Monthly water situation report: Thames Area

1 Summary - October 2025

Thames area received 74mm of rainfall in October, which was 92% of the long term average (LTA). Soil moisture deficits (SMD) decreased across Thames area; from 160mm in September to 123mm by the end of October. Monthly mean river flows were normal or below normal for the time of year. Groundwater levels continued to decline at all but 3 of our indicator sites during October. Groundwater levels ranged from exceptionally low at Rockley (Chalk) to notably high at Frith Cottage and the Flashes (Lower Greensand). Farmoor reservoir and the Lower Thames reservoirs remained below the LTA for the time of the year.

1.1 Rainfall

Thames area received 74mm of rainfall in October, which was 92% of the LTA. All our areal units received normal rainfall for the time of the year. Rainfall in October largely occurred across 4 days, the 3rd of October, and then the in 4 days leading up to Storm Benjamin, the 19th, 20th, and 22nd.

1.2 Soil moisture deficit and recharge

SMD decreased across Thames area; from 160mm in September to 123mm by the end of October. This was still far above the LTA of 70mm for the time of year, indicating that soils are considerably drier than expected. As we have entered the winter period, soils must become fully wetted before recharge to groundwater resources can happen.

1.3 River flows

Monthly mean flows increased at the 9 of the key indicator sites compared to last month, in response to the wetter conditions. Monthly mean river flows at the majority of our key indicators were normal or below normal for the time of year. The River Coln at Bibury was the only indicator site to record exceptionally low flows due to groundwater levels in the oolites.

1.4 Groundwater levels

Groundwater levels continued to decline at all but 3 of our indicator sites during October. Levels ranged from exceptionally low at Rockley (Chalk) to notably high at Frith Cottage and the Flashes (Lower Greensand).

Most sites remained within the same banding as the previous month. However, Rockley (Chalk) dropped from below normal to exceptionally low and Stonor Estate (Chalk) dropped from above normal to normal. Ampney Crucis (Great Oolite) improved from notably low to normal.

Overall, groundwater levels in the Oolites are normal to notably low, the Chalk is normal to exceptionally low, whereas levels in the slower-responding Lower Greensand remain notably high for this time of year.

1.5 Reservoir stocks

Stocks in Farmoor reservoir increased from 87% to 87.1% during October. Reservoir stocks decreased in the Lower Thames reservoirs and ended the month at 61.5% compared to 63.6% at the end of September. Both the Farmoor reservoir and Lower Thames reservoirs remained below the LTA for the time of the year.

1.6 Environmental impact

At the end of the month, 27 abstraction licences were being constrained in the area to protect water resources and the environment. There was also 1 flood alert issued.

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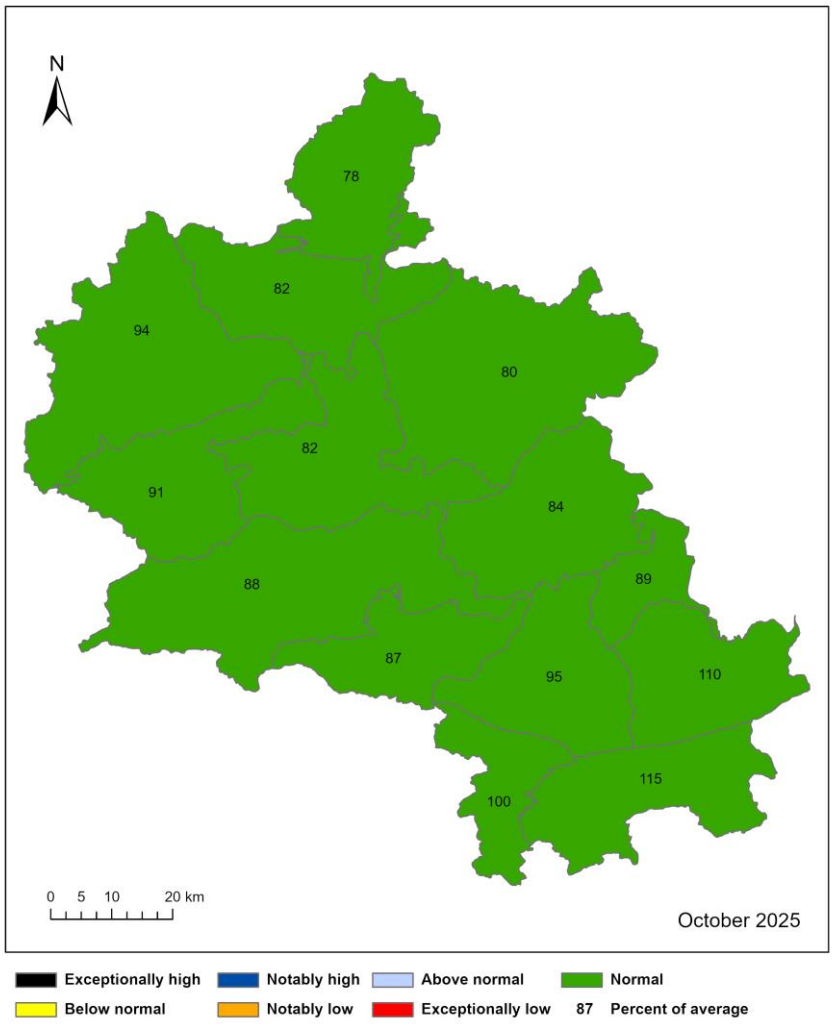
Contact Details: 030708 506 506

2 Rainfall

2.1 Rainfall map

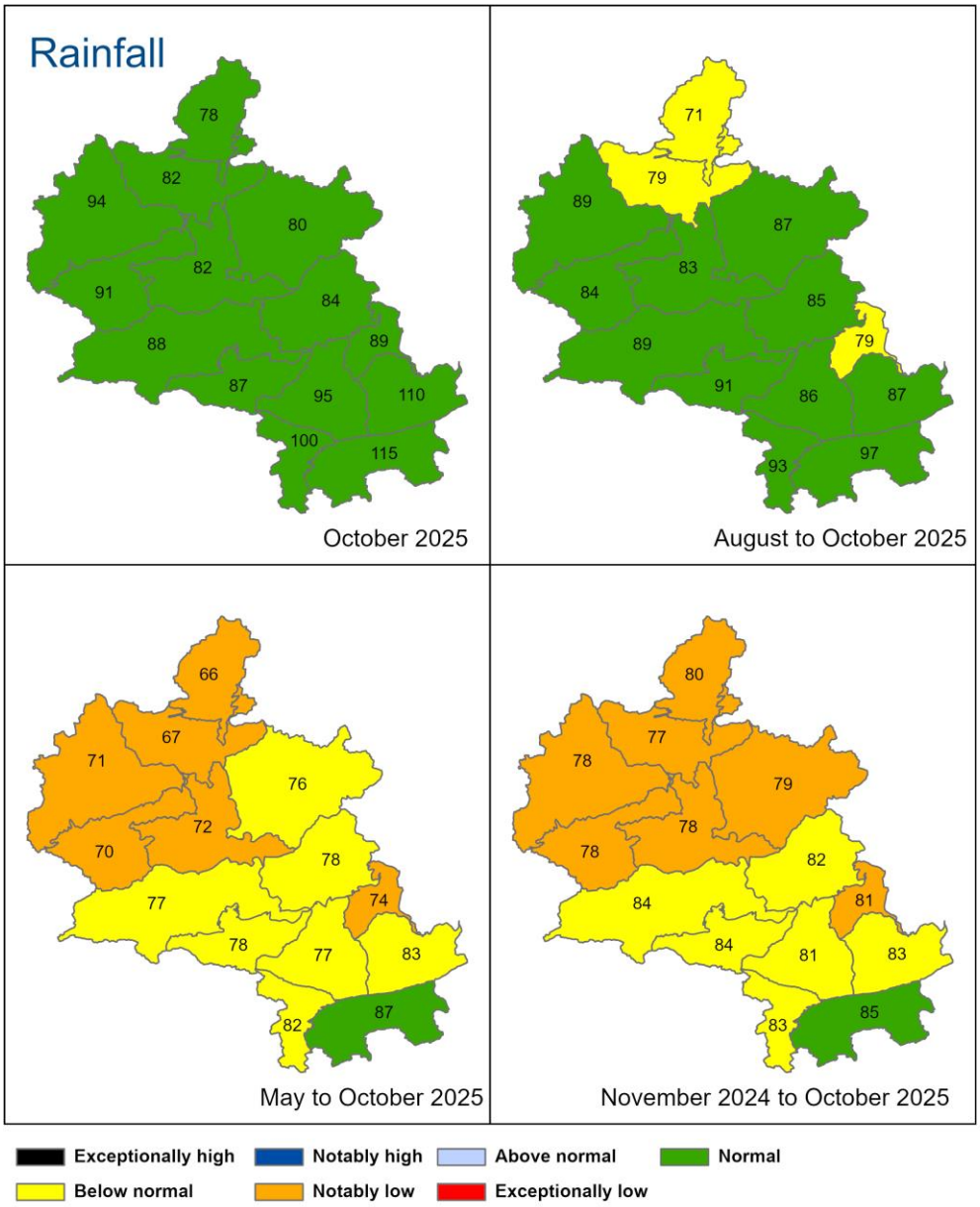
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 31 October 2025), classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



Rainfall data for 2025, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2025). Rainfall data prior to 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)

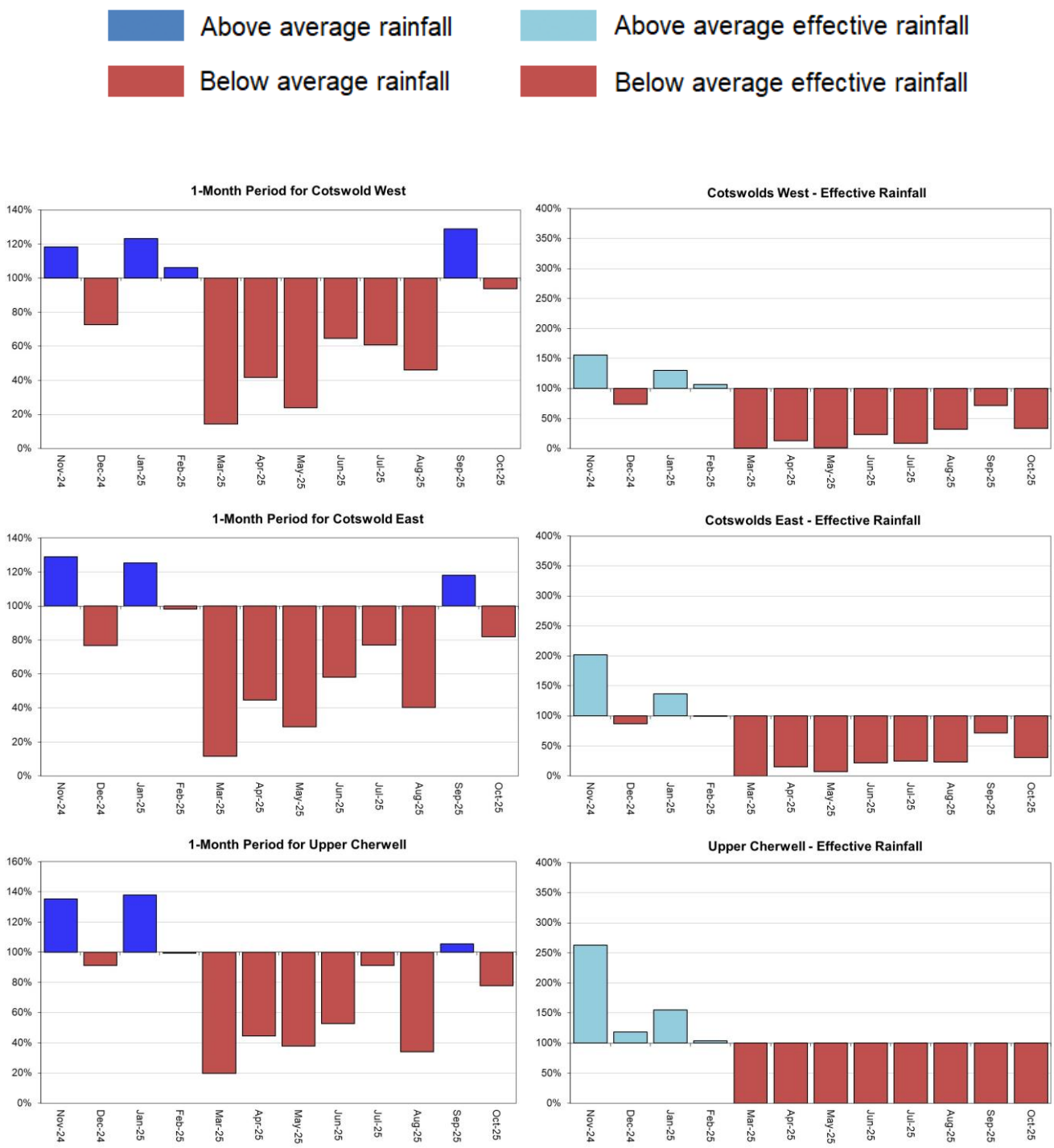
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 31 October 2025), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.

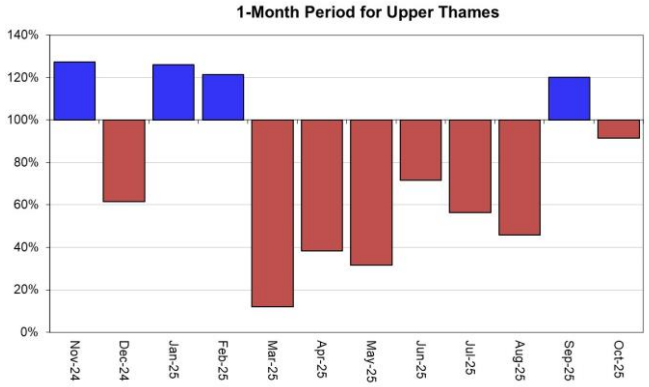


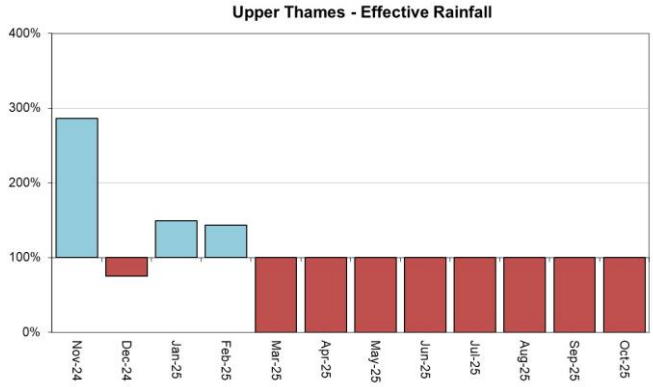
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2025). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

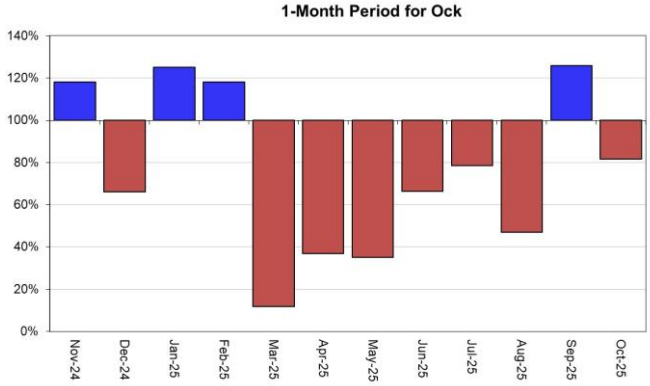
2.3 Rainfall charts

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
140%
120%
100%
80%
60%
40%
20%
0%
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25


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


1-Month Period for Ock
140%
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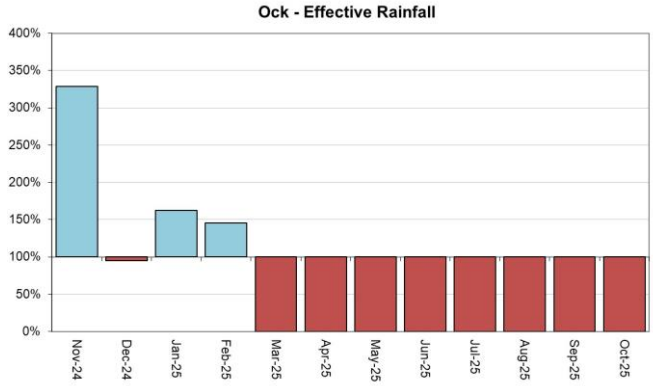
Ock - Effective Rainfall
400%
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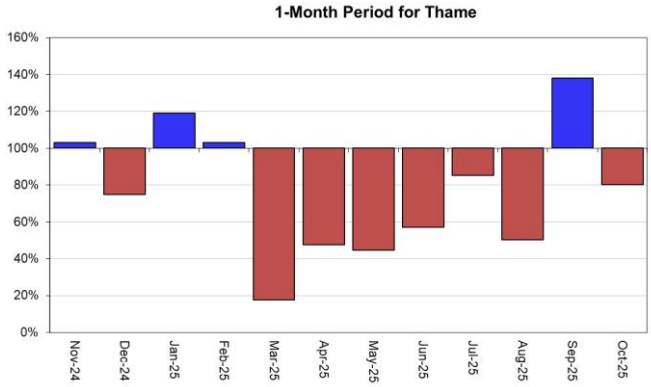
1-Month Period for Thame
160%
140%
120%
100%
80%
60%
40%
20%
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Nov-24
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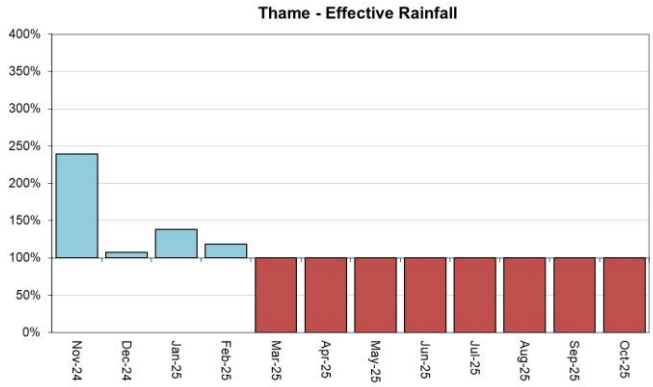
Thame - Effective Rainfall
400%
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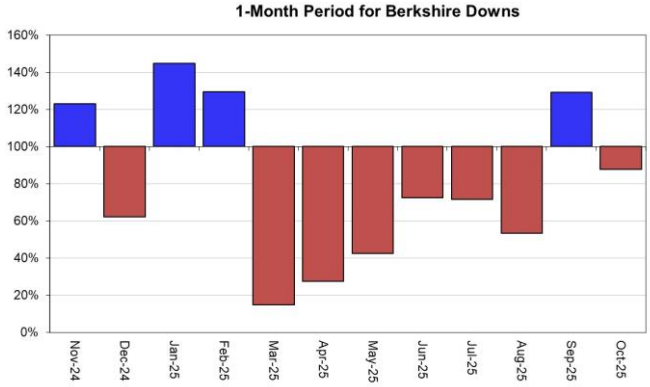
1-Month Period for Berkshire Downs
160%
140%
120%
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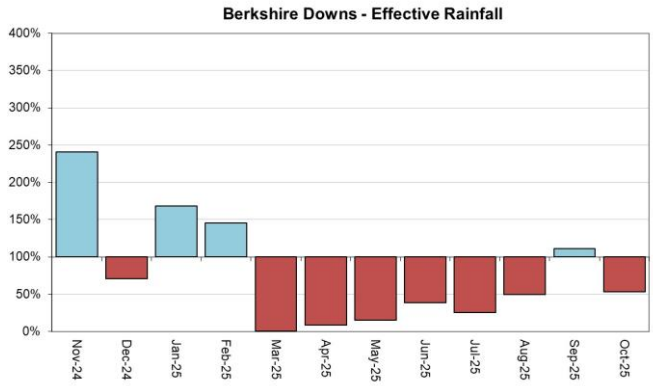
Berkshire Downs - Effective Rainfall
400%
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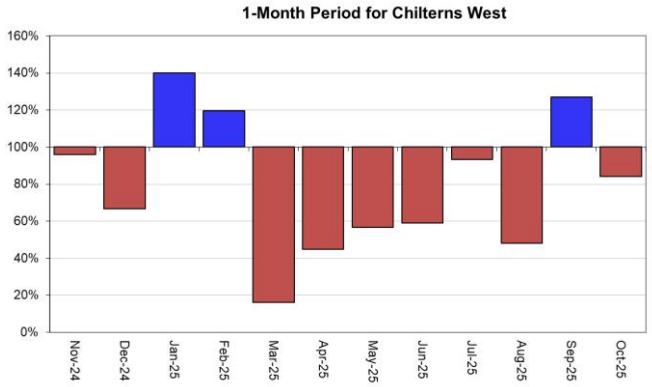
1-Month Period for Chilterns West
160%
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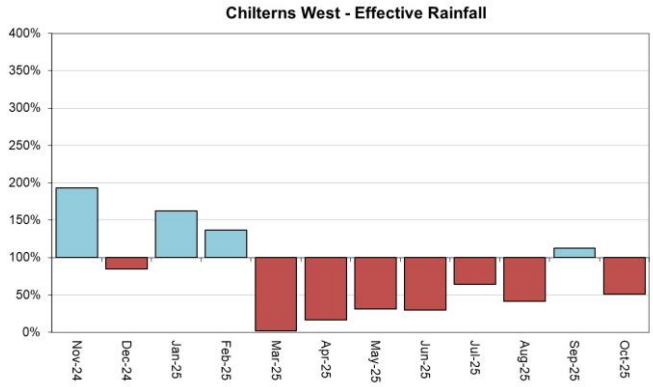
Chilterns West - Effective Rainfall
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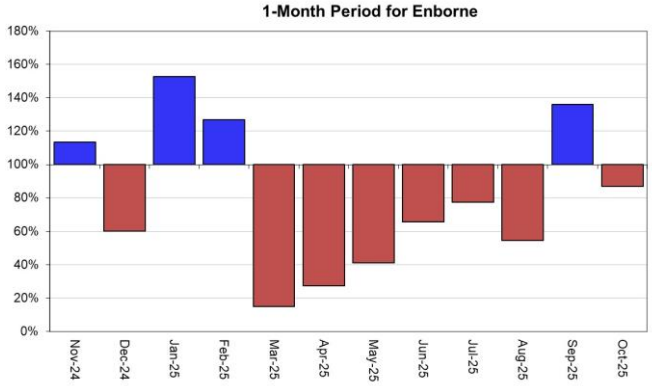
1-Month Period for Enborne
180%
160%
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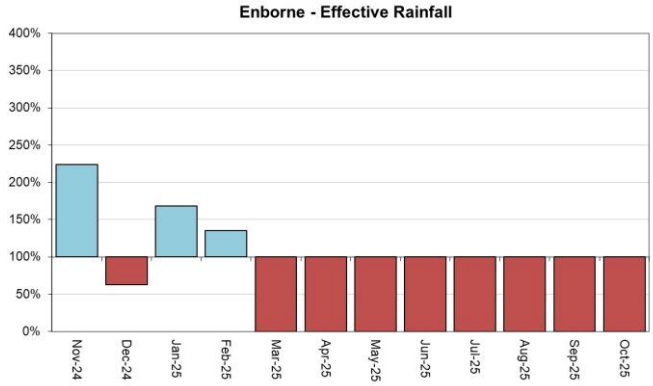
Enborne - Effective Rainfall
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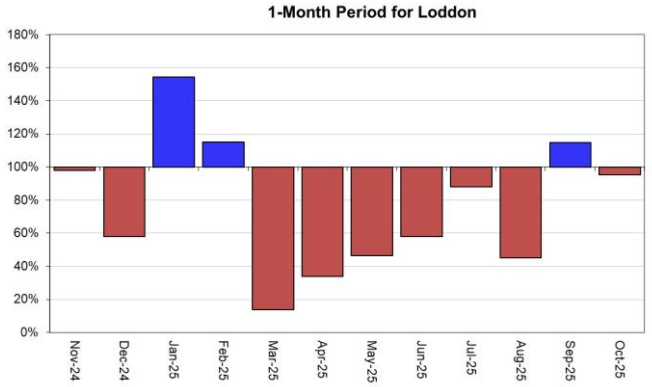
1-Month Period for Loddon
180%
160%
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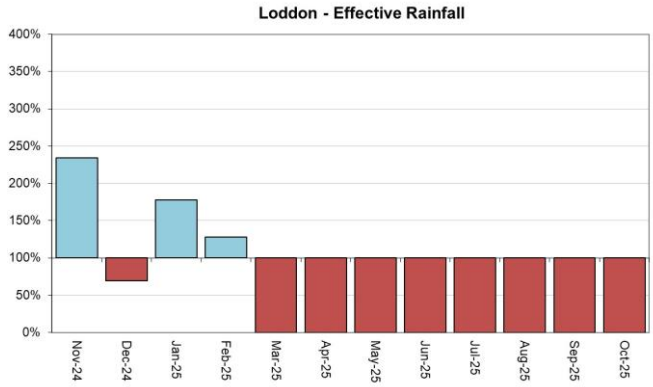
Loddon - Effective Rainfall
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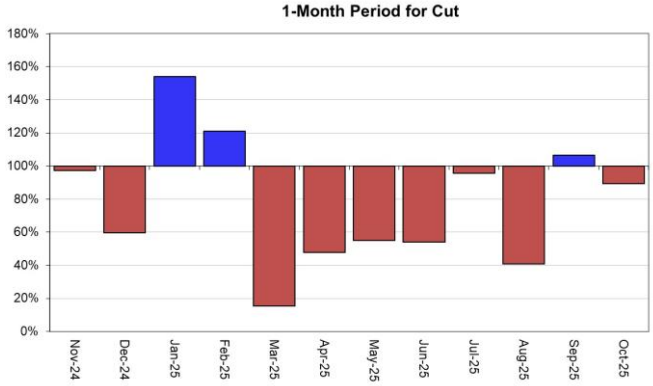
1-Month Period for Cut
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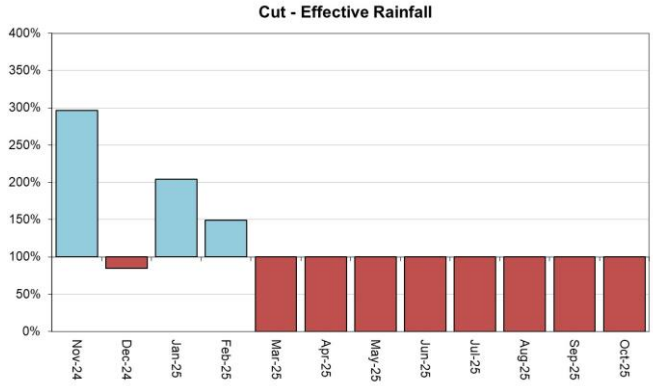
Cut - Effective Rainfall
400%
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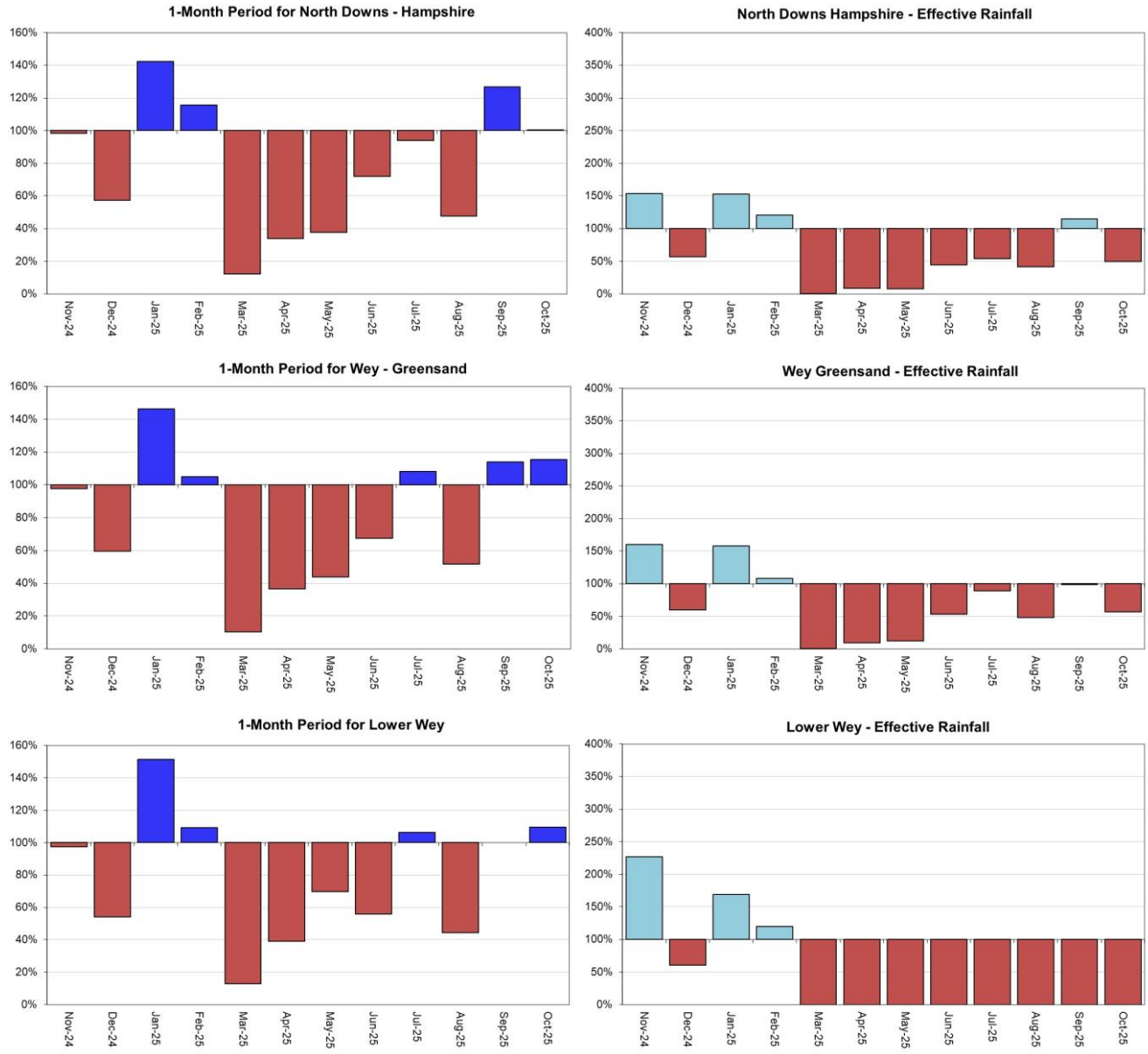


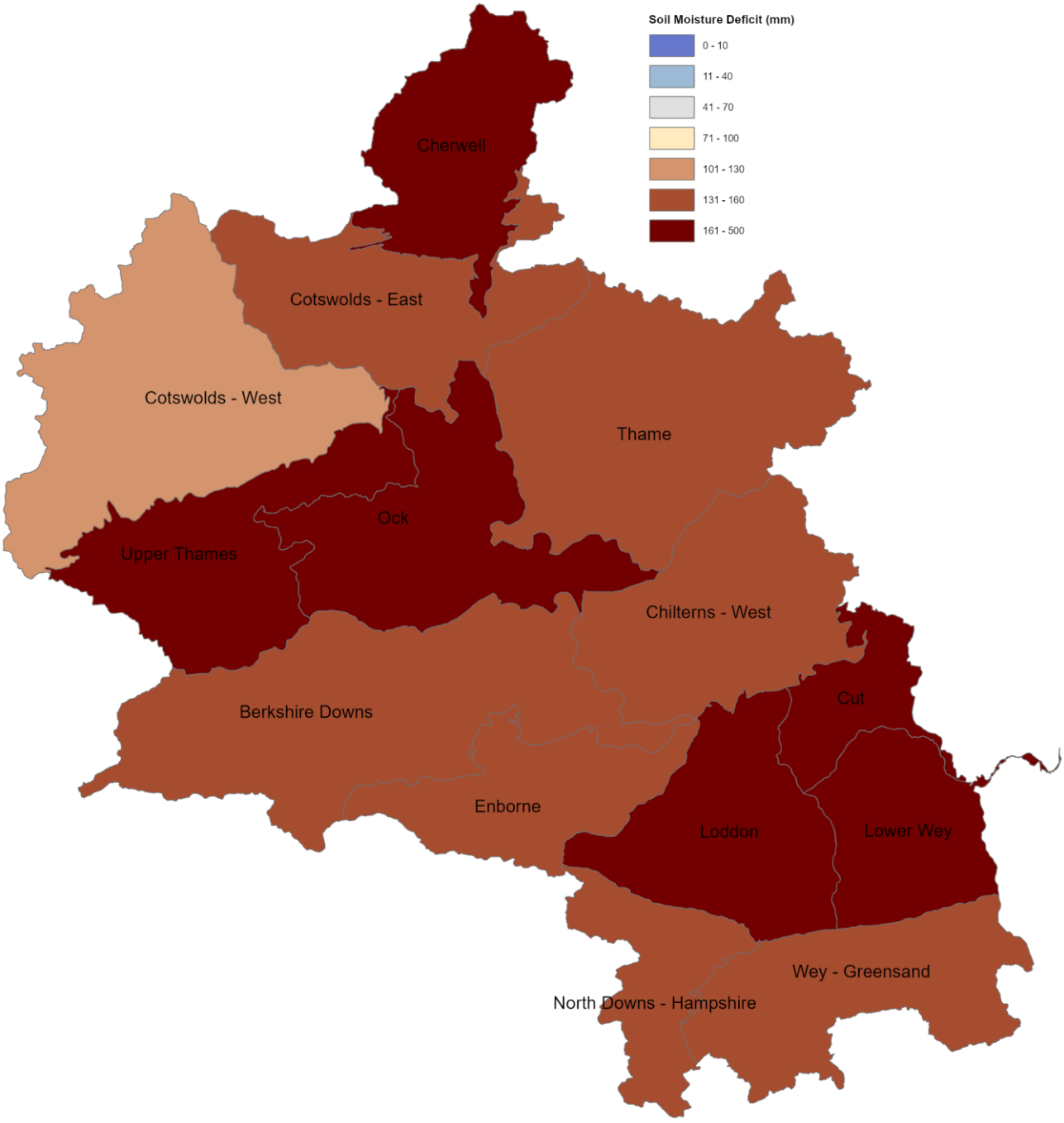
HadUK rainfall data. (Source: Met Office. Crown copyright, 2025).

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

3 Soil moisture deficit

3.1 Soil moisture deficit map

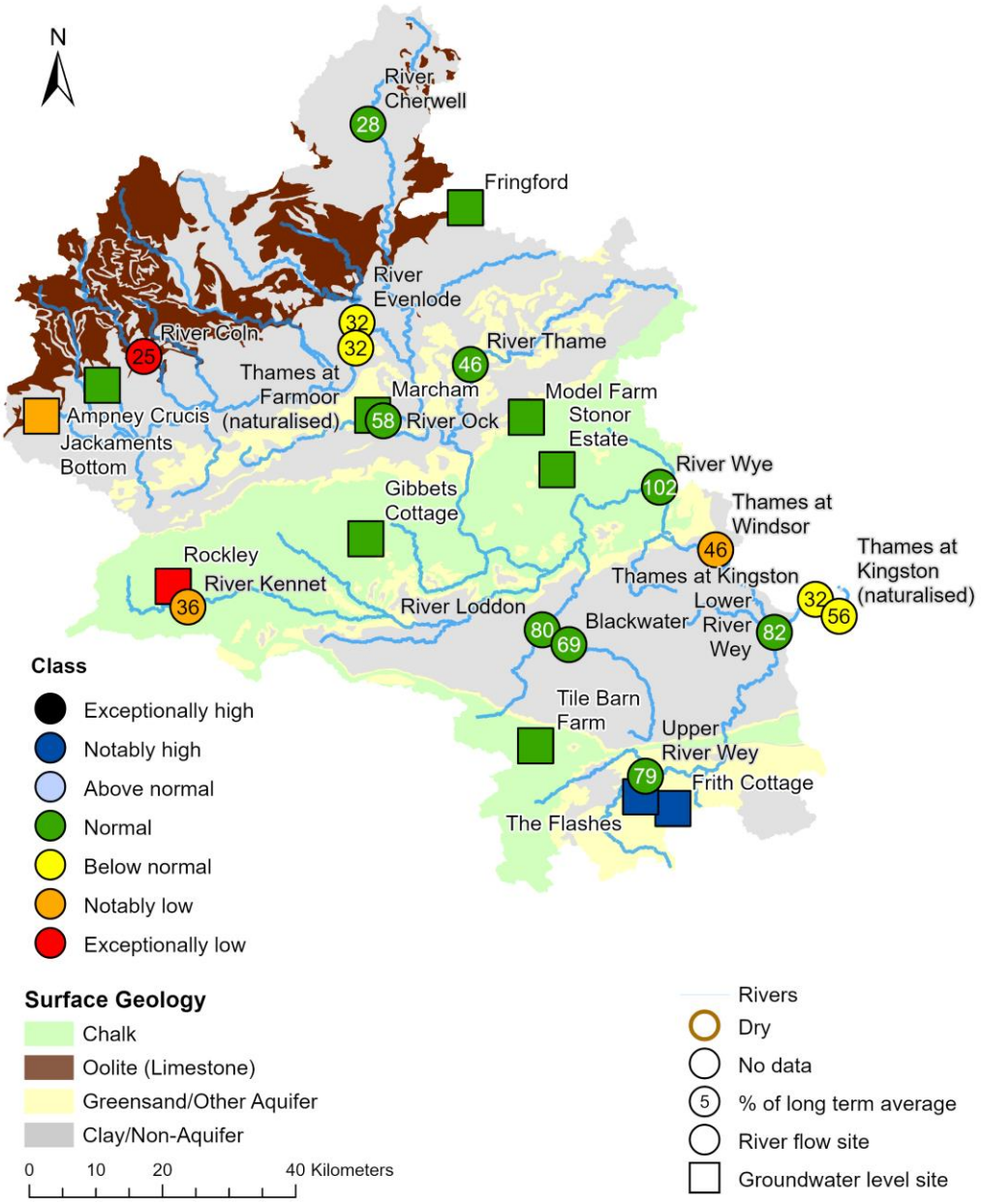
Figure 3.1: Soil moisture deficits for the week ending 31 October 2025. Shows the areal SMD estimate in millimetres.



4 River Flow and Groundwater Status

4.1 River flow and groundwater level map

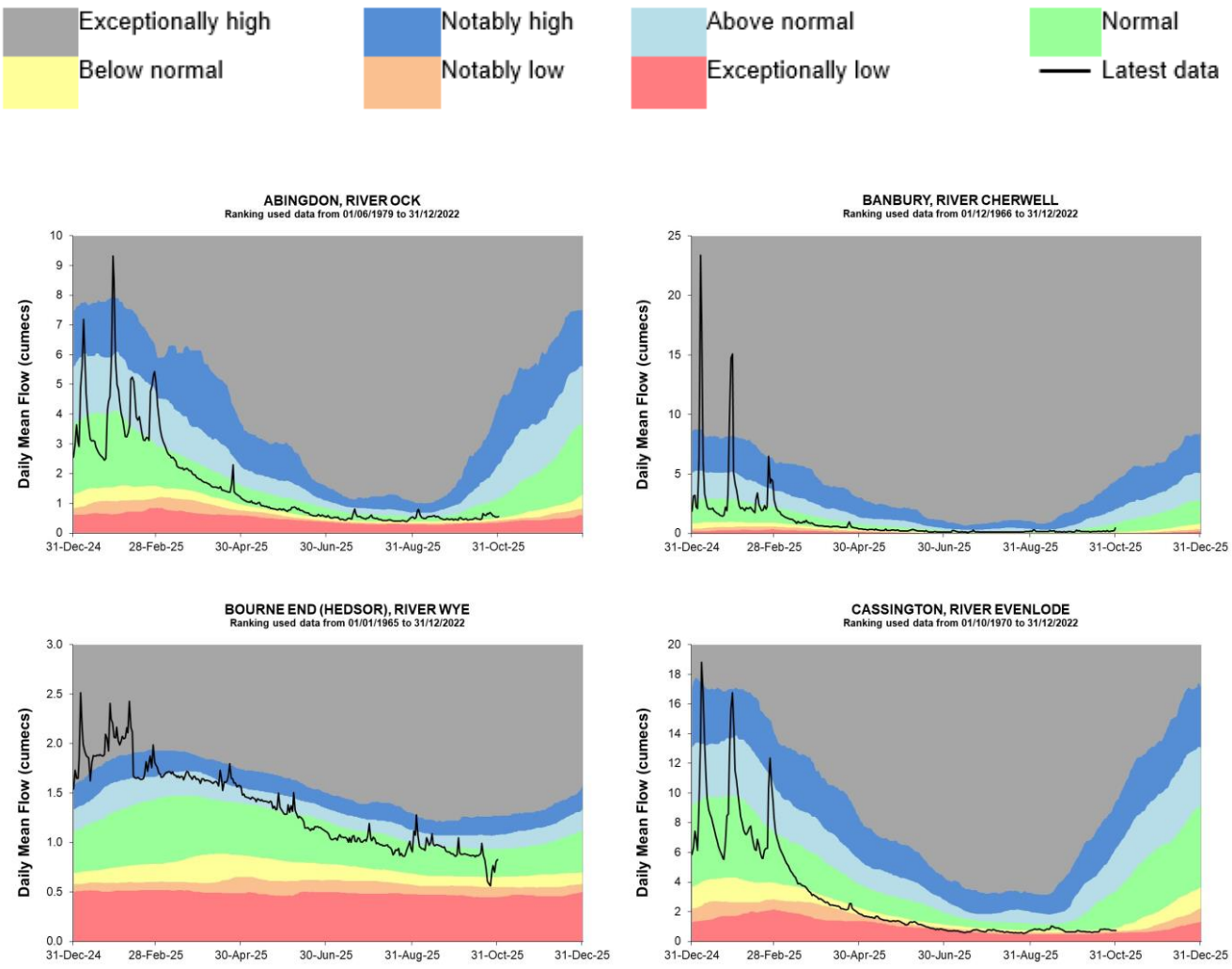
Figure 4.1: Monthly mean river flow for indicator sites and end of month groundwater levels for indicator sites for October 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic October means.



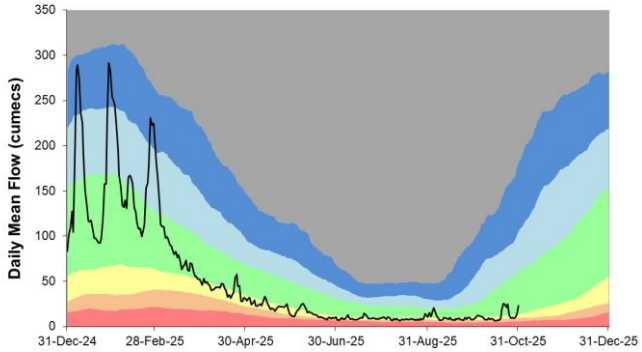
5 River flows

5.1 River flow charts

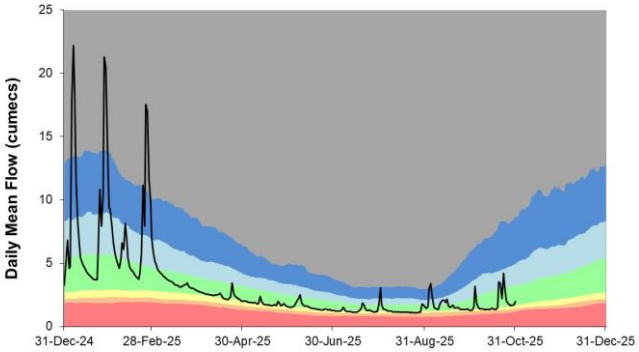
Figure 5.1: Daily mean river flows for indicator sites compared to an analysis of historic daily mean flows, and long term maximum and minimum flows



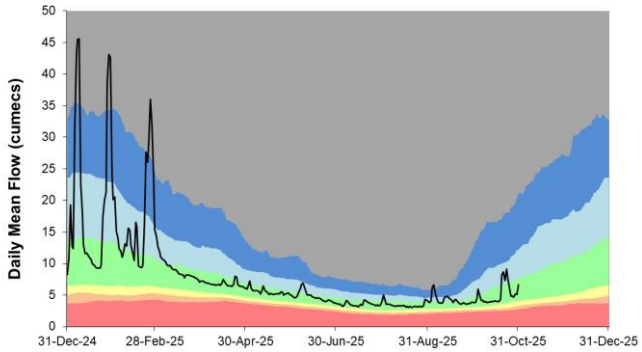
KINGSTON, RIVER THAMES
Ranking used data from 01/01/1951 to 31/12/2022



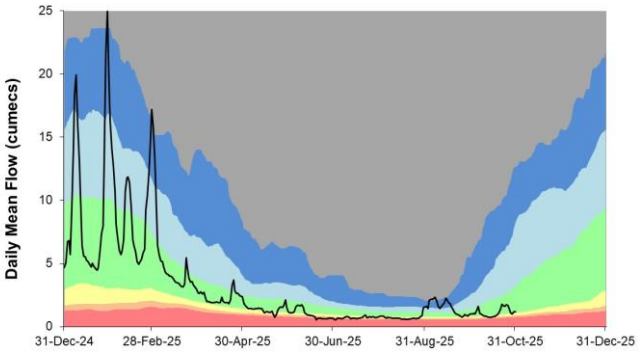
SWALLOWFIELD, RIVER BLACKWATER
Ranking used data from 01/10/1952 to 31/12/2022



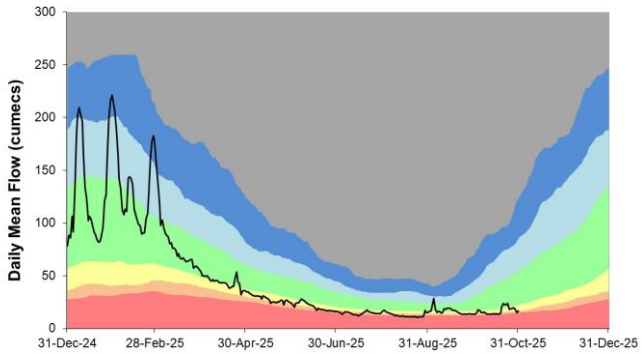
WEYBRIDGE, RIVER WEY
Ranking used data from 01/04/1979 to 31/12/2022



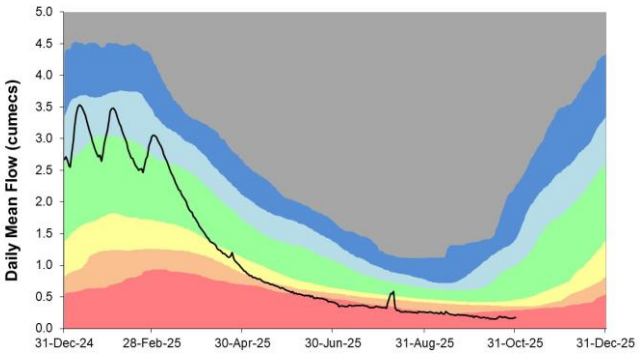
WHEATLEY, RIVER THAME
Ranking used data from 01/01/1990 to 31/12/2022



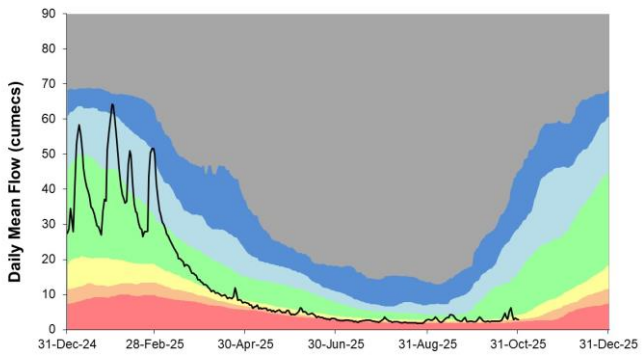
WINDSOR, RIVER THAMES
Ranking used data from 01/08/1979 to 31/12/2022



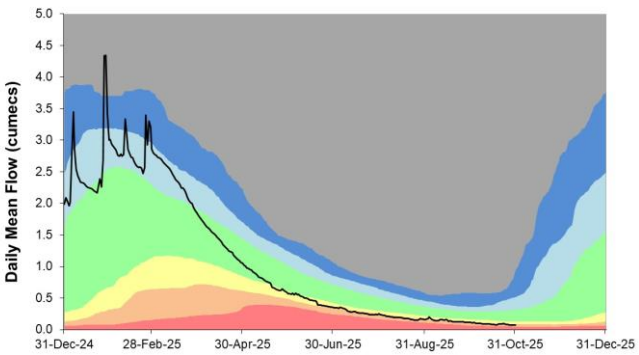
BIBURY, RIVER COLN
Ranking used data from 01/10/1963 to 31/12/2022

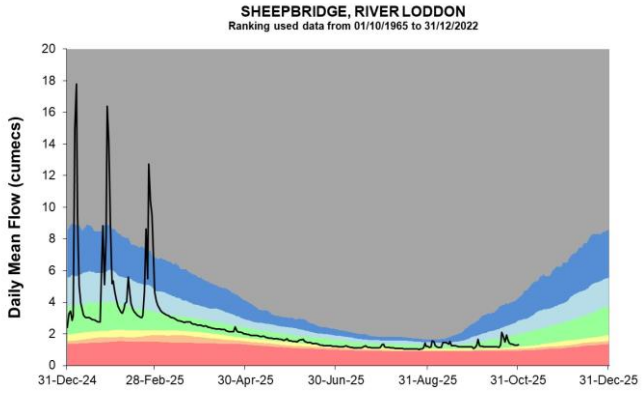


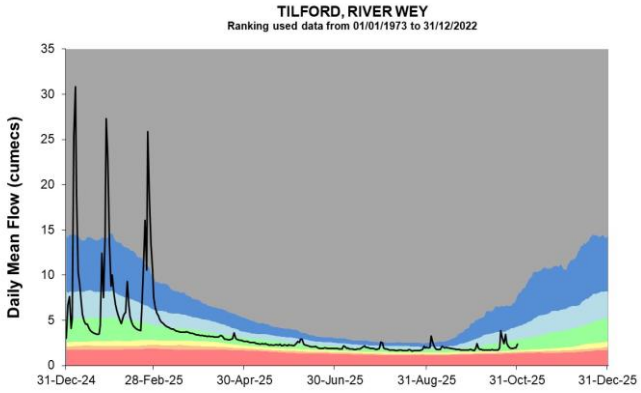
FARMOOR (NATURALISED), RIVER THAMES
Ranking used data from 01/10/1992 to 31/12/2022

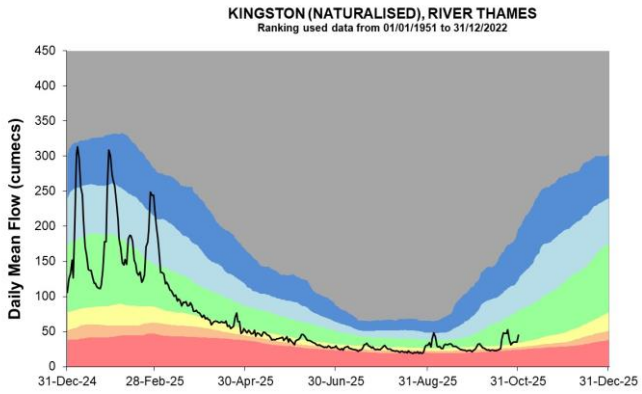


MARLBOROUGH, RIVER KENNET
Ranking used data from 01/02/1972 to 31/12/2022







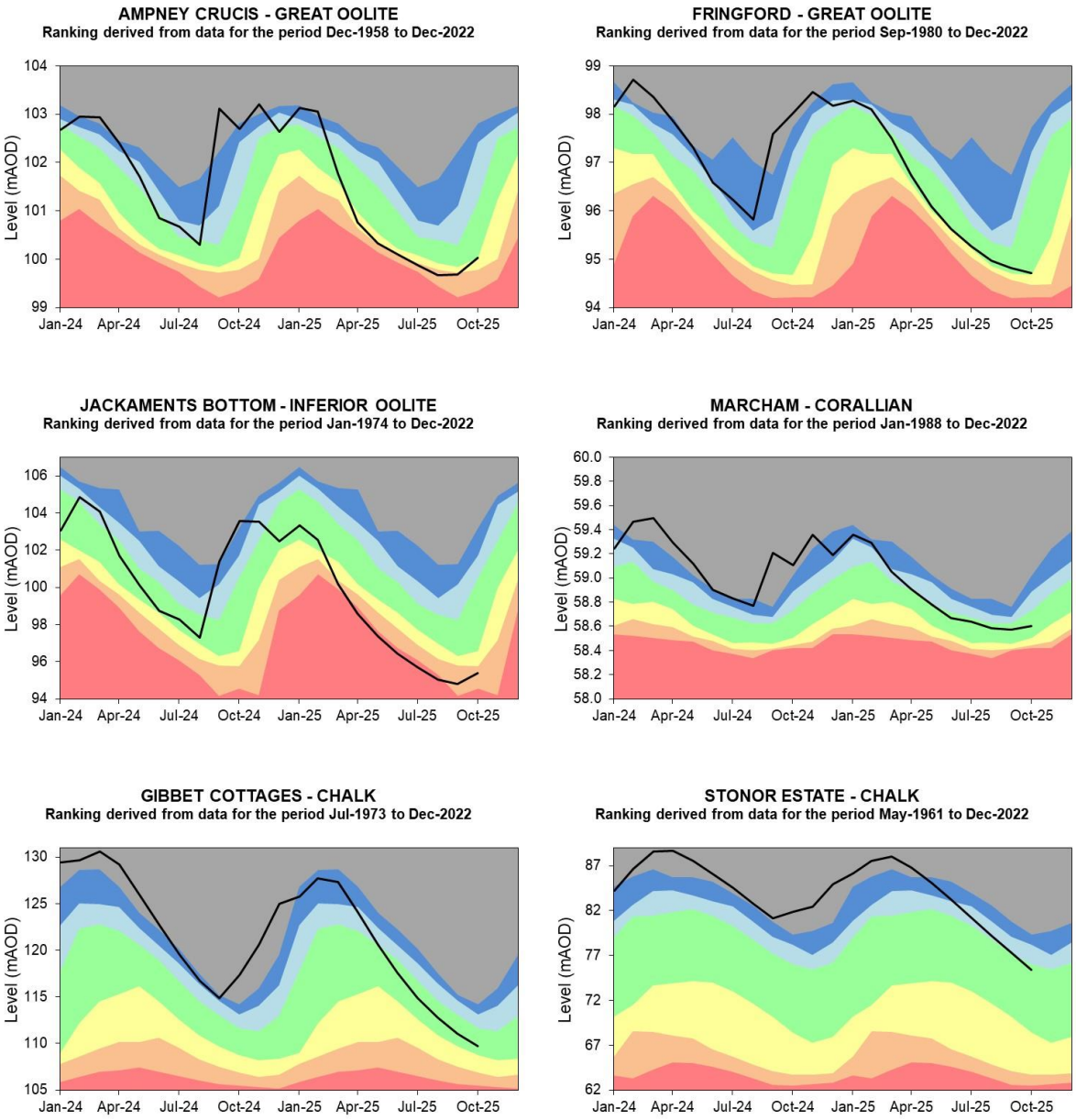


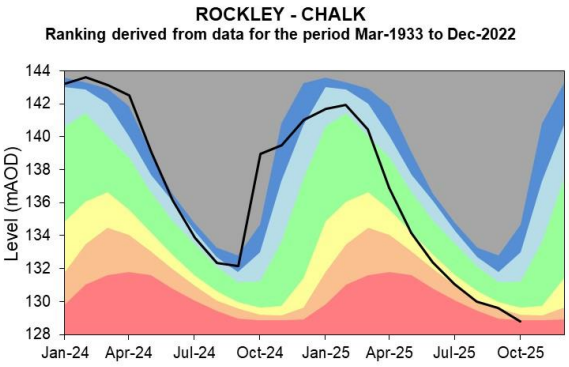
Source: Environment Agency.

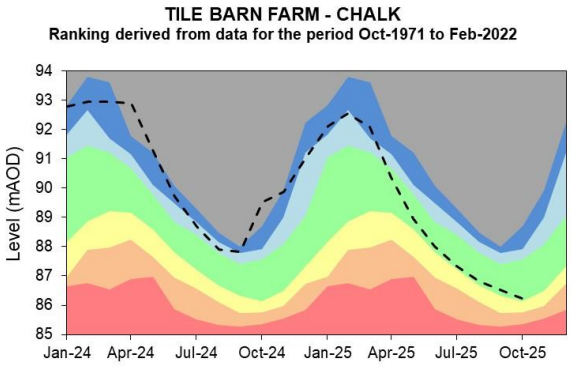
6 Groundwater levels

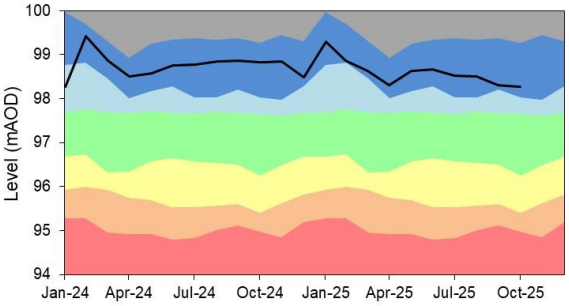
6.1 Groundwater level charts

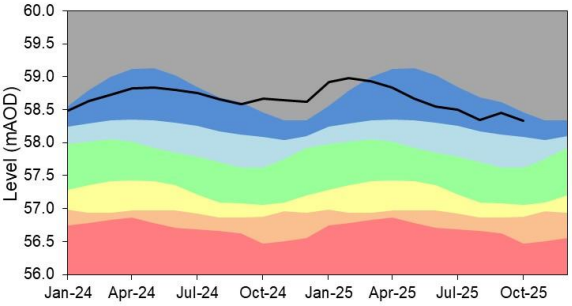
Figure 6.1: End of month groundwater levels for indicator sites, compared to an analysis of historic end of month levels, and long term maximum and minimum levels.

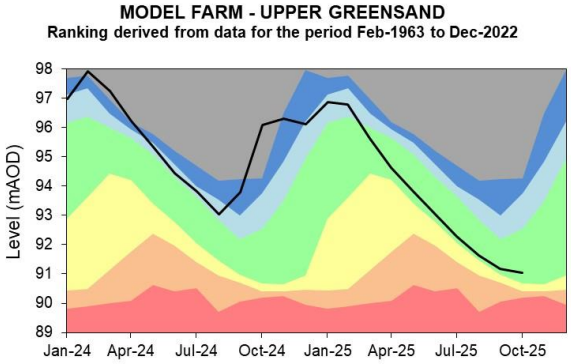










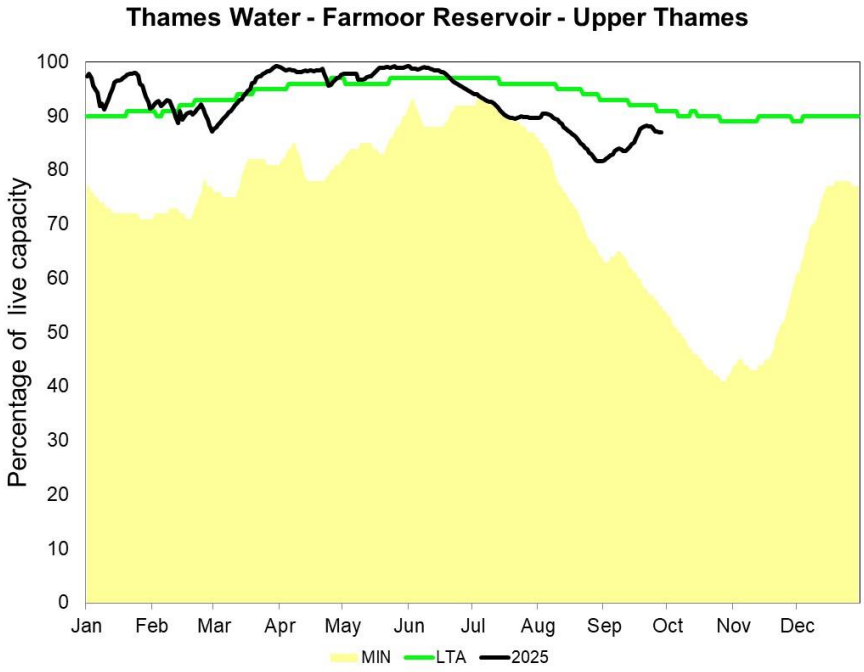


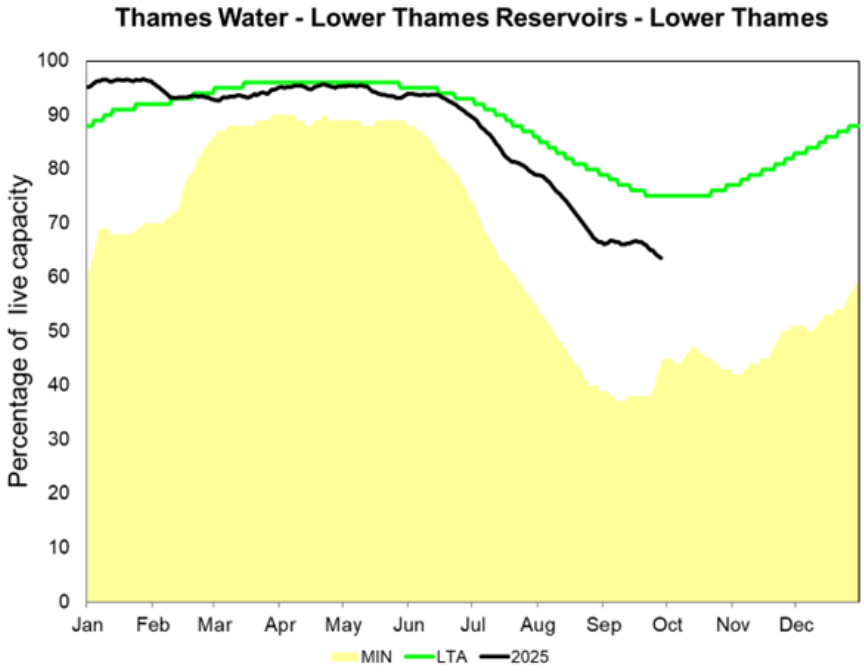
*Tile Barn Farm data has been estimated from two local sites since April 2022. A replacement is planned

Source: Environment Agency, 2025.

7 Reservoir stocks

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

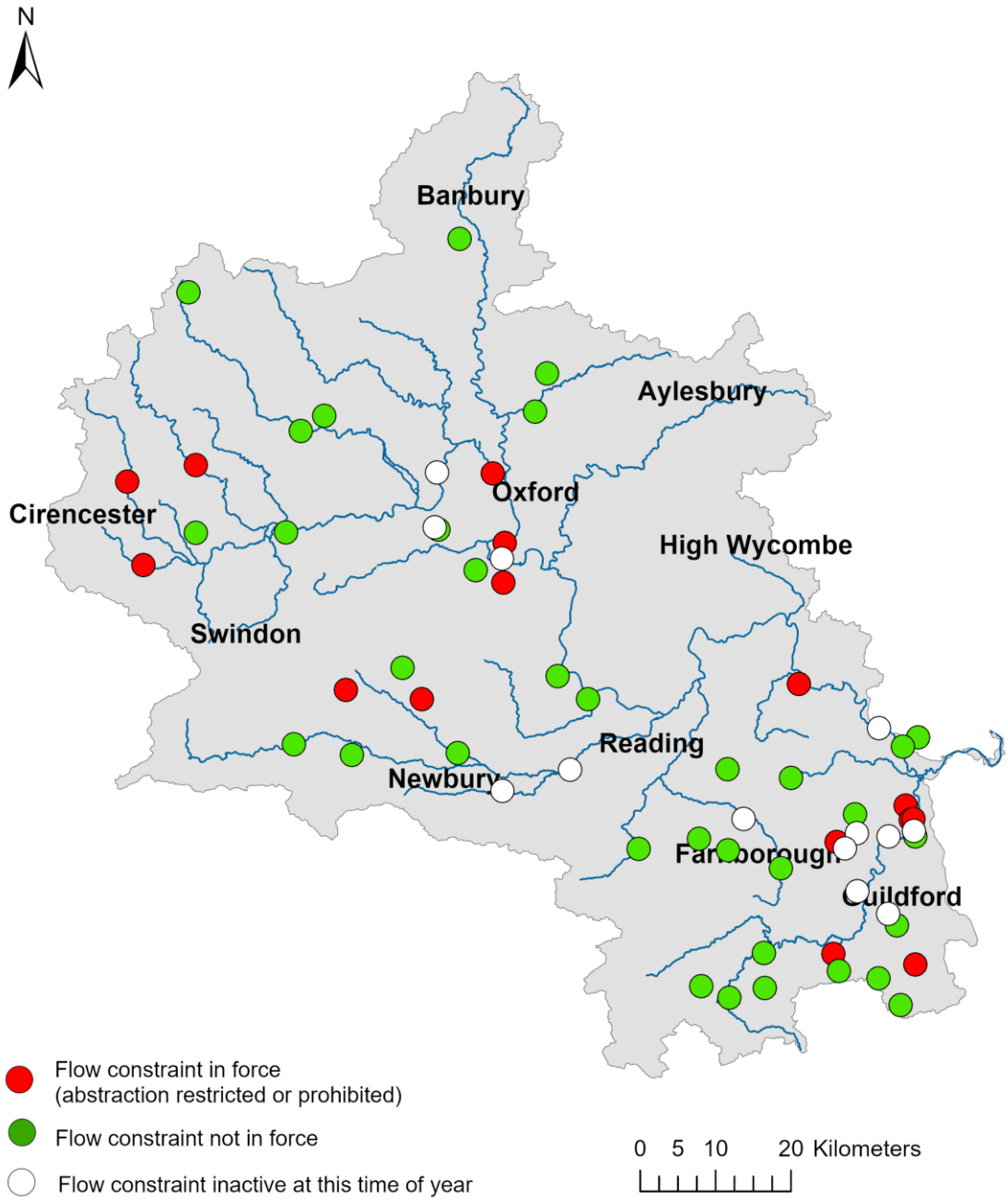




(Source: water companies).

8 Flow Constraints

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



8.2 Summary of flow constraints

Week ending	05/10/25	12/10/25	19/10/25	26/10/25
Constraint	33	36	35	27

9 Summary of rainfall, effective rainfall and soil moisture deficit

9.1 Rainfall and effective rainfall

Area	Rainfall (mm) 31 day Total	Rainfall (mm) October LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) 31 day total	Effective Rainfall (mm) October LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	82	88	94	10	31	33
Cotswolds - East	64	78	82	8	25	30
Berkshire Downs	75	85	88	9	17	53
Chilterns - West	68	80	84	8	16	51
North Downs - Hampshire	99	99	100	13	26	50
Wey - Greensand	111	97	115	15	26	57
Upper Thames	67	74	91	0	7	0
Cherwell	58	74	78	0	11	0
Thame	56	70	80	0	7	0
Loddon	75	79	95	0	7	0
Lower Wey	83	76	110	0	10	0
Ock	57	69	82	0	4	0
Enborne	73	84	86	0	11	0
Cut	63	71	89	0	5	0
Thames Area	**74**	**80**	**92**	**5**	**15**	**31**

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	89	41
Cotswolds - East	122	49
Berkshire Downs	123	75
Chilterns - West	131	80
North Downs - Hampshire	93	62
Wey - Greensand	87	64
Upper Thames	144	77
Cherwell	144	62
Thame	133	77
Loddon	131	78
Lower Wey	116	73
Ock	155	87
Enborne	110	69
Cut	151	91
Thames Area	**123**	**70**

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 31/10/2025						
Area	Rainfall (mm) Total	Rainfall (mm) LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) Total	Effective Rainfall (mm) LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	82	88	94	10	31	33
Cotswolds - East	64	78	82	8	25	30
Berkshire Downs	75	85	88	9	17	53
Chilterns - West	68	80	84	8	16	51
North Downs - Hampshire	99	99	100	13	26	50
Wey - Greensand	111	97	115	15	26	57
Upper Thames	67	74	91	0	7	0
Cherwell	58	74	78	0	11	0
Thame	56	70	80	0	7	0
Loddon	75	79	95	0	7	0
Lower Wey	83	76	110	0	10	0
Ock	57	69	82	0	4	0
Enborne	73	84	86	0	11	0
Cut	63	71	89	0	5	0
Thames Area	**74**	**80**	**92**	**5**	**15**	**31**

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	Oct 2025 rainfall % of long term average 1991 to 2020	Oct 2025 band	Aug 2025 to October cumulative band	May 2025 to October cumulative band	Nov 2024 to October cumulative band
Berkshire Downs	98	Normal	Normal	Notably low	Below normal
Chilterns West	101	Normal	Normal	Notably low	Below normal
Cotswold East	102	Normal	Below normal	Exceptionally low	Below normal
Cotswold West	111	Normal	Below normal	Exceptionally low	Below normal
Cut	86	Normal	Below normal	Notably low	Below normal
Enborne	100	Normal	Normal	Notably low	Below normal
Loddon	100	Normal	Below normal	Notably low	Below normal
Lower Wey	98	Normal	Below normal	Notably low	Below normal
North Downs - Hampshire	98	Normal	Normal	Notably low	Below normal
Ock	91	Normal	Normal	Notably low	Notably low
Thame	104	Normal	Normal	Notably low	Below normal
Upper Cherwell	100	Normal	Below normal	Exceptionally low	Below normal
Upper Thames	106	Normal	Below normal	Exceptionally low	Notably low
Wey - Greensand	98	Normal	Normal	Notably low	Below normal

11.2 River flows table

Site name	River	Catchment	Oct 2025 band	Sep 2025 band
Abingdon	River Ock	Ock	Normal	Normal
Banbury	River Cherwell	Cherwell Upper	Normal	Normal
Bibury	River Coln	Coln	Exceptionally Low	Exceptionally Low
Bourne End (hedsor)	River Wye	Wye Bucks	Normal	Above normal
Cassington	River Evenlode	Evenlode	Below normal	Normal
Farmoor (naturalised)	River Thames	Thames	Below normal	Below normal
Kingston	River Thames	Thames North Bank	Below normal	Below normal
Marlborough	River Kennet	Kennet	Notably low	Below normal
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	Above 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 Oct 2025 band	End of Sep 2025 band
Ampney Crucis Obh	Burford Oolitic Limestone (great)	Normal	Notably low
Frith Cottage	Godalming Lower Greensand	Notably high	Notably high
Gibbet Cottages Obh	Berkshire Downs Chalk	Normal	Normal
Jackaments Bottom Obh	Burford Oolitic Limestone (inferior)	Notably low	Notably low
Marcham Obh	Shrivenham Corallian	Normal	Normal
Model Farm	Chiltern Upper Greensand	Normal	Normal
Rockley Obh	Berkshire Downs Chalk	Exceptionally low	Below normal
Stonor Estate	South-west Chilterns Chalk	Normal	Above normal
The Flashes Obh	Godalming Lower Greensand	Notably high	Notably high
Tile Barn Farm	Basingstoke Chalk	Normal	Normal
Fringford P.s.	Upper Bedford Ouse Oolitic Limestone (great)	Normal	Normal