

# Monthly water situation report: Thames Area

## 1 Summary - January 2026

Thames area received 137mm of rainfall in January, which was the wettest January since 2014. The majority of areal rainfall units were exceptionally high, Loddon, Lower Wey, and Wey Greensand, had over double the long term average (LTA) rainfall. Soil moisture deficits (SMD) were negligible in all areal units by the end of the month. Saturated soils allowed significant effective rainfall to occur, with 202% of the LTA. The majority of monthly mean river flow sites were normal for the time of year, however 4 were exceptionally high. Groundwater levels increased at all of our indicator sites in January. Four sites, Ampney Crucis (great oolite), Long Sutton (chalk), and Frith Cottage, and The Flashes, both in the lower greensand, were exceptionally high. Both Farmoor reservoir and the Lower Thames reservoirs were below average for the time of year.

### 1.1 Rainfall

Thames area received 137mm of rainfall in January which was 183% of the LTA, the wettest January since 2014. Exceptionally high rainfall fell across the majority of Thames area, with only Thame, Cotswolds West, and Upper Thames receiving notably high status. Three rainfall units in the south of Thames area, Loddon, Lower Wey, and Wey Greensand, had over double the LTA rainfall. Three days (8, 15, 26) accounted for just over a third of the month's rain. While Rapsgate raingauge (Cotswolds West) had the highest daily total, receiving 33.9mm of rainfall on 15 January.

### 1.2 Soil moisture deficit and recharge

High rainfall throughout the month saturated soils and caused SMDs to reduce. SMDs were negligible in all areal units by the end of the month which meant they were wetter than usual. Saturated soils allowed significant effective rainfall to occur, 202% of the LTA at the end of the month.

### 1.3 River flows

Monthly mean river flows increased at 8 of our indicator sites in January. The majority of sites are normal for the time of year, however, 2 were above normal, 1 was notably high, and 4 were exceptionally high (Cherwell at Banbury, Blackwater at Swallowfield, Wey at Weybridge, and Wey at Tilford). The river Cherwell at Banbury recorded it's third highest January flow since 1967, the Blackwater at Swallowfield recorded it's third highest since 1953, and the Wey at Tilford recorded it's second highest since 1955.

## **1.4 Groundwater levels**

Groundwater levels increased at all of our indicator sites in January in response to the above average recharge. Four sites, Ampney Crucis (great oolite), Long Sutton (chalk), and Frith Cottage, and The Flashes, both in the Lower Greensand, were exceptionally high. Fringford (great oolite) was notably high, while, Marcham (Corallian), Rockley (chalk), and Model Farm (upper greensand) were above normal. All others were normal.

## **1.5 Reservoir stocks**

Reservoir stocks in Farmoor decreased from 97.2% to 80.4%, while the Lower Thames reservoirs increased from 85.4% to 88.6%. Both Farmoor reservoir and the Lower Thames reservoirs were below average for the time of year.

## **1.6 Environmental impact**

During January 70 fluvial and 1 groundwater flood alerts, and 3 flood warnings, were issued on rivers in the Thames area. At the end of January, no abstraction licences were being constrained in the area to protect water resources.

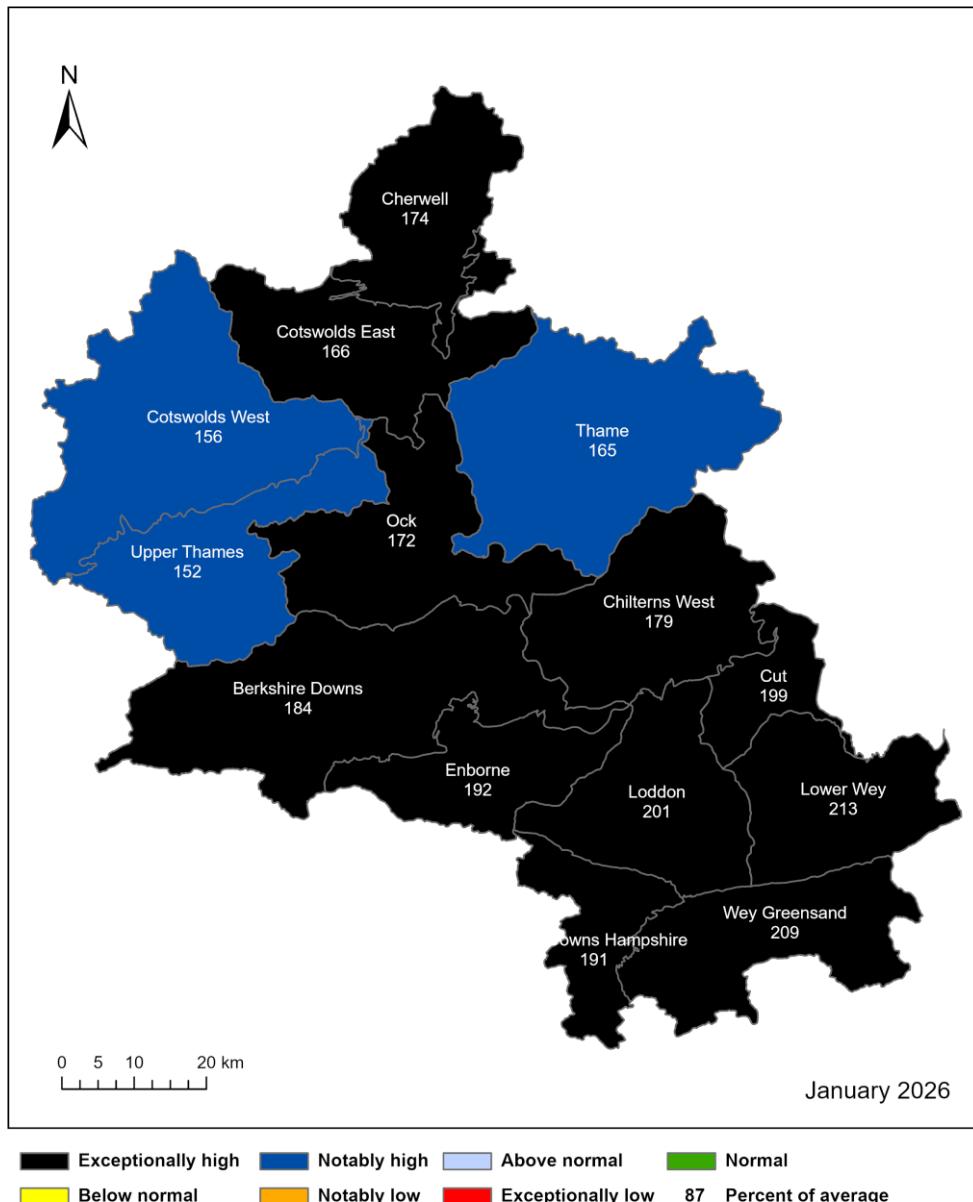
Author: Thames Area Groundwater Resources and Hydrology, [enquiriesWT@environment-agency.gov.uk](mailto:enquiriesWT@environment-agency.gov.uk)

Contact Details: 030708 506 506

## 2 Rainfall

### 2.1 Rainfall map

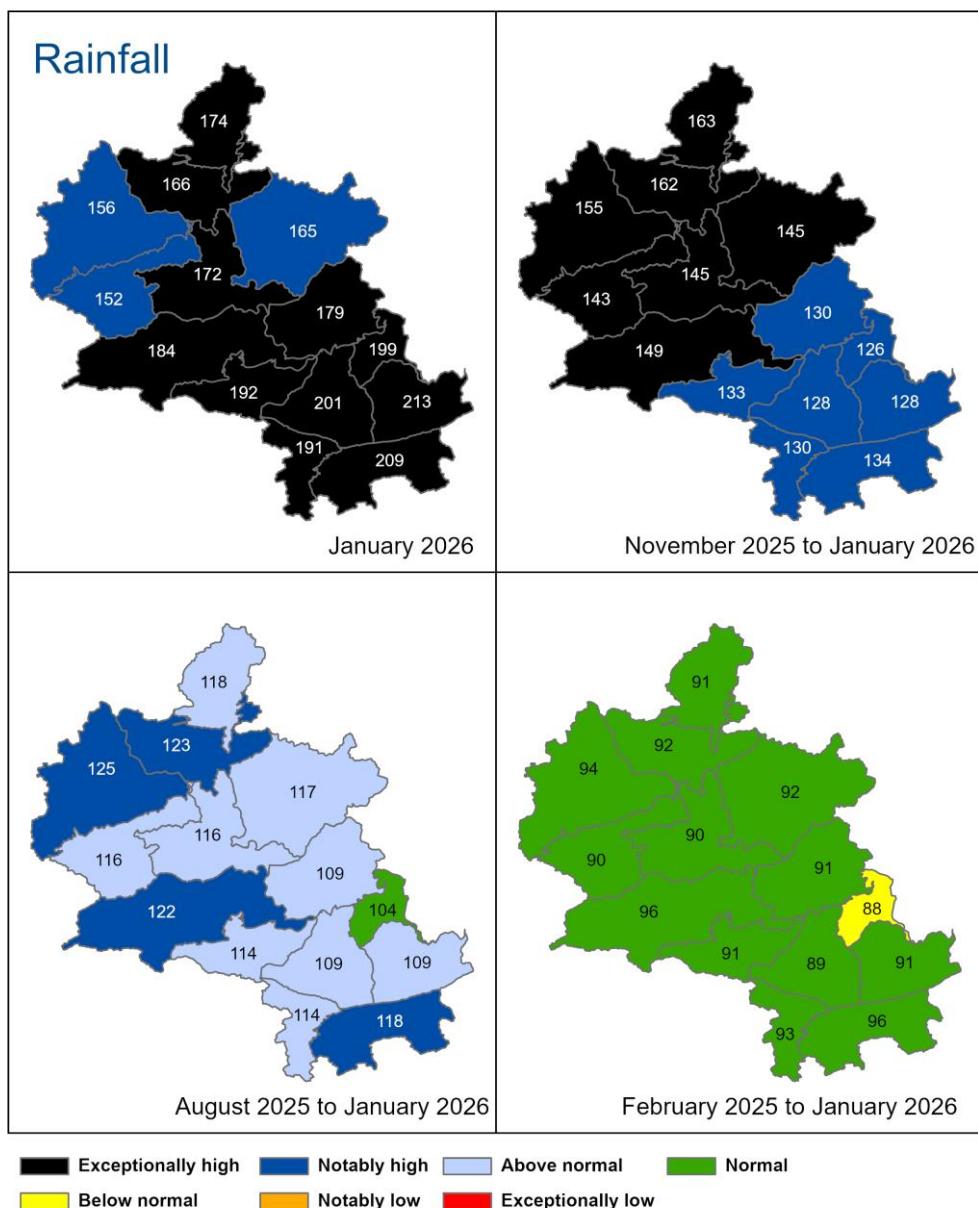
Figure 2.1: Total rainfall for hydrological areas for the current month (up to 31 January 2026), classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



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)

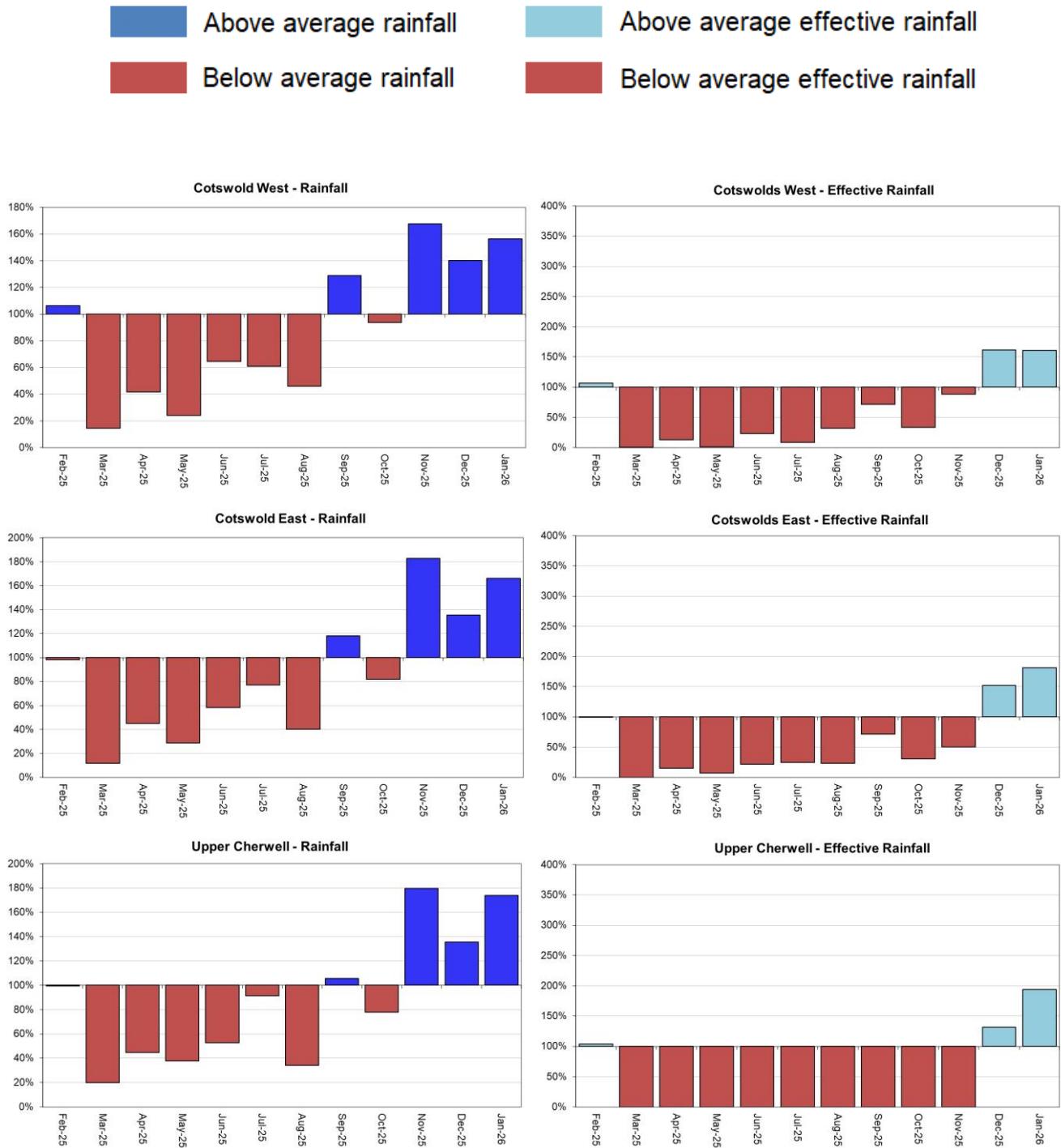
Figure 2.2: Total rainfall for hydrological areas for the current month (up to 31 January 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.

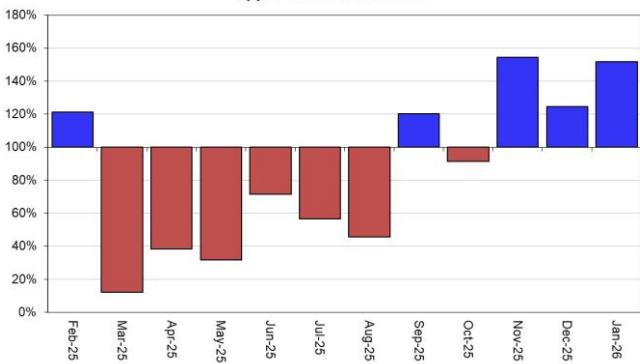
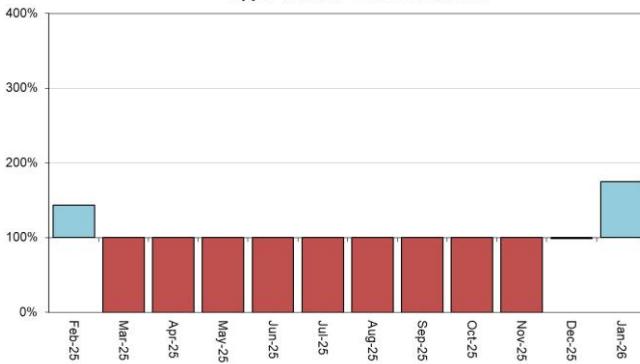
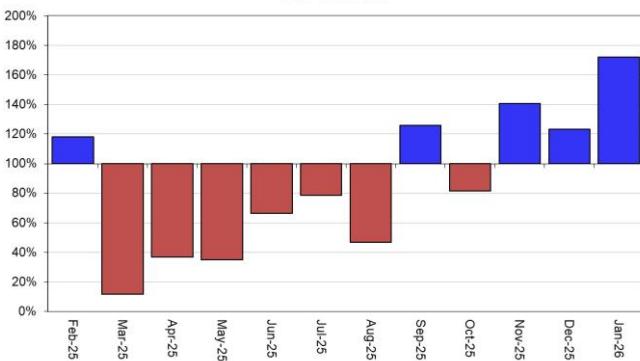
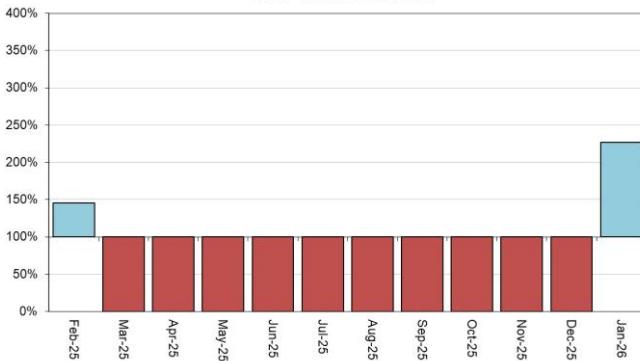
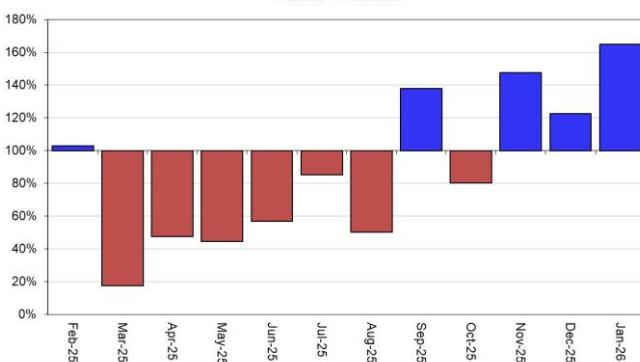
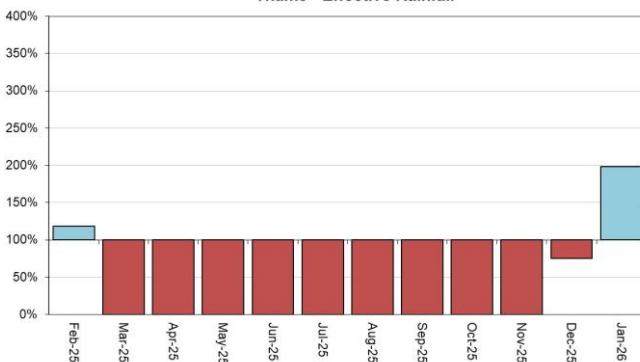
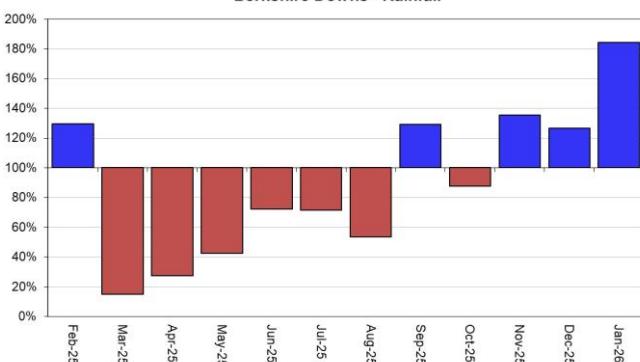
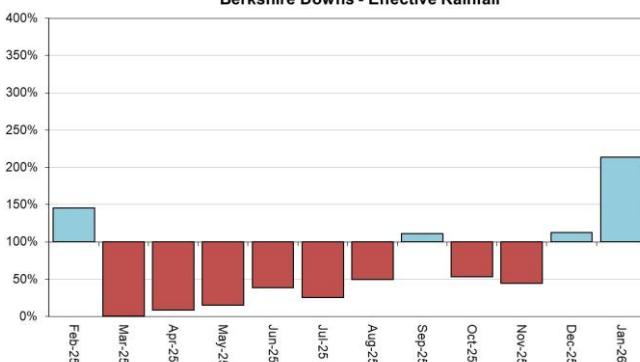


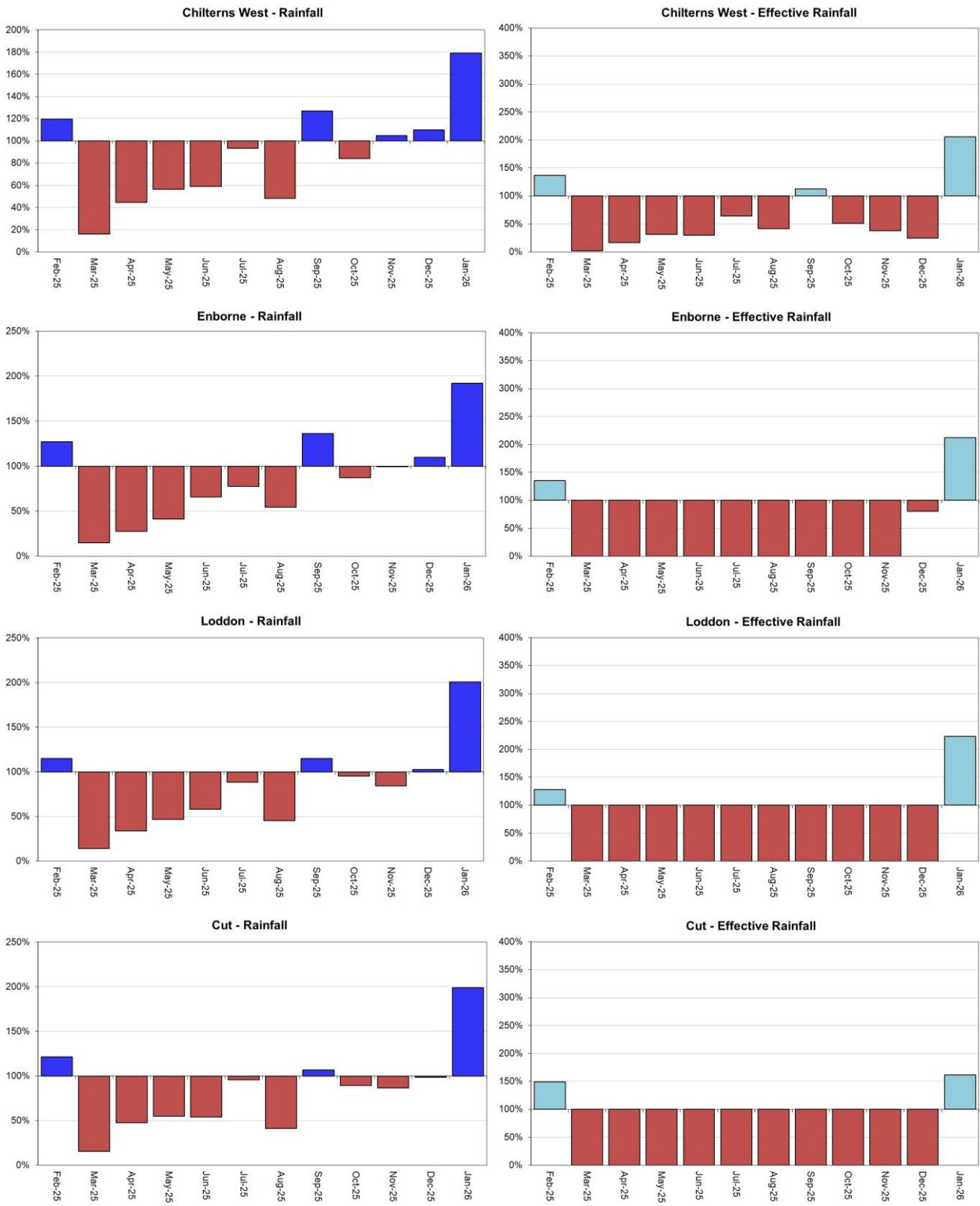
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency). © Ordnance Survey Crown Copyright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

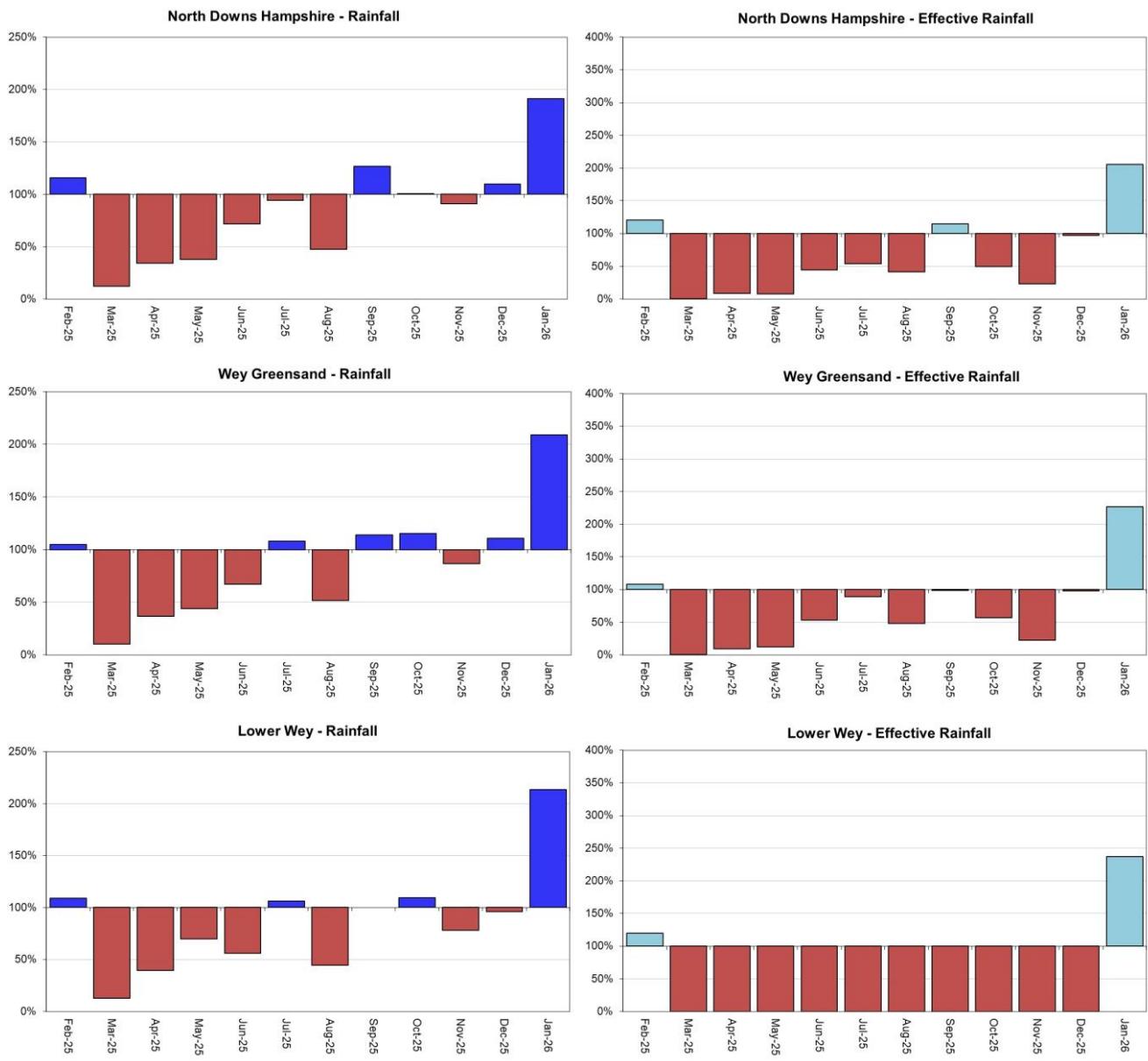
## 2.3 Rainfall charts

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**





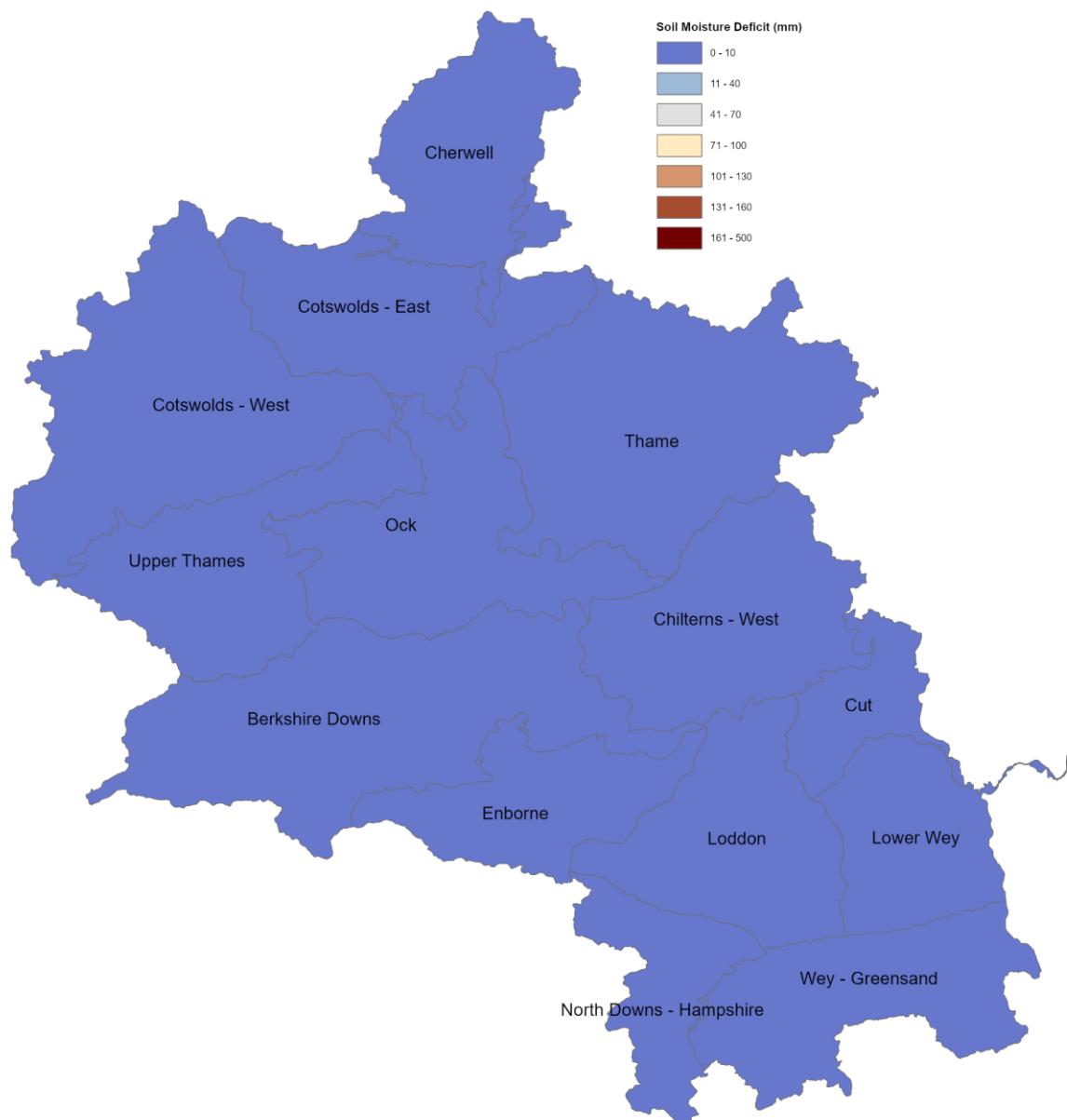
HadUK rainfall data. (Source: Met Office. Crown copyright, 2026).

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 January 2026. Shows the areal SMD estimate in millimetres.

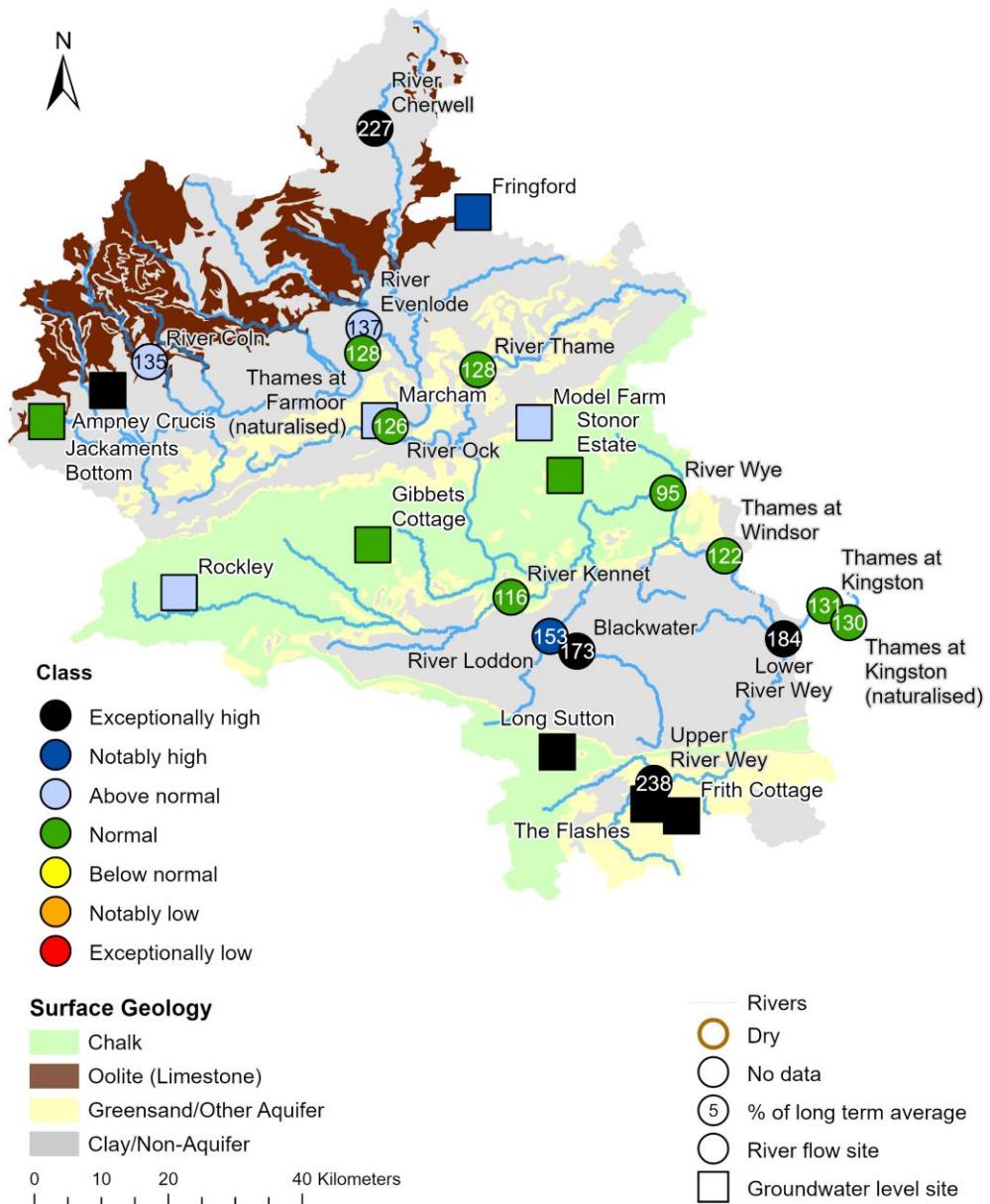


(Source: Environment Agency). © Ordnance Survey Crown Copyright and Database Rights 2026 – AC0000807064.

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

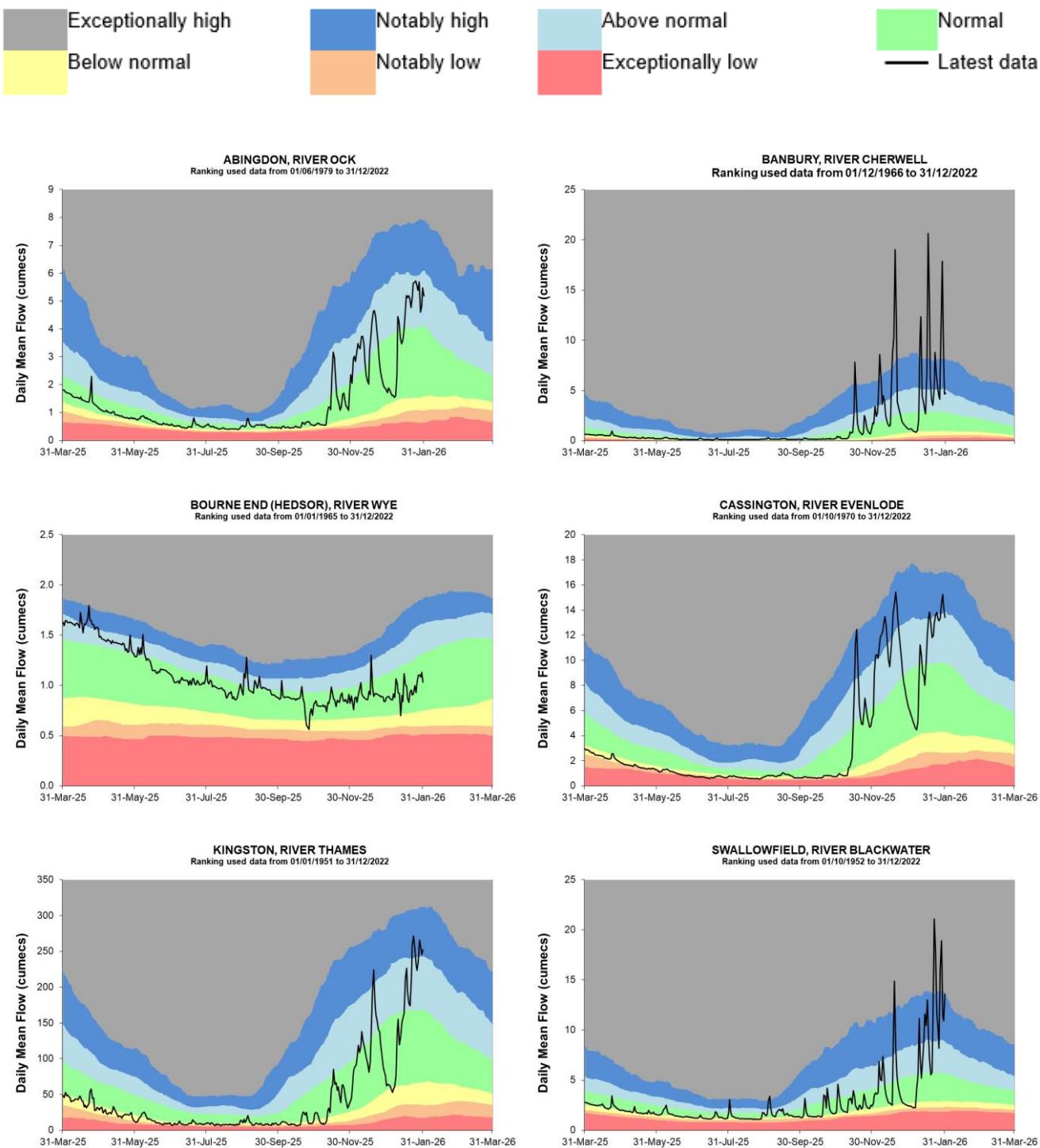


(Source: Environment Agency). © Ordnance Survey Crown Copyright and Database Rights 2026 – AC0000807064.

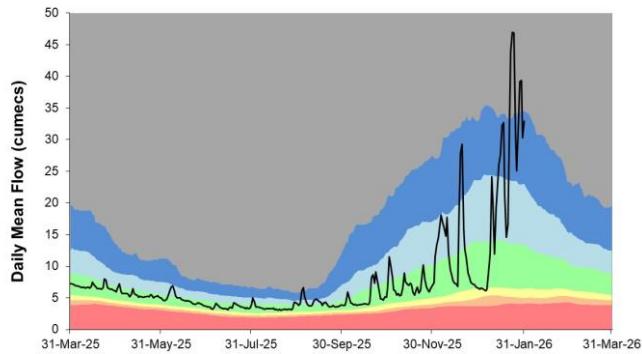
## 5 River flows

### 5.1 River flow charts

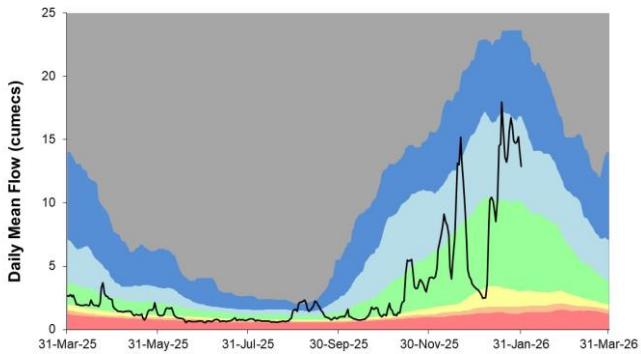
Figure 5.1: Daily mean river flows for indicator sites compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



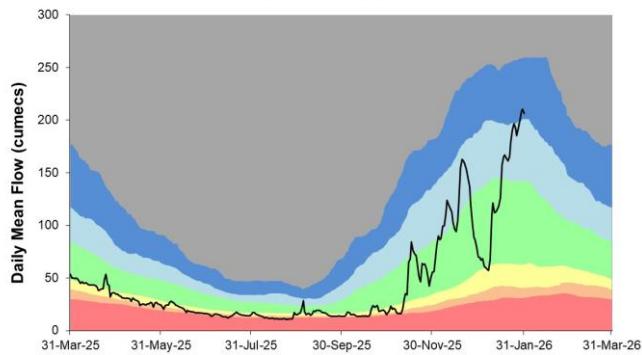
WEYBRIDGE, RIVER WEY  
Ranking used data from 01/04/1979 to 31/12/2022



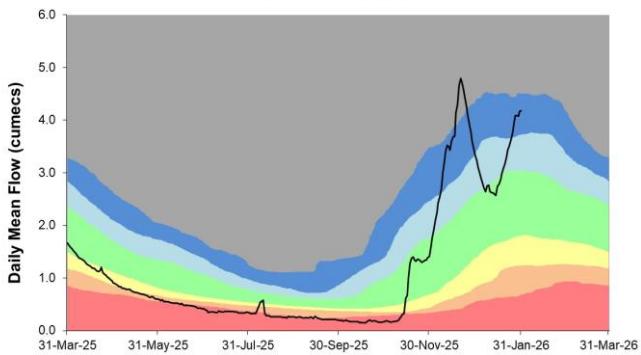
WHEATLEY, RIVER THAME  
Ranking used data from 01/01/1990 to 31/12/2022



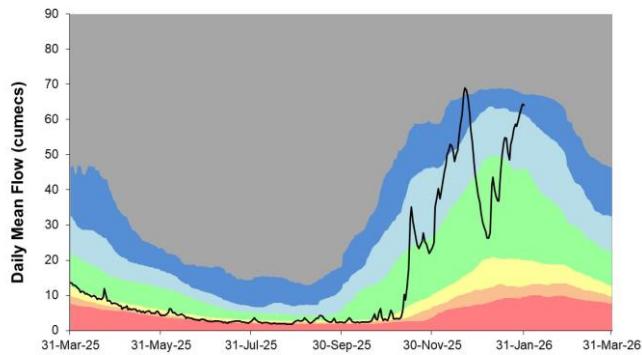
WINDSOR, RIVER THAMES  
Ranking used data from 01/08/1979 to 31/12/2022



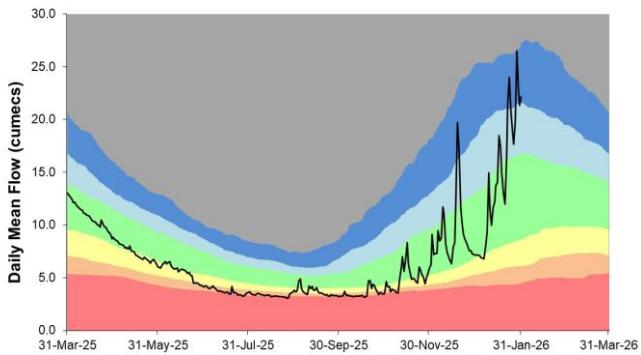
BIBURY, RIVER COLN  
Ranking used data from 01/10/1963 to 31/12/2022

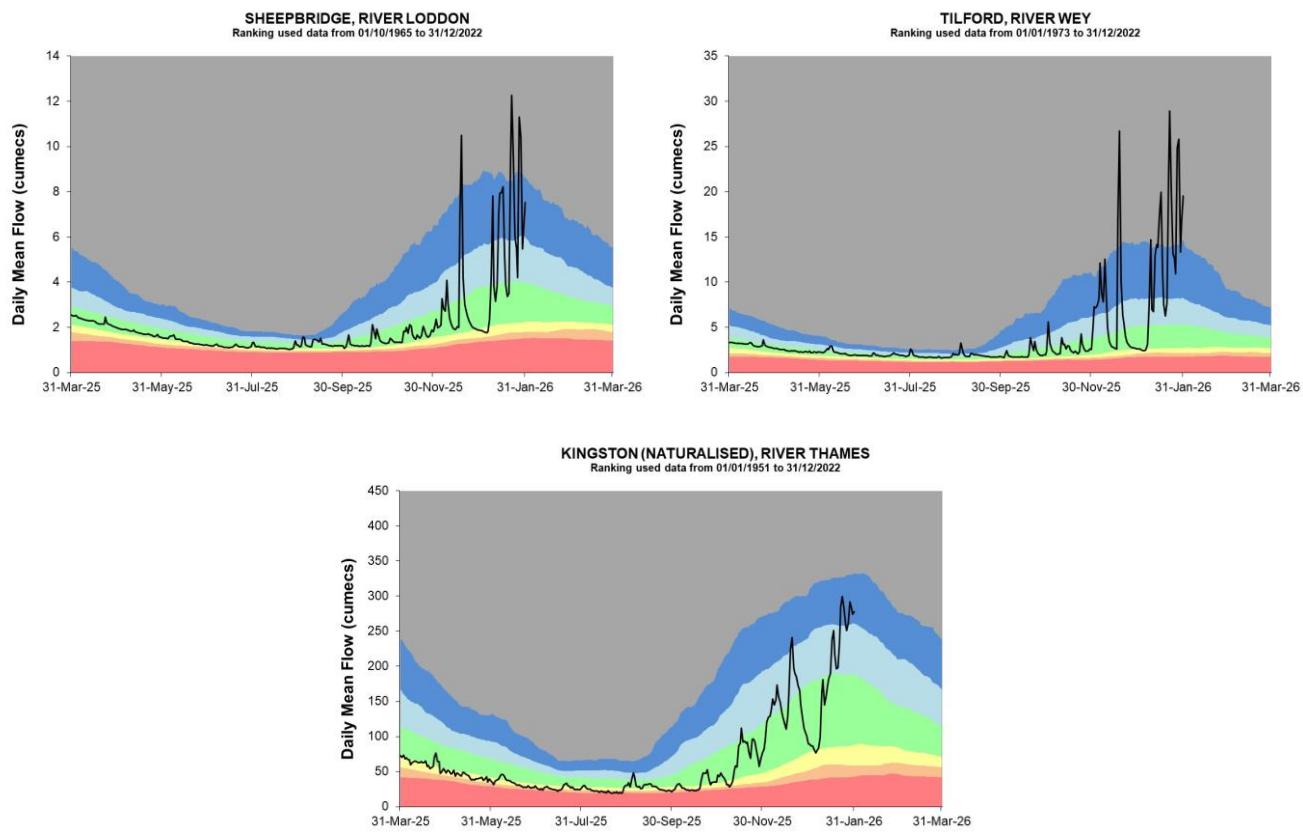


FARMOOR (NATURALISED), RIVER THAMES  
Ranking used data from 01/10/1992 to 31/12/2022



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





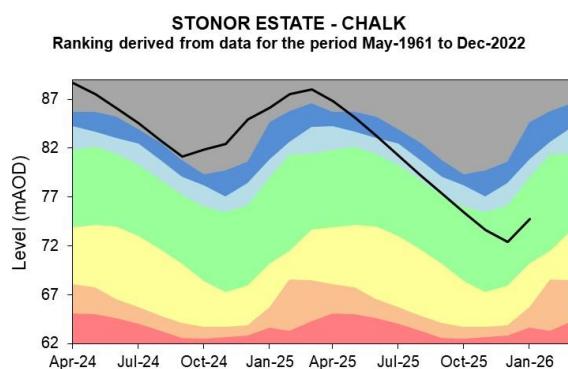
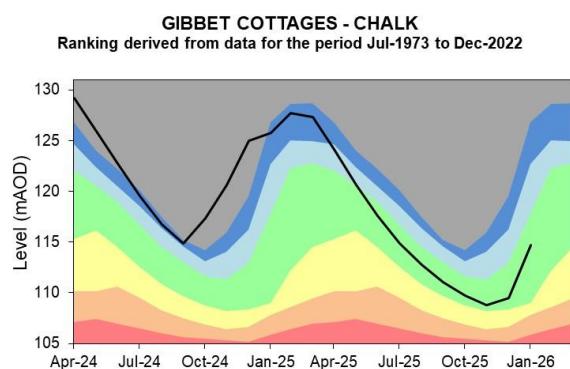
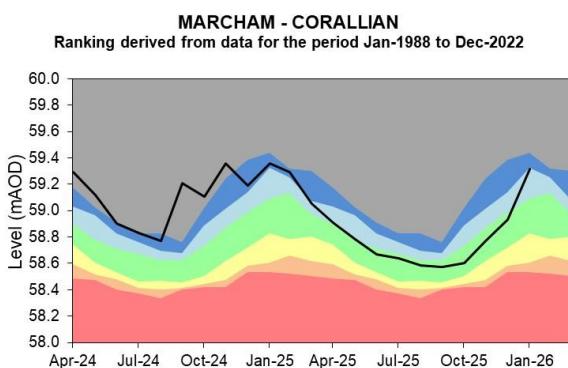
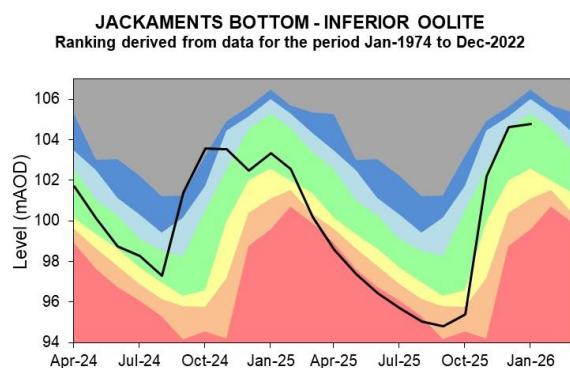
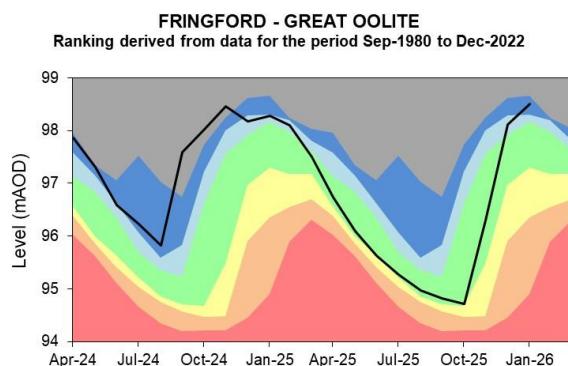
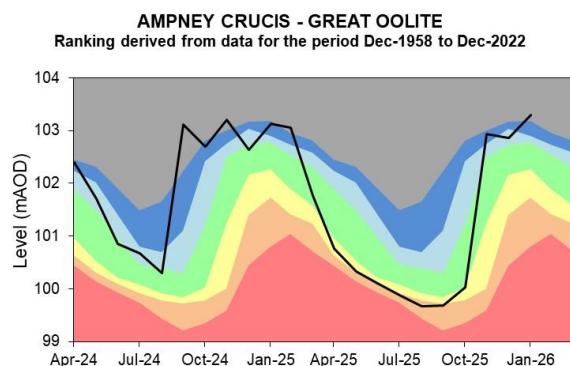
\*Calcot has replaced Marlborough

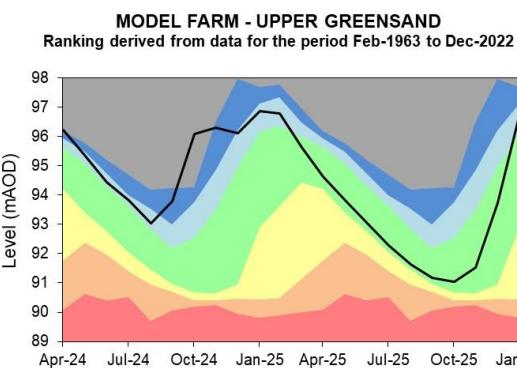
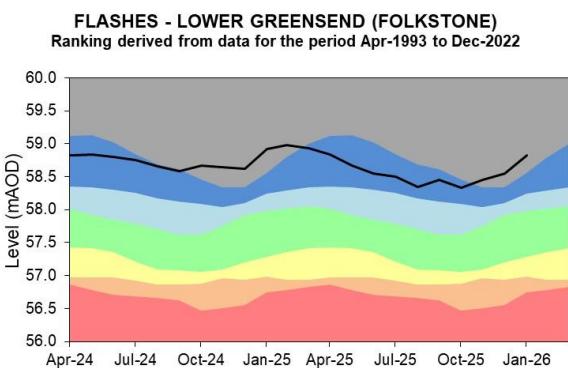
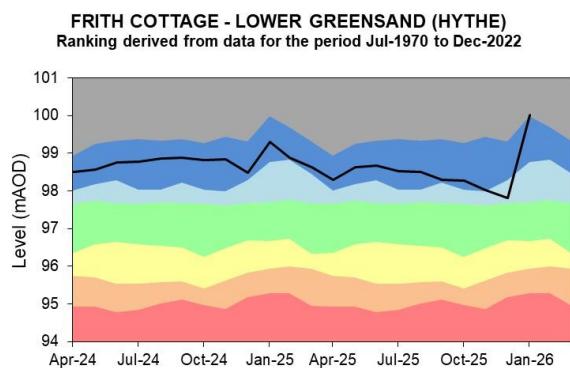
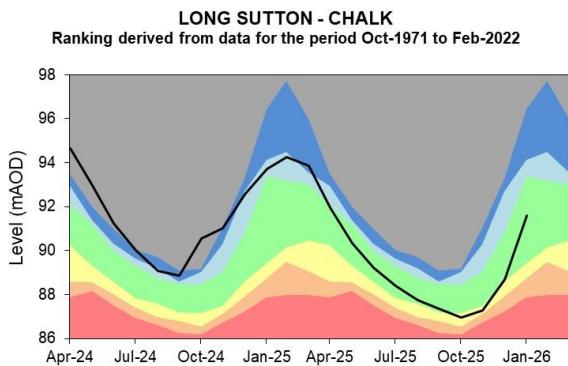
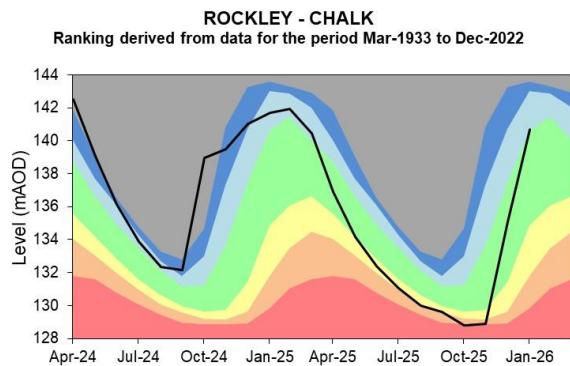
Source: Environment Agency.

## 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.



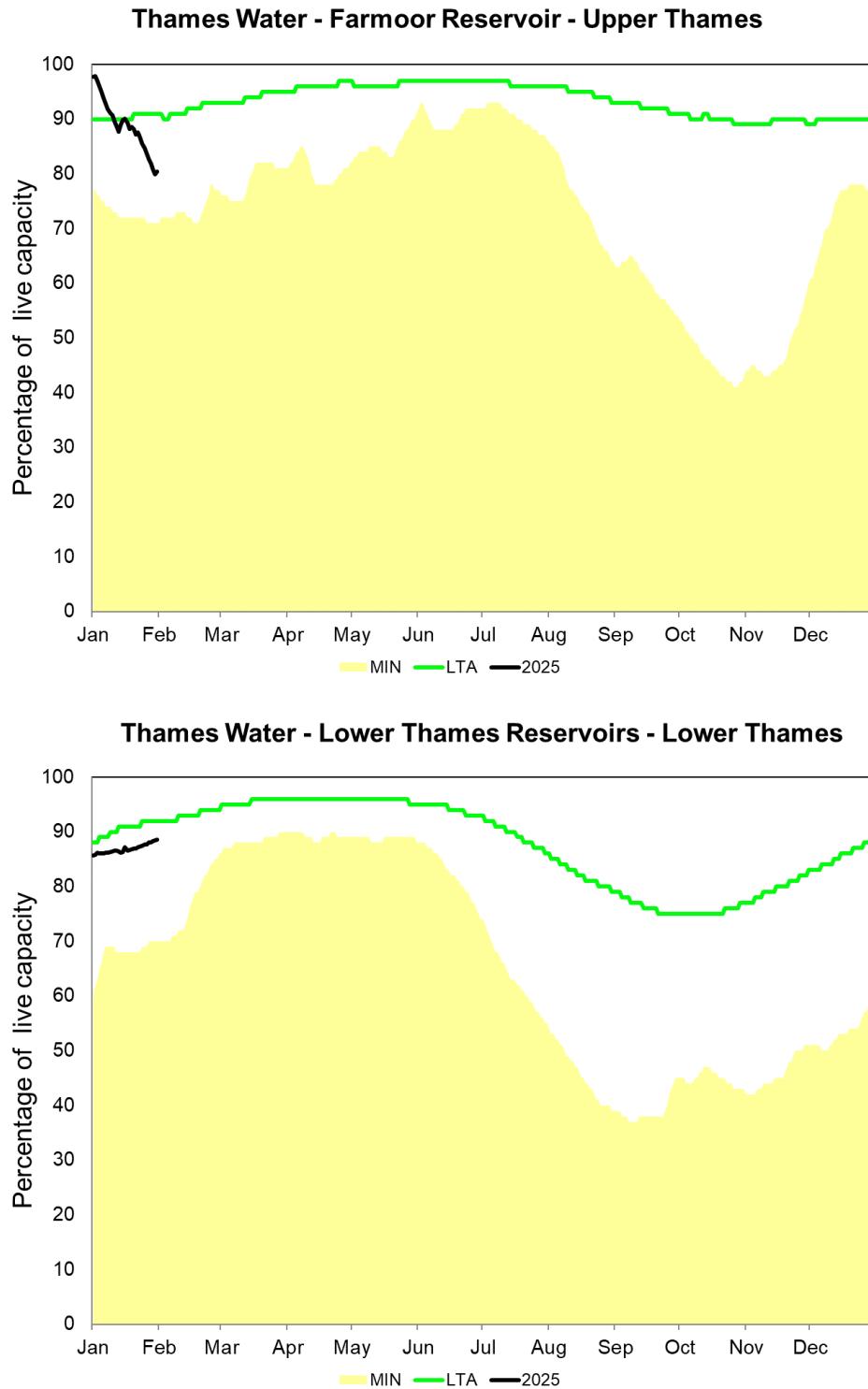


\*Long Sutton has replaced Tile Barn Farm

Source: Environment Agency, 2026.

## 7 Reservoir stocks

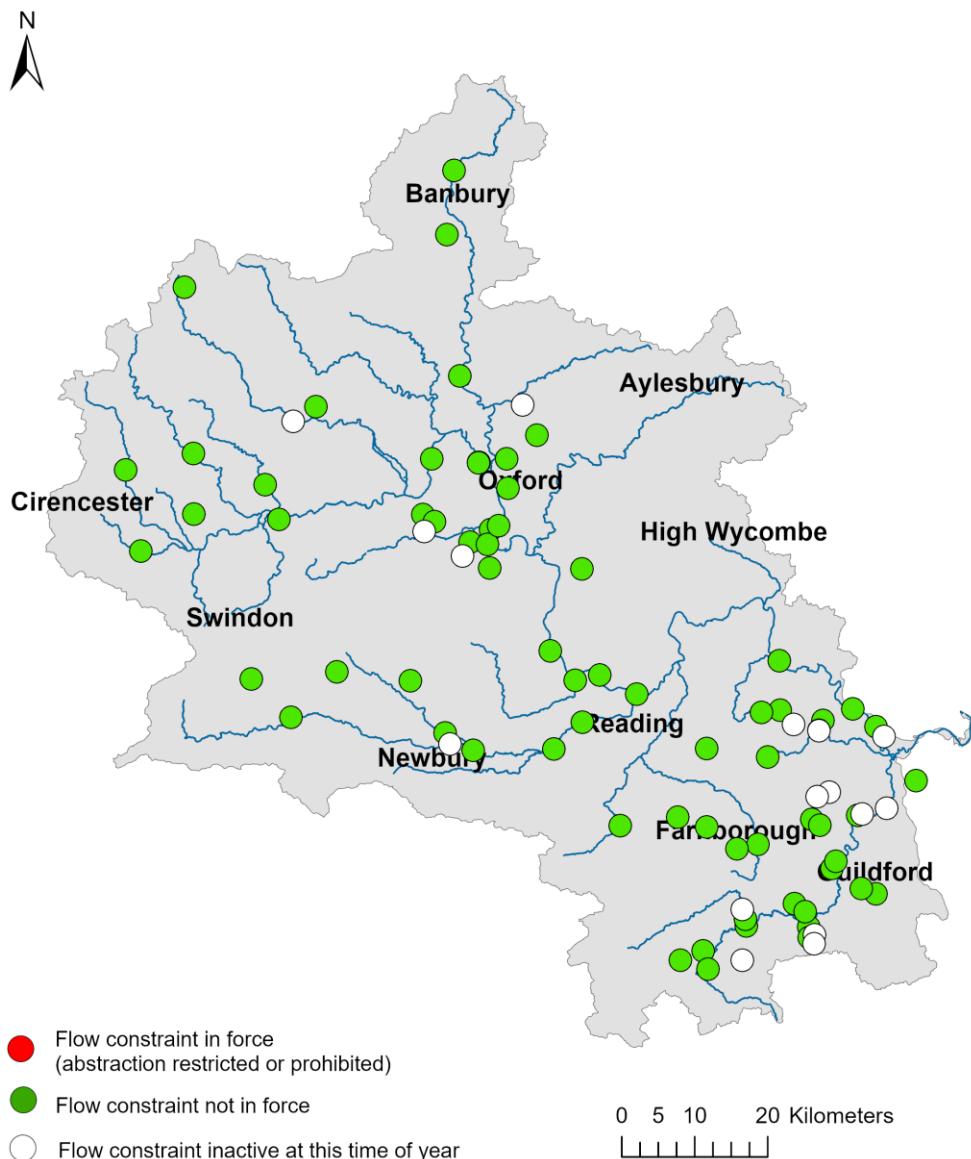
Figure 7.1: End of month regional reservoir stocks compared to minimum and average stocks.



(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	04/01/26	11/01/26	18/01/26	25/01/26
	2	0	0	0

## 9 Summary of rainfall, effective rainfall and soil moisture deficit

### 9.1 Rainfall and effective rainfall

Area	Rainfall (mm)	Rainfall (mm)	Rainfall (mm) % LTA	Effective	Effective	Effective
	31 day Total	January LTA		Rainfall (mm) 31 day total	Rainfall (mm) January LTA	Rainfall (mm) % LTA
Cotswolds - West	130	83	156	110	68	161
Cotswolds - East	118	71	167	98	54	181
Berkshire Downs	153	82	186	133	62	213
Chilterns - West	134	75	179	112	55	205
North Downs - Hampshire	189	99	191	168	82	205
Wey - Greensand	199	95	209	178	78	227
Upper Thames	107	70	152	85	49	175
Cherwell	111	64	174	92	47	194
Thame	101	61	165	81	41	198
Loddon	147	74	200	121	54	223
Lower Wey	149	70	213	125	53	237
Ock	105	61	172	84	37	227
Enborne	153	81	189	133	63	212
Cut	127	64	199	64	40	162
<b>Thames Area</b>	<b>137</b>	<b>75</b>	<b>183</b>	<b>113</b>	<b>56</b>	<b>202</b>

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	0	1
Cotswolds - East	0	4
Berkshire Downs	0	5
Chilterns - West	0	7
North Downs - Hampshire	0	2
Wey - Greensand	0	2
Upper Thames	0	7
Cherwell	0	5
Thame	0	9
Loddon	0	4
Lower Wey	0	4
Ock	0	13
Enborne	0	2
Cut	0	10
<b>Thames Area</b>	<b>0</b>	<b>5</b>

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 31/01/2026						
Area	Rainfall (mm) Total	Rainfall (mm) LTA	Rainfall (mm) % LTA	Effective Rainfall (mm) Total	Effective Rainfall (mm) LTA	Effective Rainfall (mm) % LTA
Cotswolds - West	493	354	139	293	228	129
Cotswolds - East	431	305	141	213	174	122
Berkshire Downs	452	339	133	227	174	131
Chilterns - West	371	313	119	145	146	99
North Downs - Hampshire	495	404	122	277	244	113
Wey - Greensand	505	390	130	284	232	123
Upper Thames	385	295	130	134	128	105
Cherwell	391	278	140	151	131	116
Thame	339	265	128	111	104	107
Loddon	365	307	119	121	131	92
Lower Wey	360	293	123	125	130	96
Ock	339	264	128	87	91	95
Enborne	406	336	121	187	168	111
Cut	316	272	116	64	92	70
<b>Thames Area</b>	<b>403</b>	<b>315</b>	<b>128</b>	<b>173</b>	<b>155</b>	<b>111</b>

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.

### **Cumeecs**

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	Jan 2026 rainfall % of long term average 1991 to 2020	Jan 2026 band	Nov 2025 to January cumulative band	Aug 2025 to January cumulative band	Feb 2025 to January cumulative band
Berkshire Downs	185	Exceptionally High	Exceptionally high	Notably high	Normal
Chilterns West	179	Exceptionally High	Notably high	Above normal	Normal
Cotswold East	166	Exceptionally High	Exceptionally high	Notably high	Normal
Cotswold West	156	Notably High	Exceptionally high	Notably high	Normal
Cut	199	Exceptionally High	Notably high	Normal	Below normal
Enborne	192	Exceptionally High	Notably high	Above normal	Normal
Loddon	201	Exceptionally High	Notably high	Above normal	Normal
Lower Wey	214	Exceptionally High	Notably high	Above normal	Normal
North Downs - Hampshire	191	Exceptionally High	Notably high	Above normal	Normal
Ock	172	Exceptionally High	Exceptionally high	Above normal	Normal
Thame	165	Notably High	Exceptionally high	Above normal	Normal
Upper Cherwell	174	Exceptionally High	Exceptionally high	Above normal	Normal
Upper Thames	152	Notably High	Exceptionally high	Above normal	Normal
Wey - Greensand	209	Exceptionally High	Notably high	Notably high	Normal

## 11.2 River flows table

Site name	River	Catchment	Jan 2026 band	Dec 2025 band
Abingdon	River Ock	Ock	Normal	Normal
Banbury	River Cherwell	Cherwell Upper	Exceptionally high	Notably high
Bibury	River Coln	Coln	Above normal	Notably high
Bourne End (Hedsor)	River Wye	Wye Bucks	Normal	Normal
Calcot	River Kennet	Kennet	Normal	Normal
Cassington	River Evenlode	Evenlode	Above normal	Notably high
Farmoor (naturalised)	River Thames	Thames	Normal	Notably high
Kingston	River Thames	Thames North Bank	Normal	Normal
Sheepbridge	River Loddon	Loddon	Notably high	Normal
Swallowfield	River Blackwater	Loddon	Exceptionally high	Normal
Tilford	River Wey	Wey Addlestone Bourne	Exceptionally high	Above normal
Weybridge	River Wey	Wey Addlestone Bourne	Exceptionally high	Normal
Wheatley	River Thame	Thame	Normal	Normal
Windsor	River Thames	Thames	Normal	Normal
Kingston (naturalised)	River Thames	Thames North Bank	Normal	Above normal

### 11.3 Groundwater table

Site name	Aquifer	End of Jan 2026 band	End of Dec 2025 band
Ampney Crucis OBH	Burford Oolitic Limestone (great)	Exceptionally high	Above normal
Frith Cottage	Godalming Lower Greensand	Exceptionally high	Above normal
Gibbet Cottages OBH	Berkshire Downs Chalk	Normal	Normal
Jackaments Bottom OBH	Burford Oolitic Limestone (inferior)	Normal	Above normal
Marcham OBH	Shrivenham Corallian	Above normal	Normal
Model Farm	Chiltern Upper Greensand	Above normal	Normal
Rockley OBH	Berkshire Downs Chalk	Above normal	Normal
Stonor Estate	South-west Chilterns Chalk	Normal	Normal
The Flashes OBH	Godalming Lower Greensand	Exceptionally high	Exceptionally high
Long Sutton	North Downs Chalk	Exceptionally high	Normal
Fringford P.S.	Upper Bedford Ouse Oolitic Limestone (great)	Notably high	Above normal