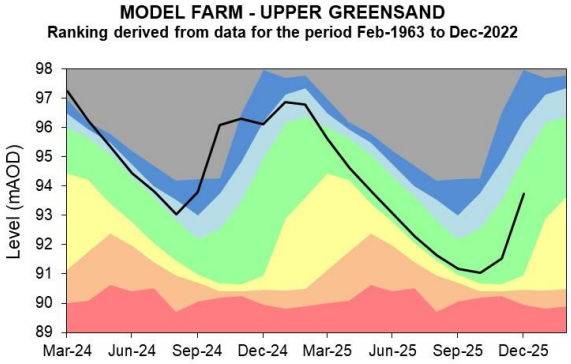










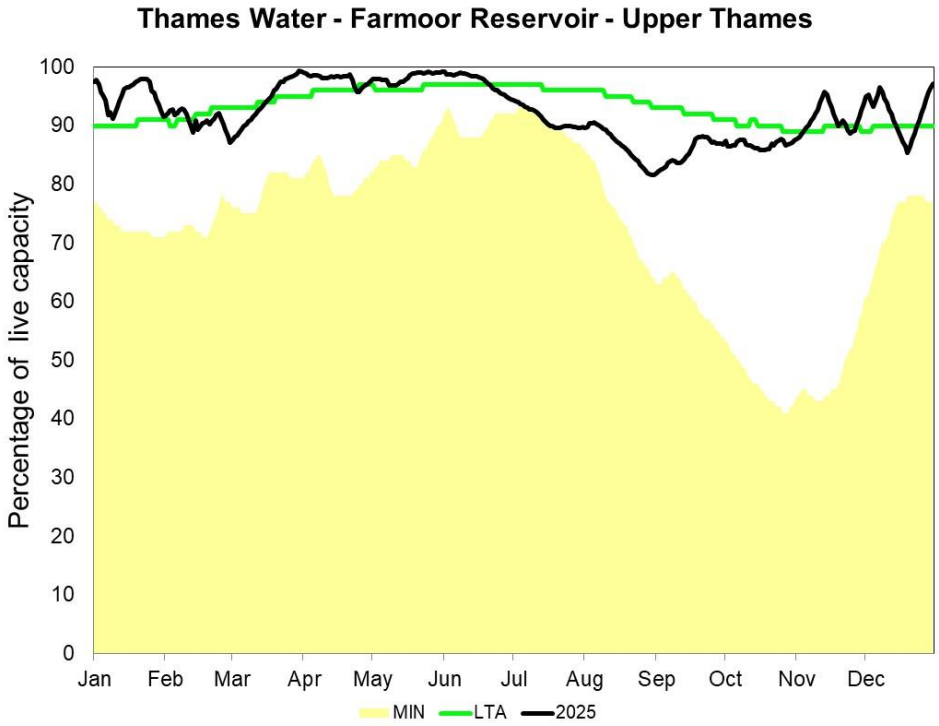


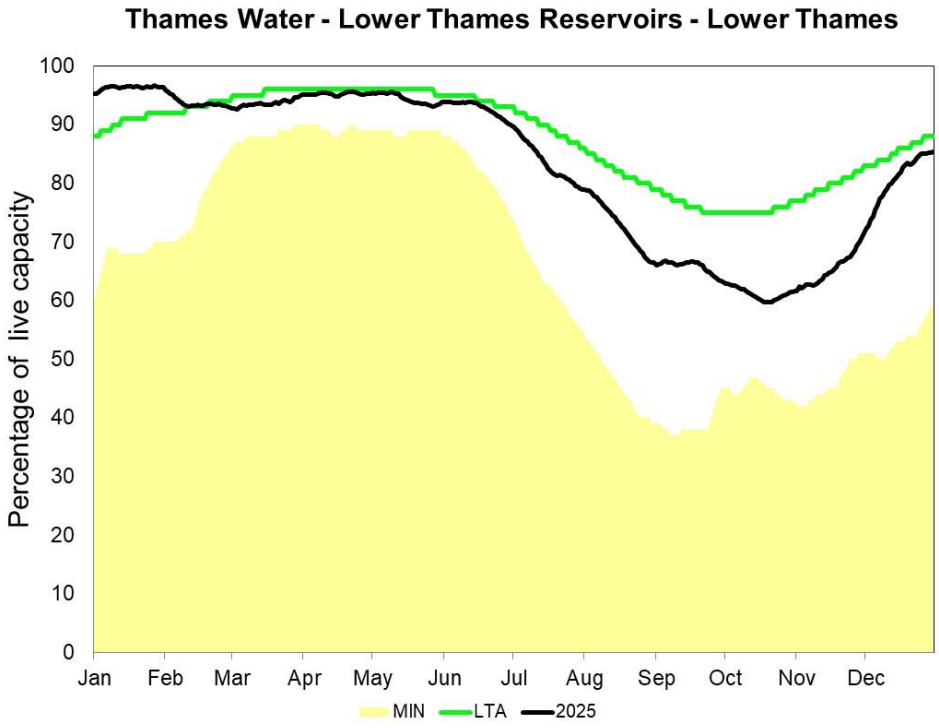
*Tile Barn Farm data has been estimated from two local sites since April 2022. A replacement is planned

Source: Environment Agency, 2026.

7 Reservoir stocks

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

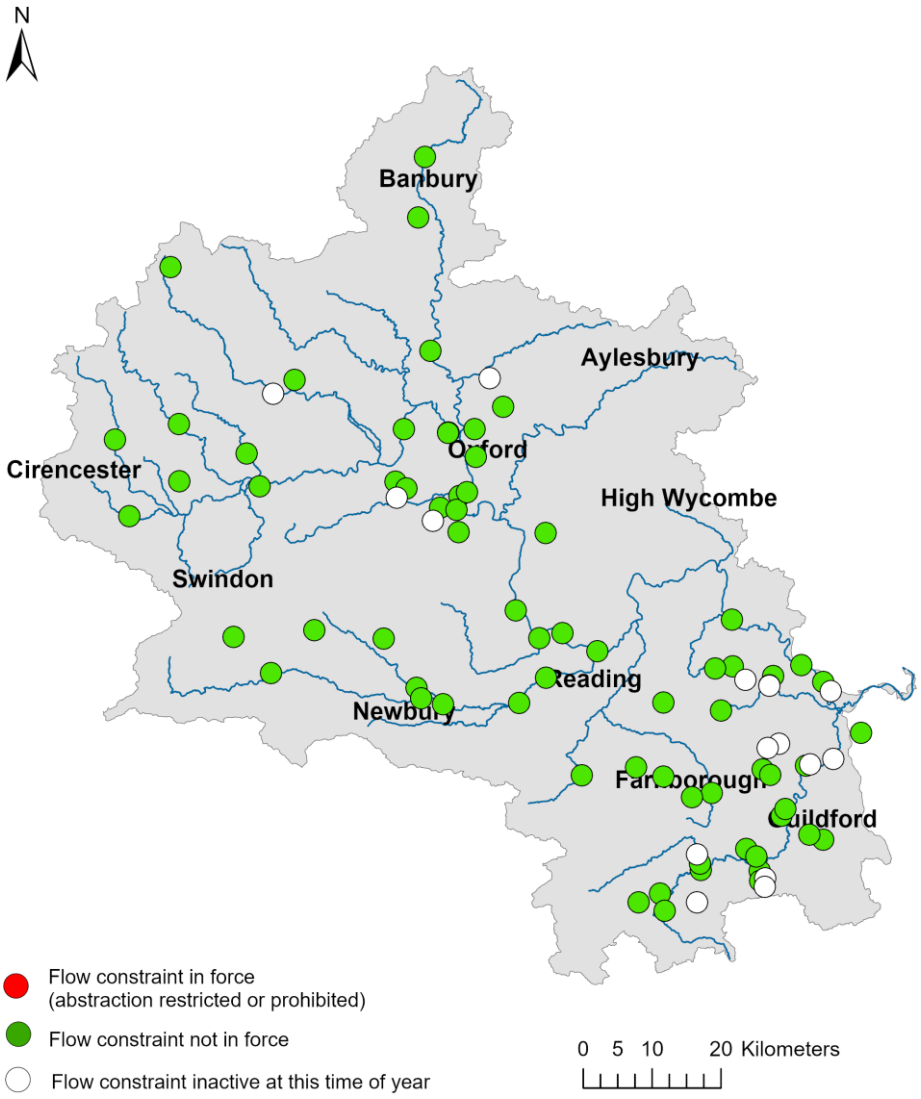




(Source: water companies).

8 Flow Constraints

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



8.2 Summary of flow constraints

Week ending	07/12/25	14/12/25	21/12/25	28/12/25
	1	2	0	0

9 Summary of rainfall, effective rainfall and soil moisture deficit

9.1 Rainfall and effective rainfall

Area	Rainfall (mm) 31 day Total	Rainfall (mm) December LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) 31 day total	Effective Rainfall (mm) December LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	128	92	140	119	73	162
Cotswolds - East	104	77	135	83	55	152
Berkshire Downs	105	82	127	64	57	113
Chilterns - West	81	74	110	11	45	25
North Downs - Hampshire	109	100	110	78	80	97
Wey - Greensand	106	95	111	74	76	98
Upper Thames	94	76	125	45	46	99
Cherwell	92	68	136	56	43	132
Thame	77	63	123	26	34	75
Loddon	74	73	102	0	45	0
Lower Wey	67	70	96	0	43	0
Ock	78	63	124	0	31	0
Enborne	88	81	108	48	59	80
Cut	62	64	97	0	31	0
Thames Area	**90**	**77**	**118**	**43**	**51**	**84**

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 31	SMD (mm) LTA
Cotswolds - West	4	3
Cotswolds - East	4	7
Berkshire Downs	4	11
Chilterns - West	10	16
North Downs - Hampshire	4	4
Wey - Greensand	4	5
Upper Thames	4	16
Cherwell	4	11
Thame	4	18
Loddon	14	10
Lower Wey	13	10
Ock	6	24
Enborne	4	5
Cut	52	23
Thames Area	**9**	**12**

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 31/12/2025						
Area	Rainfall (mm) Total	Rainfall (mm) LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) Total	Effective Rainfall (mm) LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	363	270	134	180	160	113
Cotswolds - East	313	235	133	112	120	93
Berkshire Downs	300	257	117	91	112	81
Chilterns - West	237	238	99	32	92	34
North Downs - Hampshire	306	306	100	105	162	65
Wey - Greensand	306	295	104	102	153	66
Upper Thames	278	225	124	45	79	57
Cherwell	280	214	131	56	84	67
Thame	238	204	117	26	63	41
Loddon	218	233	94	0	77	0
Lower Wey	211	223	95	0	77	0
Ock	234	203	115	0	54	0
Enborne	251	255	98	48	106	45
Cut	189	208	91	0	52	0
Thames Area	**266**	**240**	**111**	**57**	**99**	**57**

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	Dec 2025 rainfall % of long term average 1991 to 2020	Dec 2025 band	Oct 2025 to December cumulative band	Jul 2025 to December cumulative band	Jan 2025 to December cumulative band
Berkshire Downs	127	Above Normal	Above normal	Normal	Normal
Chilterns West	110	Normal	Normal	Normal	Below normal
Cotswold East	135	Above Normal	Notably high	Above normal	Normal
Cotswold West	140	Above Normal	Notably high	Above normal	Normal
Cut	98	Normal	Normal	Normal	Below normal
Enborne	110	Normal	Normal	Normal	Normal
Loddon	103	Normal	Normal	Normal	Below normal
Lower Wey	96	Normal	Normal	Normal	Below normal
North Downs - Hampshire	110	Normal	Normal	Normal	Normal
Ock	123	Above Normal	Above normal	Normal	Below normal
Thame	123	Normal	Above normal	Normal	Normal
Upper Cherwell	136	Above Normal	Notably high	Normal	Below normal
Upper Thames	125	Above Normal	Above normal	Normal	Normal
Wey - Greensand	111	Normal	Normal	Normal	Normal

11.2 River flows table

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

11.3 Groundwater table

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