

Monthly water situation report: East Anglia

1 Summary - October 2025

East Anglia rainfall for October 2025 ranged from 70% to 113% of the long term average for the month, with the wettest catchments being in the east of the area. The area soil moisture deficit reduced by approximately 20mm from September to October, with most of that reduction following heavy rainfall towards the end of October. However, the soil moisture deficit for East Anglia remained notably high for the time of year at 102mm. With continuing dry soils, the flow response seen in area rivers to the approximately average October rainfall was muted. For the majority of rivers, the flow for October 2025, when calculated as an average for the month, was approximately equal to or slightly higher than the flow for September 2025. Groundwater levels at the majority of report sites continue to recede, although remain normal to below normal for the time of year. Public water supply reservoirs within East Anglia ended October 2025 with levels ranging from 46% to 71% of full storage capacity.

1.1 Rainfall

October 2025 rainfall totals across East Anglia ranged from 70% to 113% of the long term average [LTA] for the month. The highest rainfall totals were recorded towards the east of the area, with East Suffolk and South Essex receiving respectively 72mm and 67mm across the month. The average rainfall across East Anglia for October 2025 was 59mm, which is 91% of the historic LTA and is considered normal for the time of year. Approximately average rainfall for both October and September 2025 was preceded by an exceptionally dry spring and summer period. The East Anglia rainfall total for March 2025 to August 2025 was 159mm, which ranks as the fourth driest March to August period on record (1871 to 2025) for East Anglia.

1.2 Soil moisture deficit

The soil moisture deficit [SMD] for East Anglia at the end of October 2025 was 102mm. The SMD decreased following generally cooler conditions and rainfall towards the end of the month, although the SMD remains notably high for the time of year. The hydrological catchments with the highest SMDs are located towards the north-west of the area, with the Central Area Fenland and North West Norfolk and Wissey catchments having SMD values of 136mm and 127mm respectively.

1.3 River flows

For the majority of river flow report sites, the October 2025 month mean flow was approximately equal to or slightly higher than the September 2025 month mean flow. The

response of East Anglian rivers to the approximately average October rainfall was dampened by catchment soils being drier than typical for the time of year. Report sites along the Bedford Ouse, and its tributaries, recorded October 2025 flows considered normal to below normal for the time of year. The lowest flows were concentrated towards the centre of the area, with report sites on the Ely Ouse and its tributaries, such as the Wissey and Little Ouse, recording exceptionally low flows for the time of year.

1.4 Groundwater levels

Groundwater levels have continued to recede with the majority of sites reporting a drop in levels from September to October. The recovery in groundwater levels, indicative of aquifer recharge, is likely to be delayed with area soil moisture deficits remaining notably high for the time of year. The majority of report sites ended October 2025 with groundwater levels categorised as normal or below normal for the time of year. The groundwater level at The Spinney, Wensum Chalk, continues to be exceptionally low for the time of year, with the latest value being the lowest October groundwater level on record for this site (1971 to 2025). Therfield Rectory, North Hertfordshire Chalk, continues to be atypical for the area, with above normal groundwater levels for the time of year. This is likely to be the result of a locally exceptional recharge season, with the September 2024 to February 2025 rainfall in the Upper Bedford Ouse catchment being the fifth wettest September to February rainfall total on record (1871-2025) for that catchment.

1.5 Reservoir stocks

Public water supply reservoirs within East Anglia finished October 2025 with levels ranging from 46% to 71% of full storage capacity. Alton Water, Grafham and Hanningfield reservoirs ended the month with levels below their respective normal operating curves.

1.6 Forward look

1.6.1 Probabilistic ensemble projections for river flows at key sites

River flow projections for the Bedford Ouse, and its tributaries, show a high probability of below normal to notably low flows for December 2025. Flow projections for the Ely Ouse show a high probability of normal or lower flows for December 2025. Projections for March 2026 show a greater than 50% probability of notably low or lower flows at most forecast sites.

1.6.2 Probabilistic ensemble projections for groundwater levels in key aquifers

The groundwater projections for March 2026 shows a high probability of below normal to notably low groundwater levels at most forecast sites. The Therfield Rectory groundwater level is expected to drop to within the normal range by March 2026. The projection for September 2026 give a high probability of most forecast sites having below normal or lower groundwater levels into next autumn, with Therfield Rectory expected to stay within the normal range.

Author: Hydrology Team, hydrology-ean-and-lna@environment-agency.gov.uk

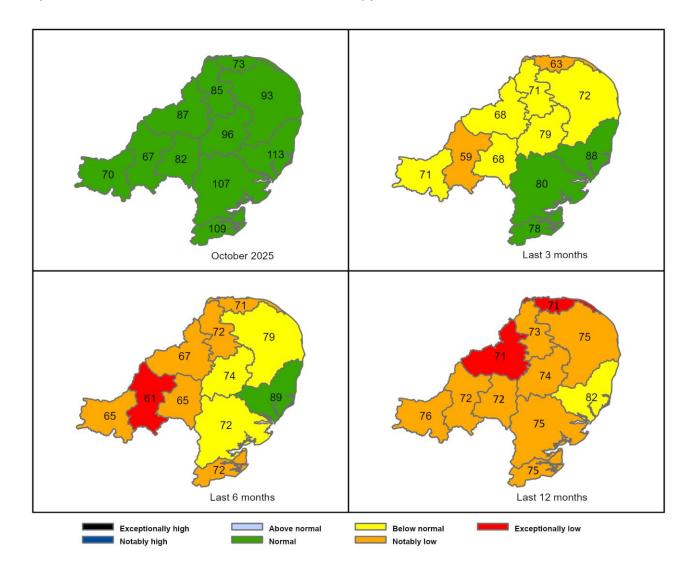
Contact details: 03708 506 506

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2 Rainfall

2.1 Rainfall map

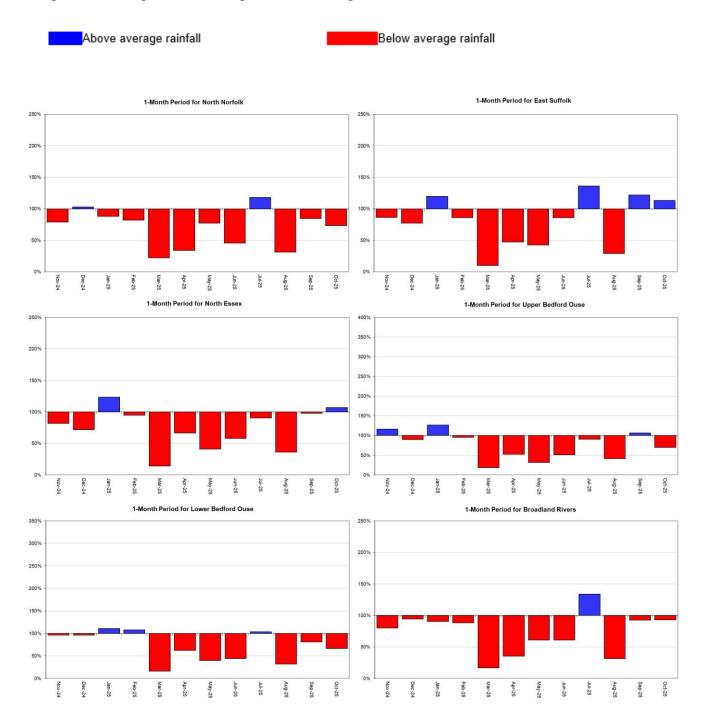
Figure 2.1: Total rainfall for hydrological areas across East Anglia, expressed as a percentage of long term average rainfall for the current month (up to 31 October 2025), the last 3 months, the last 6 months, and the last 12 months. Category classes are based on an analysis of respective historic totals. Table available in the appendices with detailed information.

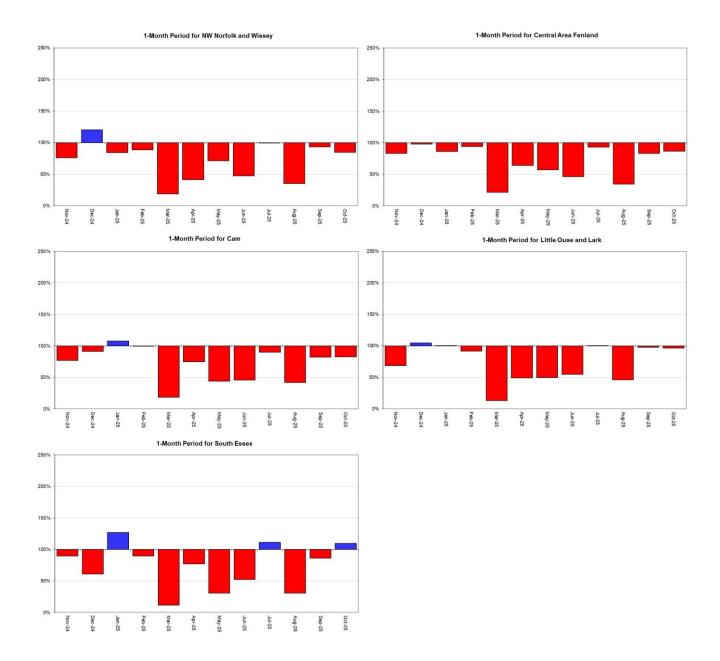


HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2025). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved.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

2.2 Rainfall charts

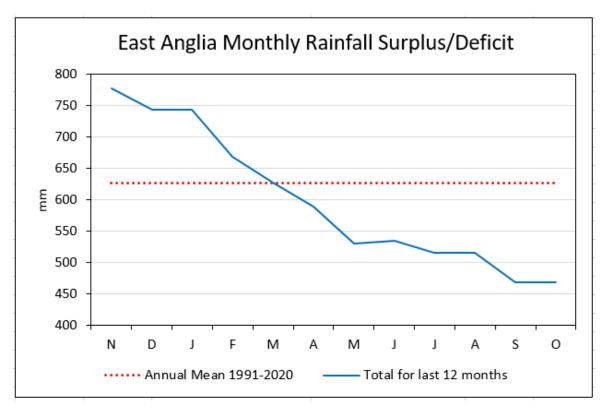
Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each region and for England.





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

2.3 Monthly rainfall surplus deficit chart



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

3 Soil moisture deficit

3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficit values for 31 October 2025. Values based on the weekly MORECS data for real land use.

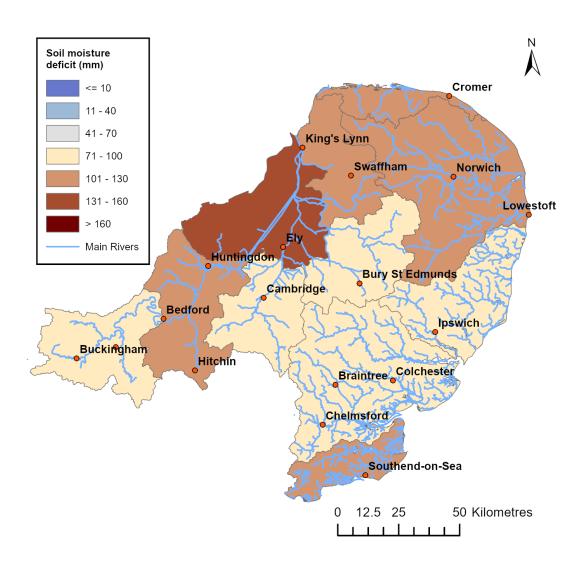
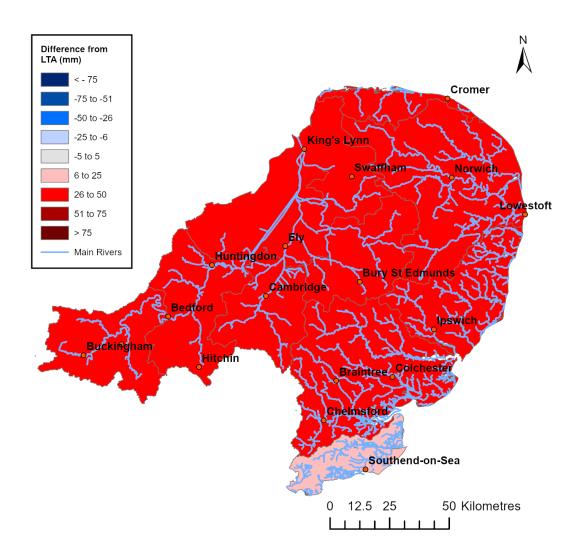


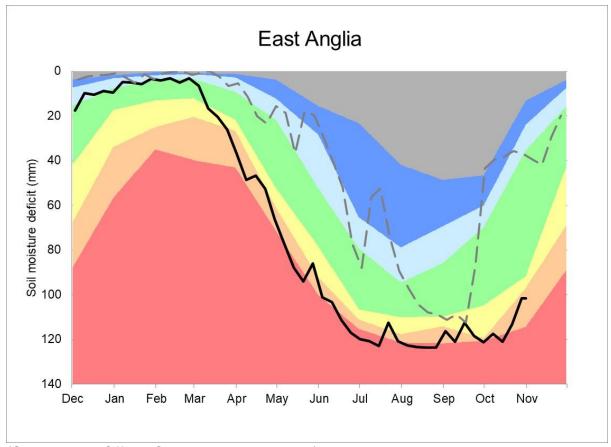
Figure 3.2: Difference between soil moisture deficit values for 31 October 2025 and long term average soil moisture deficit values for the end of October. Values based on the weekly MORECS data for real land use.



(Source: Met Office. Crown copyright, 2025). All rights reserved. Environment Agency, 100024198, 2025.

3.2 Soil moisture deficit charts

Figure 3.2: Latest soil moisture deficit compared to an analysis of historic 1991 to 2020 long term data set. Weekly MORECS data for real land use.

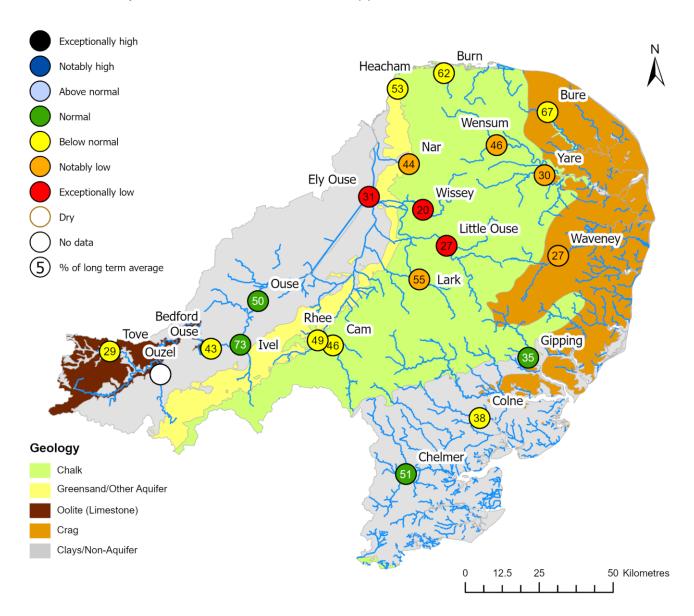


(Source: Met Office. Crown copyright, 2025). All rights reserved. Environment Agency, 100024198, 2025

4 River flows

4.1 River flows map

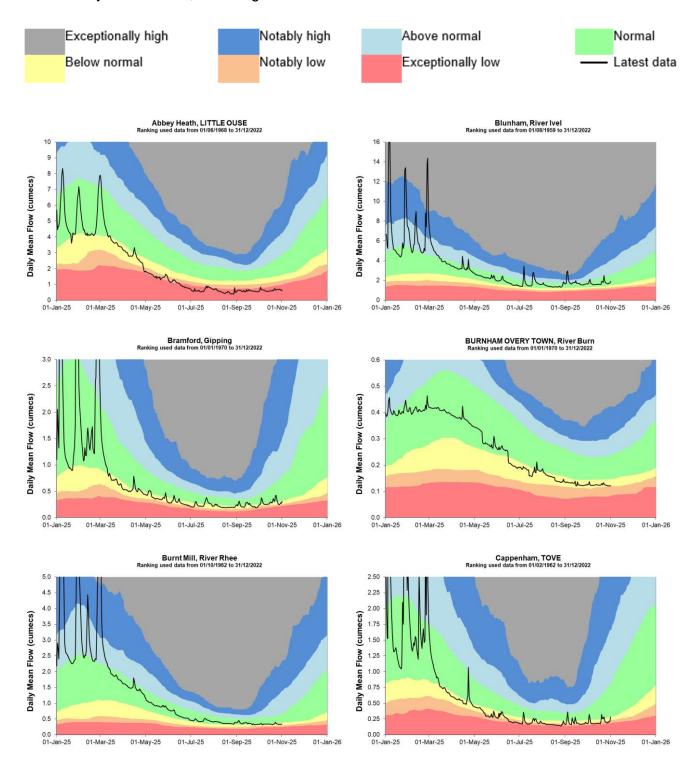
Figure 4.1: Monthly mean river flow for indicator sites for October 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic October monthly means Table available in the appendices with detailed information.

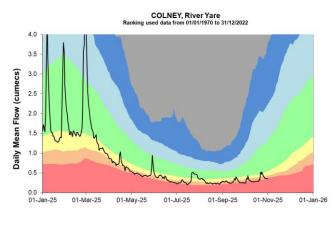


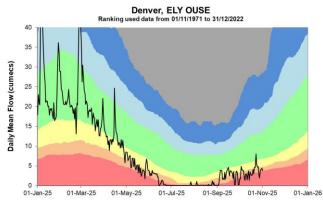
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

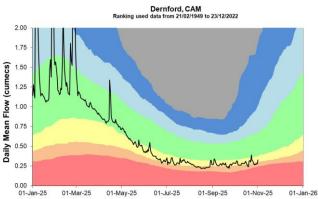
4.2 River flow charts

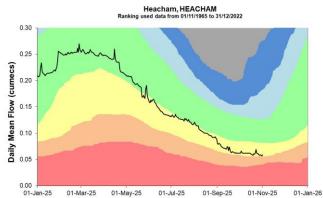
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

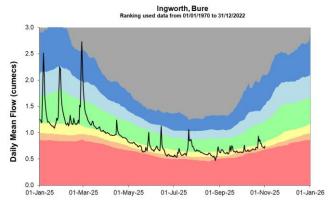


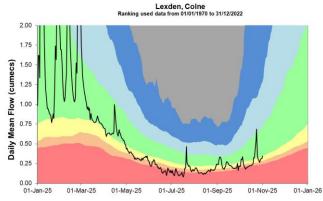


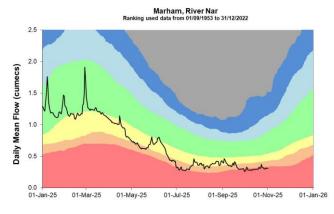


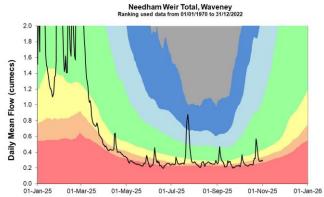


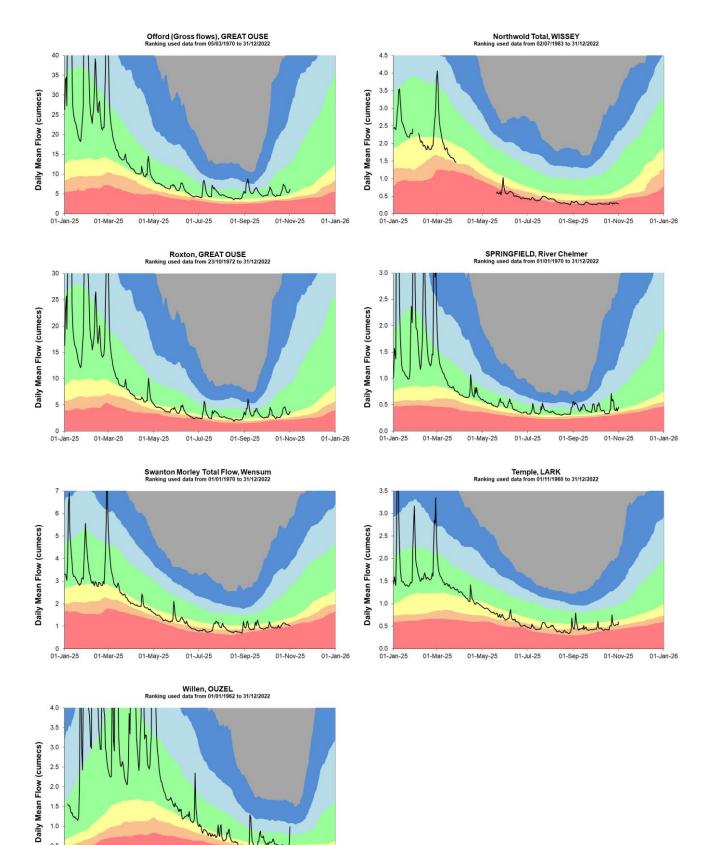












2.0

1.0 0.5 0.0 29-Oct-24

29-Dec-24

28-Feb-25

30-Apr-25

30-Jun-25

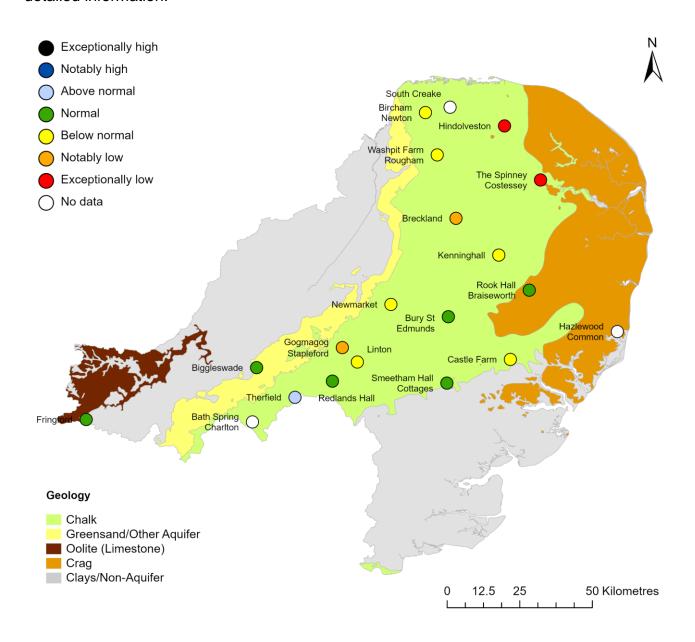
31-Aug-25

Source: Environment Agency.

5 Groundwater levels

5.1 Groundwater levels map

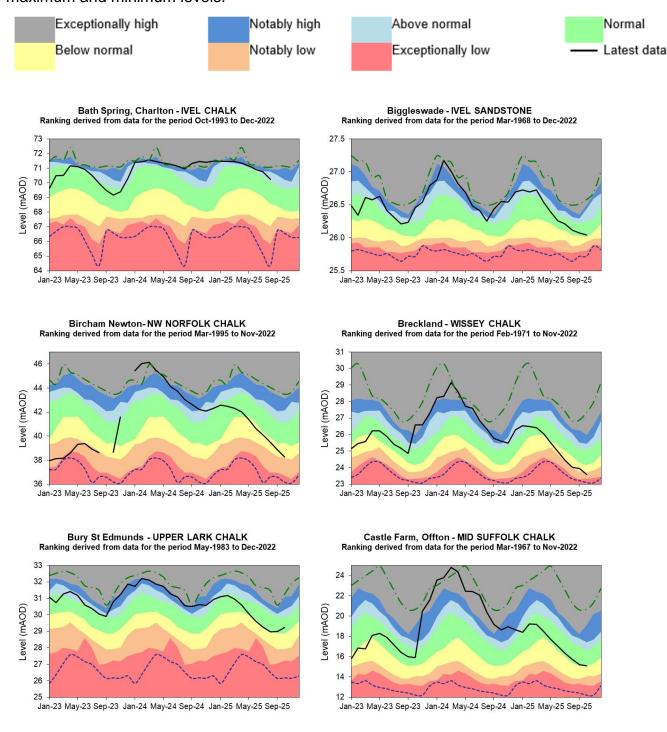
Figure 5.1: Groundwater levels for indicator sites at the end of October 2025, classed relative to an analysis of respective historic October levels. Table available in the appendices with detailed information.



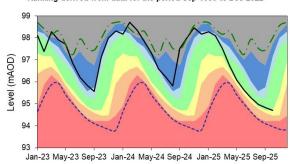
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

5.2 Groundwater level charts

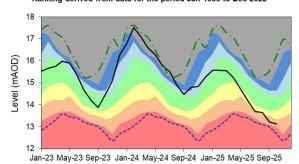
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.



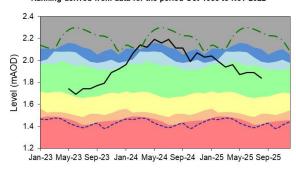
Fringford - GREAT OOLITE Ranking derived from data for the period Sep-1980 to Dec-2022



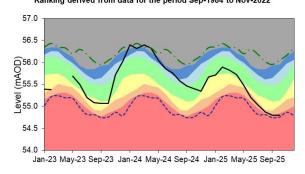
Gog Magog, Stapleford - CAM CHALK Ranking derived from data for the period Jan-1980 to Dec-2022



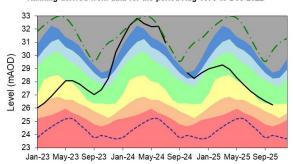
Hazlewood Common - SUFFOLK CRAG Ranking derived from data for the period Oct-1988 to Nov-2022



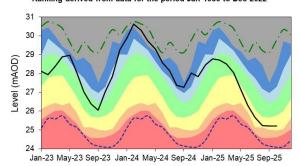
Hindolveston - NORFOLK CHALK Ranking derived from data for the period Sep-1984 to Nov-2022



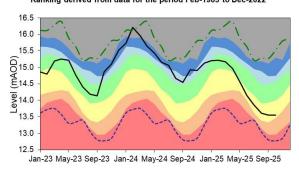
Kenninghall - LITTLE OUSE CHALK Ranking derived from data for the period Aug-1973 to Dec-2022



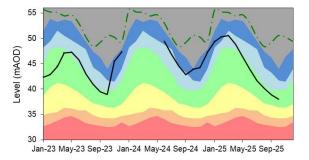
Linton-CAM CHALK
Ranking derived from data for the period Jan-1980 to Dec-2022

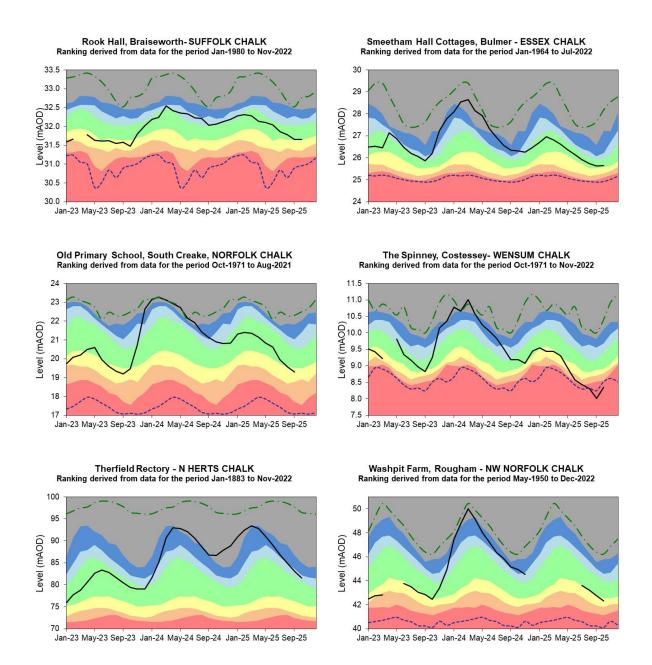


Newmarket - SNAIL CHALK Ranking derived from data for the period Feb-1983 to Dec-2022



Redlands Hall, lckleton - CAM CHALK Ranking derived from data for the period Aug-1963 to Dec-2022

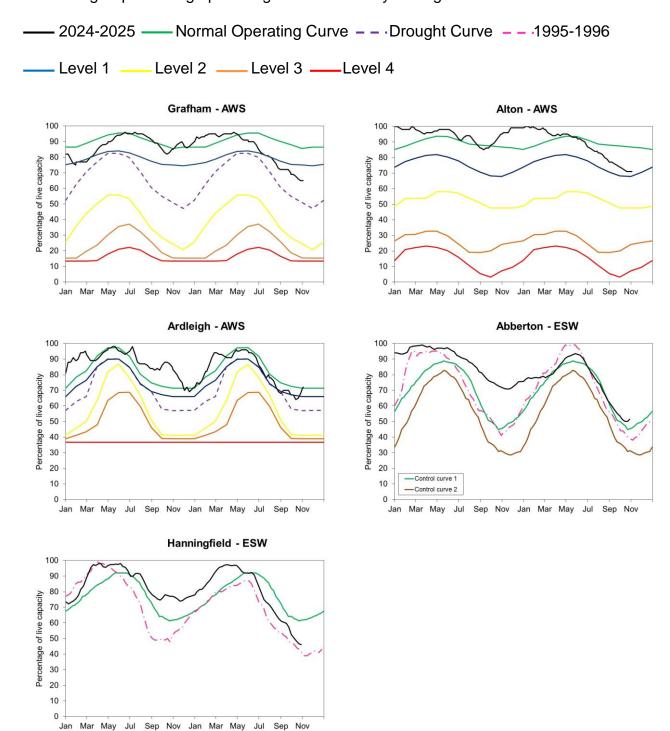




Source: Environment Agency, 2025.

6 Reservoir stocks

Figure 6.1: End of month regional reservoir stocks compared to the normal operating curve, drought curve and dry 1995-1996 stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.

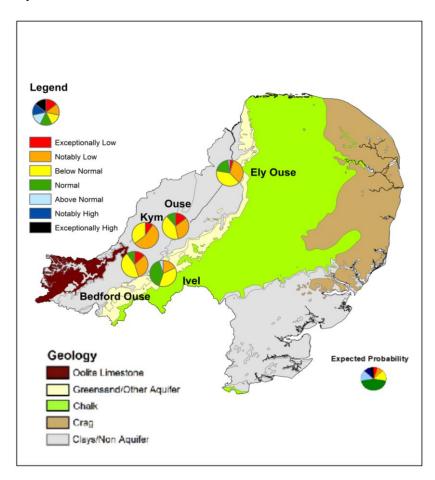


(Source: water companies. For more information on Anglian Water's reservoir level curves, please see Appendix 4 in their <u>Drought Plan</u>).

7 Forward look

7.1 Probabilistic ensemble projection of river flows at key sites in December 2025

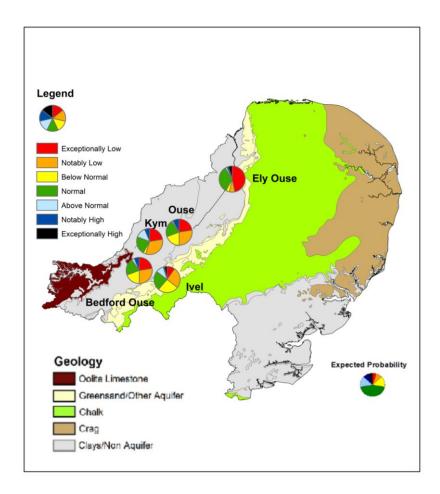
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those which would typically occur 15% of the time. Normal levels are those which would typically occur 44% of the time within the historic record.



Pie charts indicate probability, based on climatology, of the surface water flow at each site being, for example, exceptionally low for the time of year. (Source: Centre for Ecology and Hydrology, Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum, BGS © NERC. Crown copyright. All rights reserved. Environment Agency, 100026380, 2025.

7.2 Probabilistic ensemble projection of river flows at key sites in March 2026

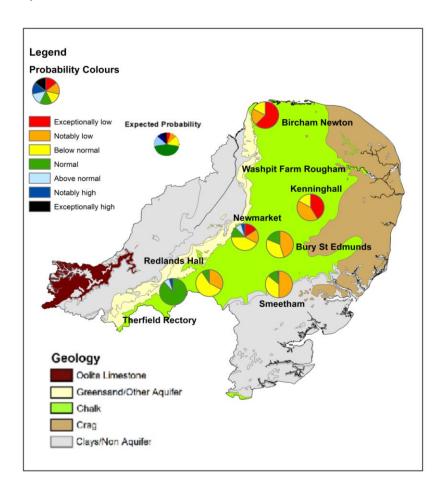
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7.3 Probabilistic ensemble projection of groundwater levels at key sites in March 2026

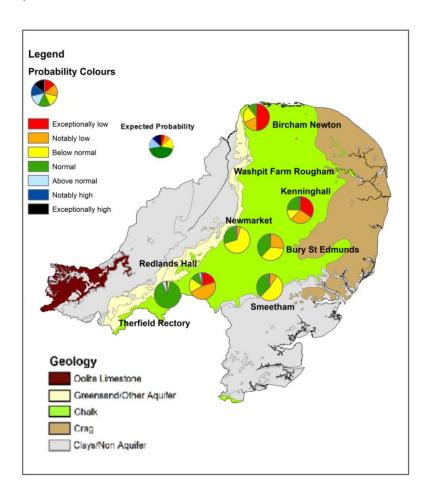
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Pie charts indicate probability, based on climatology, of the groundwater level at each site being, for example, exceptionally low for the time of year. (Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum, BGS © NERC. Crown copyright. All rights reserved. Environment Agency, 100026380, 2025

7.4 Probabilistic ensemble projection of groundwater levels at key sites in September 2026

Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those which would typically occur 15% of the time. Normal levels are those which would typically occur 44% of the time within the historic record.



Pie charts indicate probability, based on climatology, of the groundwater level at each site being, for example, exceptionally low for the time of year. (Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum, BGS © NERC. Crown copyright. All rights reserved. Environment Agency, 100026380, 2025

8 Glossary

8.1 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.

Normal Operating Curve

A reservoir normal operating curve is an optimum storage 'target' or 'control' to ensure security of water supply. It also aims to avoid overfilling of reservoirs resulting in costly over-pumping. It is not expected that a reservoir will always be at its target level. Various factors such as maintenance, raw water quality and supply network issues can affect the ability of a water company to maintain a reservoir at its target level.

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).

8.2 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.

9 Appendices

9.1 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
Broadland Rivers	93	Normal	Below normal	Below normal	Notably low
Cam	82	Normal	Below normal	Notably low	Notably low
Central Area Fenland	87	Normal	Below normal	Notably low	Exceptionally low
East Suffolk	113	Normal	Normal	Normal	Below normal
Little Ouse And Lark	96	Normal	Below normal	Below normal	Notably low
Lower Bedford Ouse	67	Normal	Notably low	Exceptionally low	Notably low
North Essex	107	Normal	Normal	Below normal	Notably low
North Norfolk	73	Normal	Notably low	Notably low	Exceptionally low
Nw Norfolk And Wissey	85	Normal	Below normal	Notably low	Notably low
South Essex	109	Normal	Normal	Notably low	Notably low

Ouse	Upper Bedford Ouse	70	Normal	Below normal	Notably low	Notably low
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9.2 River flows table

Site name	River	Catchment	Oct 2025 band	Sep 2025 band
Abbey Heath	Little Ouse	Little Ouse	Exceptionally low	Exceptionally low
Blunham	lvel	lvel	Normal	Above normal
Bramford	Gipping	Gipping	Normal	Below normal
Burnham Overy	Burn	Burn	Below normal	Below normal
Burnt Mill	Rhee	Rhee	Below normal	Normal
Cappenham	Tove	Tove	Below normal	Below normal
Colney	Yare	Yare	Notably low	Notably low
Denver	Ely Ouse	Cutoff and Renew Channel	Exceptionally low	Notably low
Dernford	Cam	Cam	Below normal	Below normal
Heacham	Heacham	Heacham	Below normal	Below normal
Ingworth	Bure	Bure	Below normal	Below normal
Lexden	Colne	Colne Essex	Below normal	Below normal
Marham	Nar	Nar	Notably low	Below normal
Needham Weir Total	Waveney (lower)	Waveney	Notably low	Notably low

Northwold Total	Wissey	Wissey	Exceptionally low	Exceptionally low
Offord (gross Flows)	Great Ouse	Ouse Beds	Normal	Normal
Roxton	Great Ouse	lvel	Below normal	Normal
Springfield	Chelmer	Chelmer Upper	Normal	Normal
Swanton Morley Total	Wensum	Wensum	Notably low	Below normal
Temple	Lark	Lark	Notably low	Notably low
Willen	Ouzel	Ouzel	No Data	No Data

9.3 Groundwater table

Site name	Aquifer	End of Oct 2025 band	End of Sep 2025 band
Bath Spring	Ivel Chalk	No Data	No Data
Biggleswade	Ivel Woburn Sands	Normal	Normal
Bircham Newton	North West Norfolk Chalk	Below normal	Below normal
Breckland	Wissey Chalk	Notably low	Below normal
Bury St Edmunds	Upper Lark Chalk	Normal	Normal
Castle Farm, Offton	East Suffolk Chalk	Below normal	Normal
Gog Magog, Stapleford	Cam Chalk	Notably low	Notably low
Hazlewood Common	East Suffolk Crag	No Data	No Data
Hindolveston	Norfolk Chalk	Exceptionally low	Notably low
Kenninghall	Little Ouse Chalk	Below normal	Normal
Linton	Cam Chalk	Below normal	Below normal
Newmarket	Snail Chalk	Below normal	Below normal

Old Primary School, South Creake	North Norfolk Chalk	No Data	Below normal
Redlands Hall, Ickleton	Cam Chalk	Normal	Normal
Rook Hall, Braiseworth	East Suffolk Chalk	Normal	Normal
Smeetham Hall Cottages, Bulmer	North Essex Chalk	Normal	Normal
The Spinney, Costessey	Wensum Chalk	Exceptionally low	Exceptionally low
Washpit Farm, Rougham	North West Norfolk Chalk	Below normal	Normal
Therfield Rectory	Upper Lee Chalk	Above normal	Above normal
Fringford P.s.	Upper Bedford Ouse Oolitic Limestone (great)	Normal	Normal

9.4 Ensemble projections tables

9.4.1 Probabilistic ensemble projection of river flows at key sites in December 2025

Site	Bedford Ouse	Kym	lvel	Ouse	Ely Ouse
Exceptionally low	13	10	0	15	4
Notably low	32	55	18	32	33
Below normal	45	35	37	42	43
Normal	10	0	40	11	19
Above normal	0	0	5	0	2
Notably high	0	0	0	0	0
Exceptionally high	0	0	0	0	0

9.4.2 Probabilistic ensemble projection of river flows at key sites in March 2026

Site	Bedford Ouse	Kym	lvel	Ouse	Ely Ouse
Exceptionally low	23	23	10	23	44
Notably low	27	32	26	27	6
Below normal	19	3	26	19	6
Normal	21	23	24	21	33
Above normal	3	13	10	2	4
Notably high	6	6	2	8	4
Exceptionally high	0	0	3	0	4

9.4.3 Probabilistic ensemble projection of groundwater levels at key sites in March 2026

Site	Therfield Rectory	Redlands Hall	Newmarket	Bircham Newton	Kenninghall	Bury St Edmunds	Smeetham
Exceptionally low	0.0	0.0	15.6	62.5	35.9	0.0	0.0
Notably low	0.0	32.8	17.2	20.3	45.3	45.3	50.0
Below normal	0.0	57.8	42.2	17.2	18.8	35.9	35.9
Normal	88.5	9.4	12.5	0.0	0.0	18.8	12.5
Above normal	6.6	0.0	7.8	0.0	0.0	0.0	0.0
Notably high	4.9	0.0	4.7	0.0	0.0	0.0	1.6
Exceptionally high	0.0	0.0	0.0	0.0	0.0	0.0	0.0

9.4.4 Probabilistic ensemble projection of groundwater levels at key sites in September 2026

Site	Therfield Rectory	Redlands Hall	Newmarket	Bircham Newton	Kenninghall	Bury St Edmunds	Smeetham
Exceptionally low	0.0	20.3	0.0	50.0	34.4	0.0	0.0
Notably low	0.0	46.9	4.7	18.8	28.1	26.6	9.4
Below normal	3.3	17.2	65.6	20.3	12.5	35.9	53.1
Normal	90.2	10.9	26.6	10.9	23.4	35.9	34.4
Above normal	4.9	3.1	1.6	0.0	0.0	0.0	1.6
Notably high	0.0	1.6	1.6	0.0	1.6	1.6	0.0
Exceptionally high	1.6	0.0	0.0	0.0	0.0	0.0	1.6