Monthly water situation report: East Anglia

1 Summary - September 2025

Rainfall for September 2025 was standard for the time of year, with rainfall totals within the normal range across all areas. The overall soil moisture deficit changed little over the course of the month, the regional average increasing from 124mm at the end of August to 125mm by the end of September. Some of the more reactive rivers showed a temporary response to observed rainfall, though have since fallen with little change to base flow. Groundwater levels continue to fall, with all sites at normal or lower levels. Public water supply reservoir stocks ended the month ranging from 52% to 69% capacity.

1.1 Rainfall

Rainfall during September 2025 ranged from 81% to 122% of the long term average [LTA] for the month. East Suffolk received noticeably more than other catchments, receiving the higher 122% with the only other catchment receiving more than 100% of the LTA being the Upper Bedford Ouse at 107%. The cumulative 3-month total rainfall for all catchments has been below normal, with the exception of East Suffolk and Broadland Rivers which have instead received normal totals. The cumulative 6-month total shows the extent of the dry spring and summer seen this year, with exceptionally low totals across south-western catchments, and notably low totals across the northeast, again with the exception of East Suffolk which is below normal.

1.2 Soil moisture deficit and recharge

The regional soil moisture deficit [SMD] at the end of September was 26-50mm higher than normal for the time of for all catchments with the exception of East Suffolk, North Essex and South Essex which were 6-25mm above the LTA. Fenland was the only catchment to end the month with an SMD greater than 131mm.

1.3 River flows

River flows across East Anglia during September 2025 continued to recede, displaying only a temporary response to the observed rainfall throughout the month. Monthly average flows ranged from 28% to 107% of the LTA, the Ivel being the only river with above normal flows and both the Ely Ouse and Wissey displaying exceptionally low flows. Flow at Denver on the

Ely Ouse have dramatically increased compared to August, the monthly average increasing from 3% to 35% of the LTA in September.

1.4 Groundwater levels

Groundwater levels continue to fall across all catchments which is expected for the time of year. Levels range from above normal at Therfield to exceptionally low in Costessey. While levels have dropped at all sites, some have fallen at a reduced rate, both Washpit Farm and Breckland ending the month at a higher banding than they did for August despite lower levels.

1.5 Reservoir stocks

All reservoirs with the exception of Abberton have fallen below their respective normal operating curves for the time of year as stocks continue to fall. Stocks ended the month ranging from 52% to 69% capacity.

1.6 Forward look

1.6.1 Probabilistic ensemble projections for river flows at key sites

Surface water flows are projected to continue declining, with a higher likelihood of below normal or dryer flows at all sites with the exception of the Ivel by December 2025. The March 2026 projection forecasts slightly higher odds of drier flows, with increased likelihood of notably low and exceptionally low flows.

1.6.2 Probabilistic ensemble projections for groundwater levels in key aquifers

Groundwater levels are projected to continue dropping, and have a high chance of being either below normal or lower levels by March 2026. The September 2026 projection predicts much the same, though with a higher likelihood of lower levels. Redfield is an exception to both projections, with a high degree in confidence of normal or higher levels.

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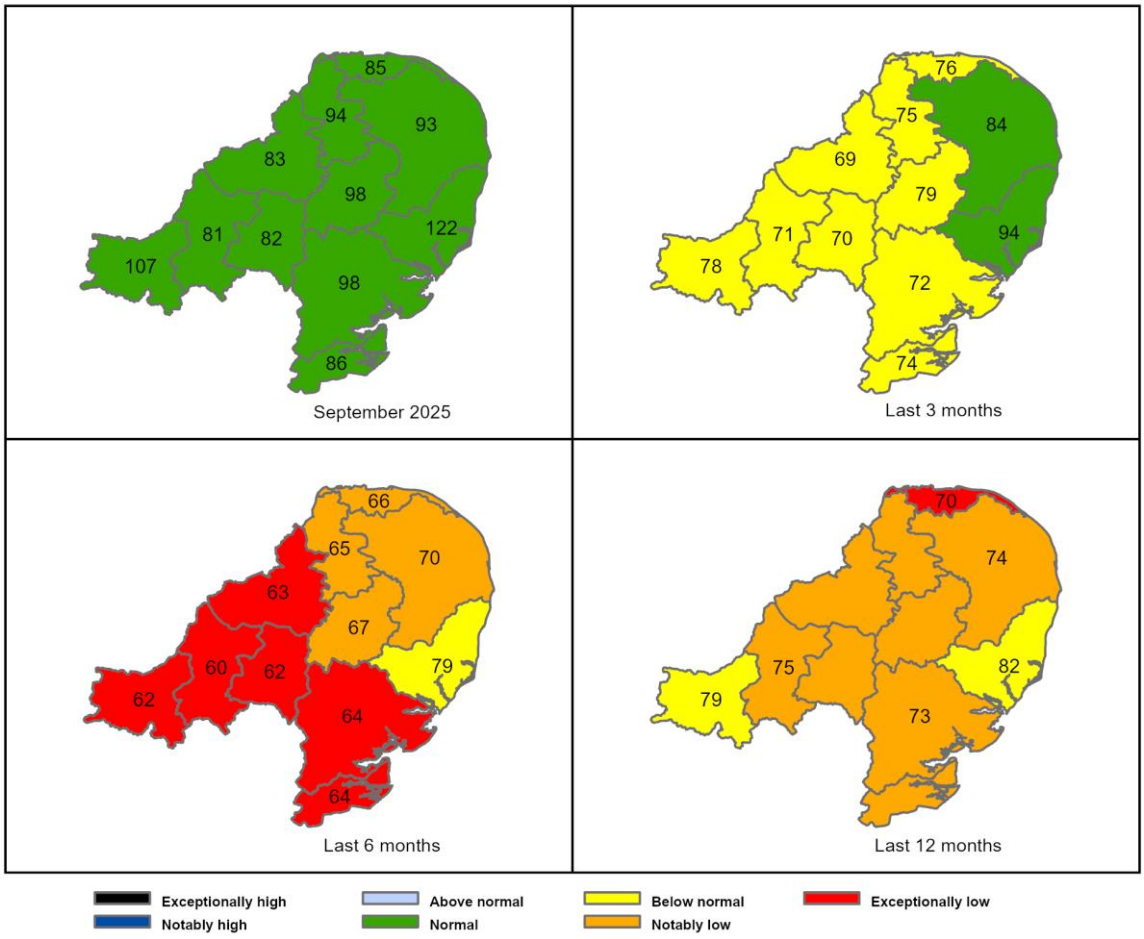
2 Rainfall

2.1 Rainfall map

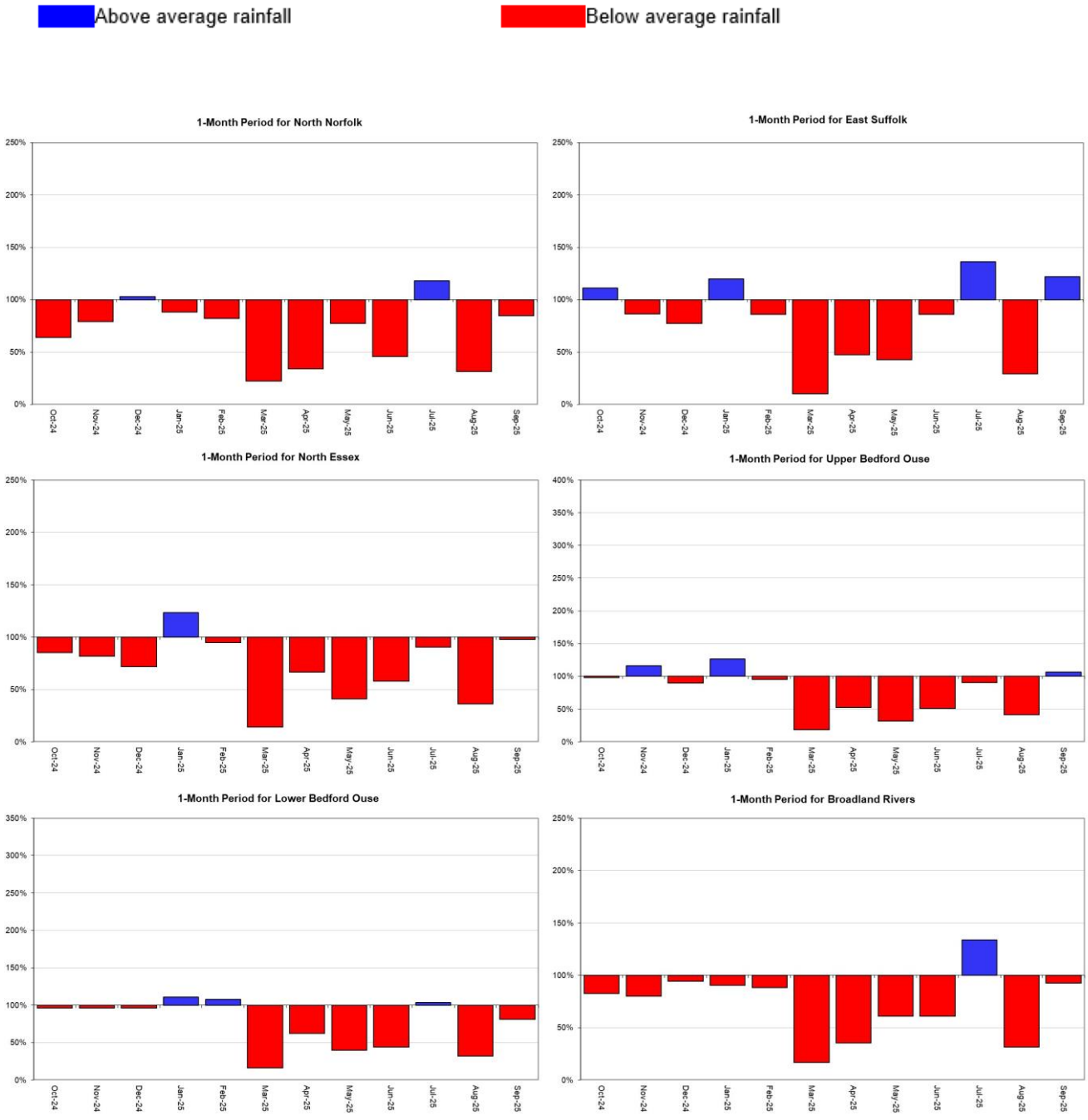
Figure 2.1: Total rainfall for hydrological areas across East Anglia, expressed as a percentage of long term average rainfall for the current month (up to 30 September 2025), the last 3 months, the last 6 months, and the last 12 months. Category classes are based on an analysis of respective historic totals. Table available in the appendices with detailed information.

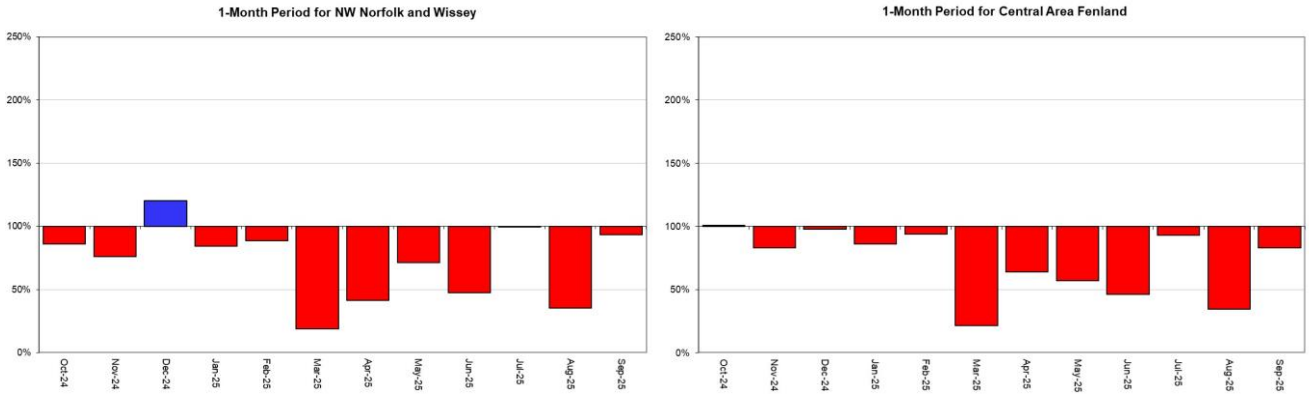


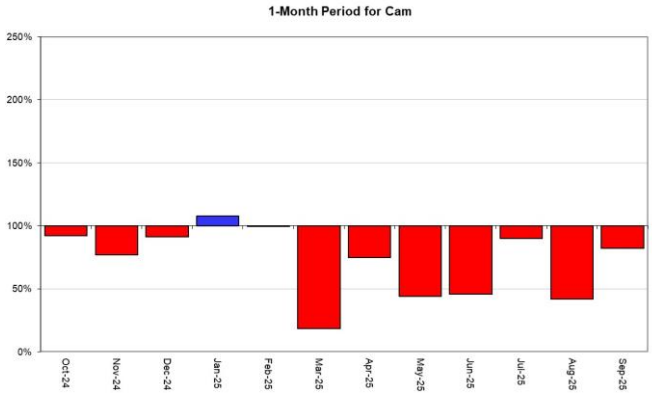
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2025). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved.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

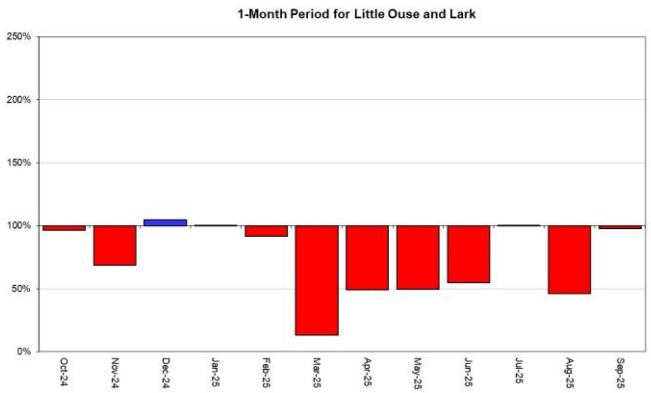
2.2 Rainfall charts

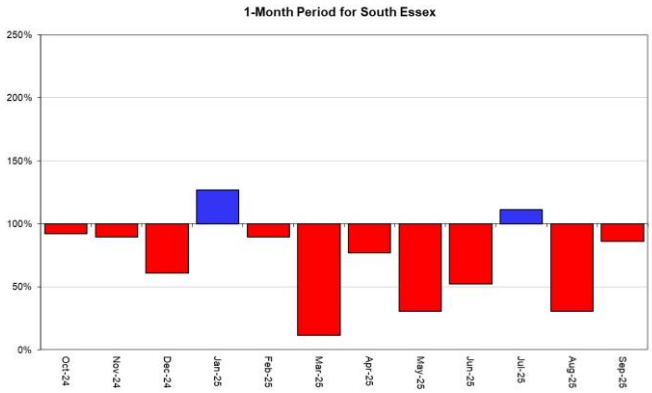
Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each region and for England.





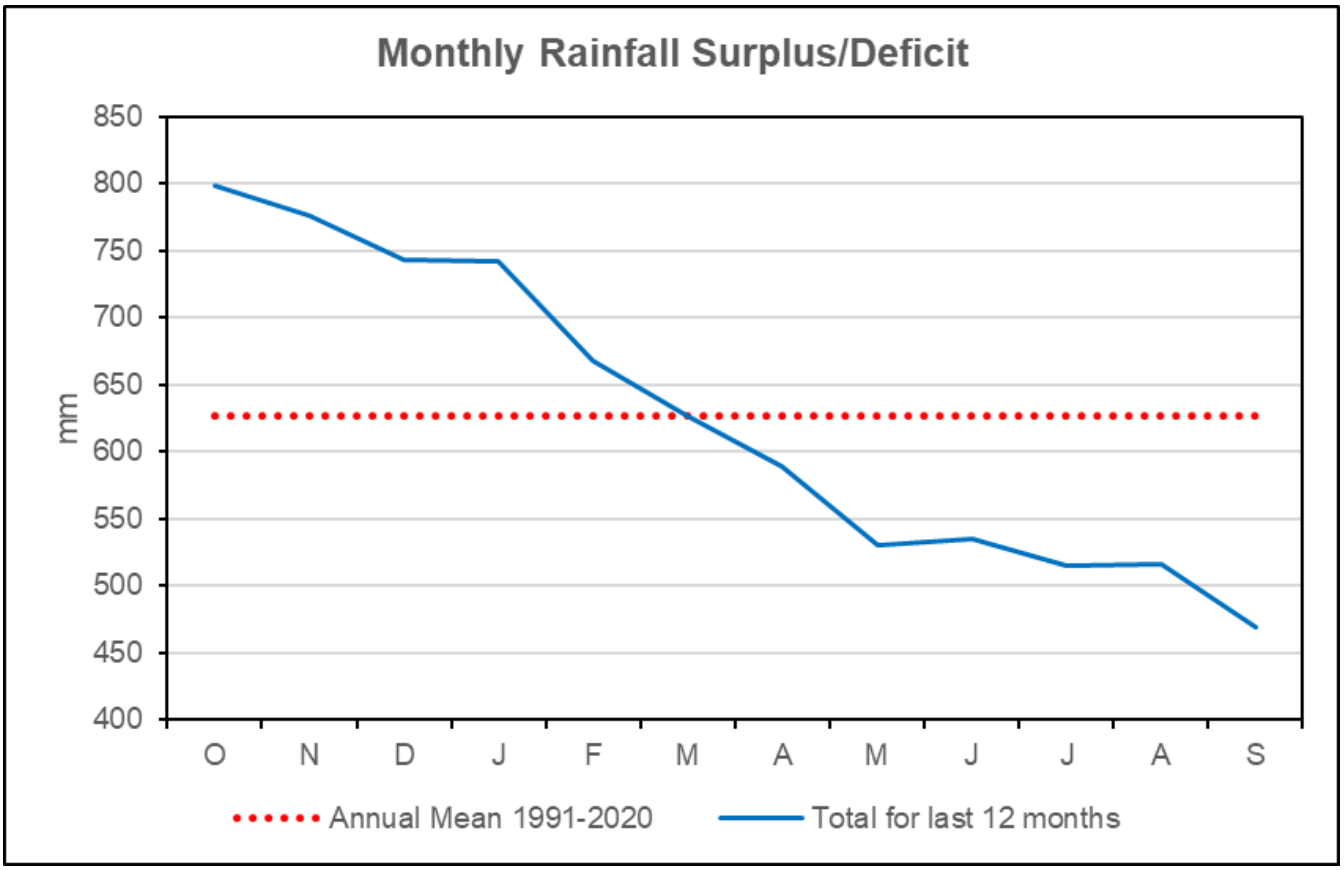






HadUK rainfall data. (Source: Met Office. Crown copyright, 2025).

2.3 Monthly rainfall surplus deficit chart

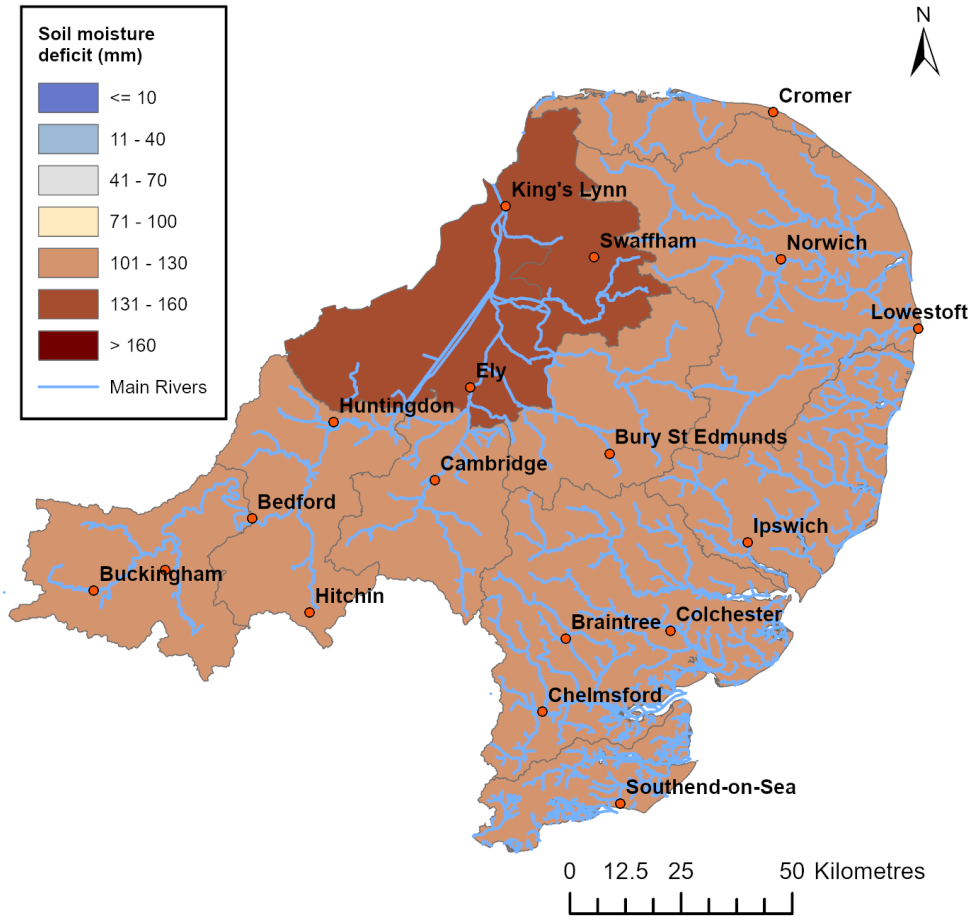


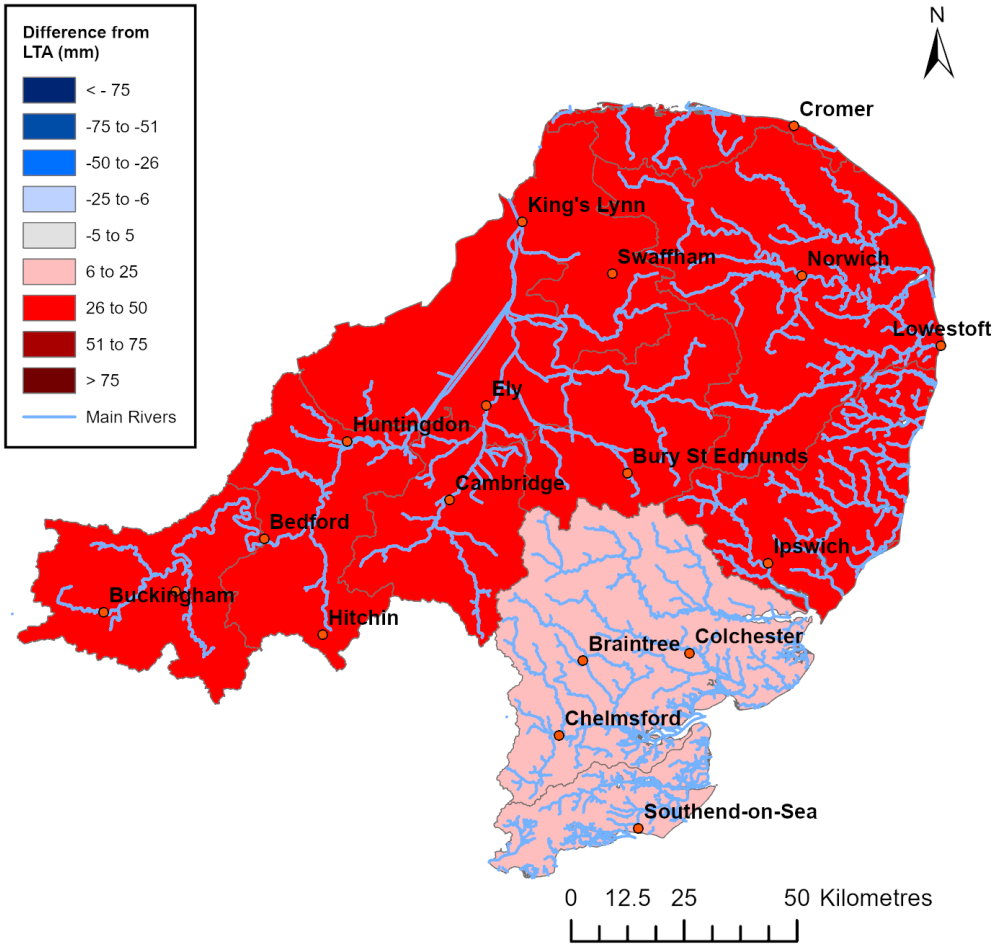
HadUK rainfall data. (Source: Met Office. Crown copyright, 2025).

3 Soil moisture deficit

3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficit values for 30 September 2025. Values based on the weekly MORECS data for real land use.

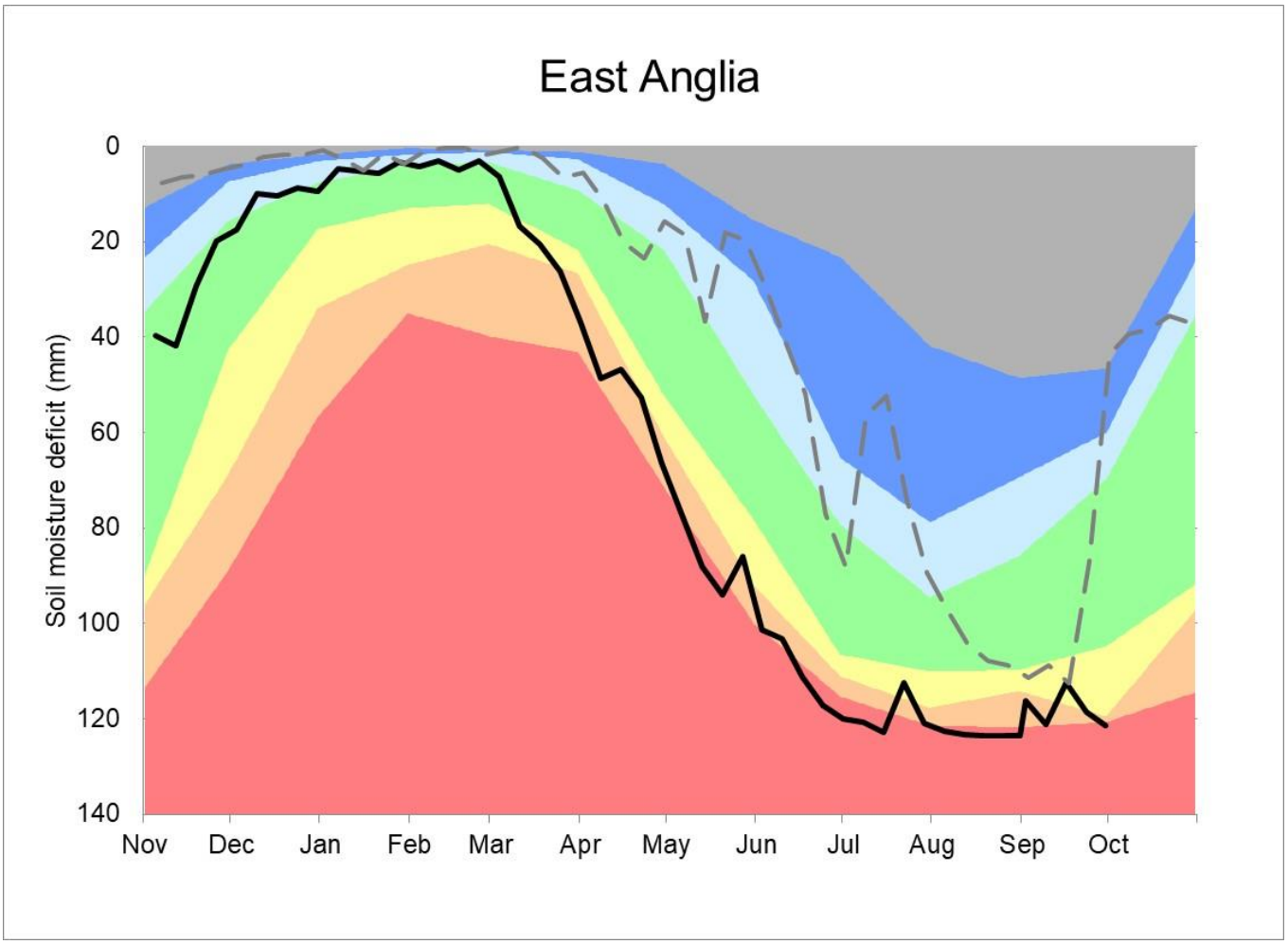




(Source: Met Office. Crown copyright, 2025). All rights reserved. Environment Agency, 100024198, 2025.

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.

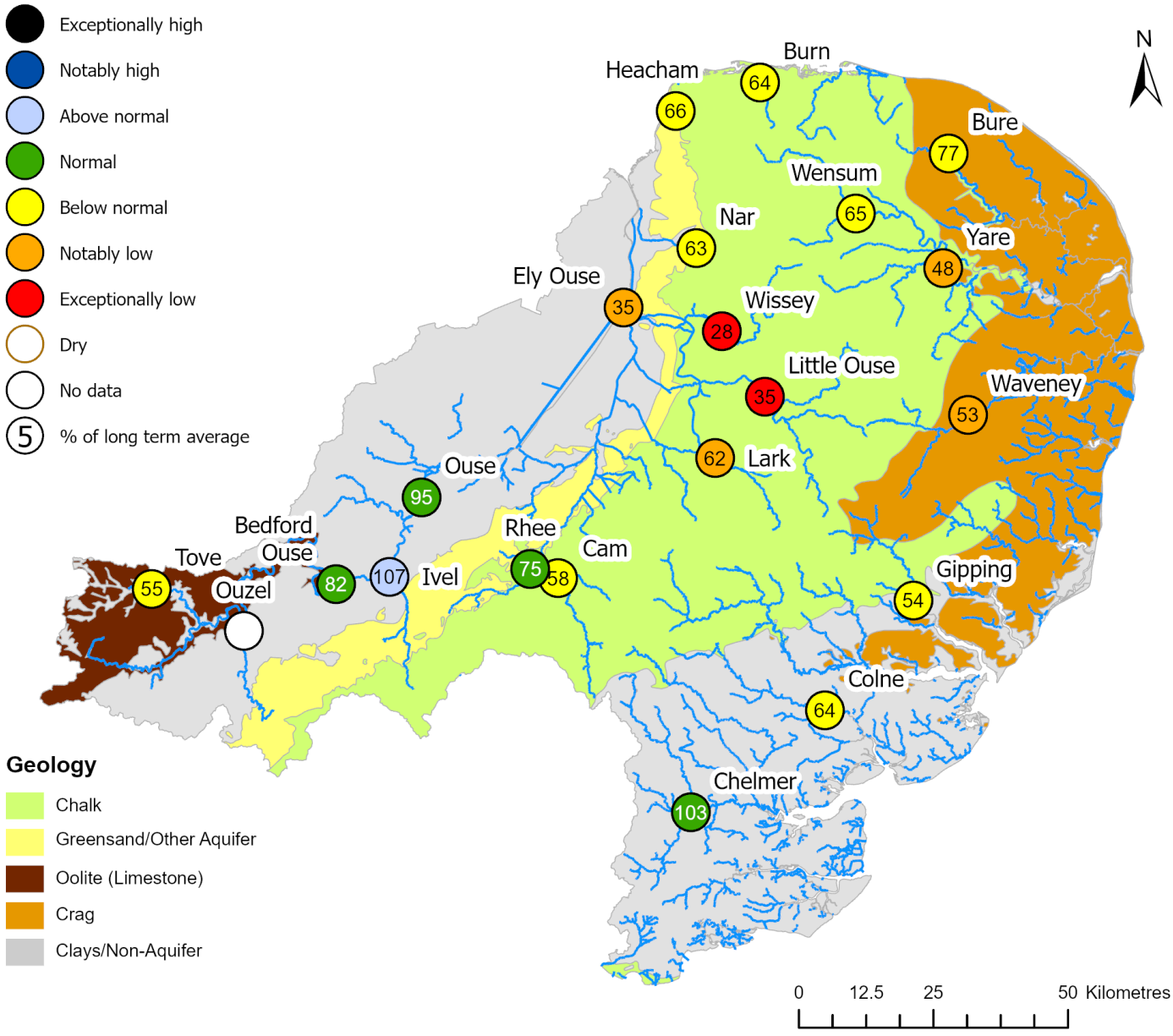


(Source: Met Office. Crown copyright, 2025). All rights reserved. Environment Agency, 100024198, 2025

4 River flows

4.1 River flows map

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



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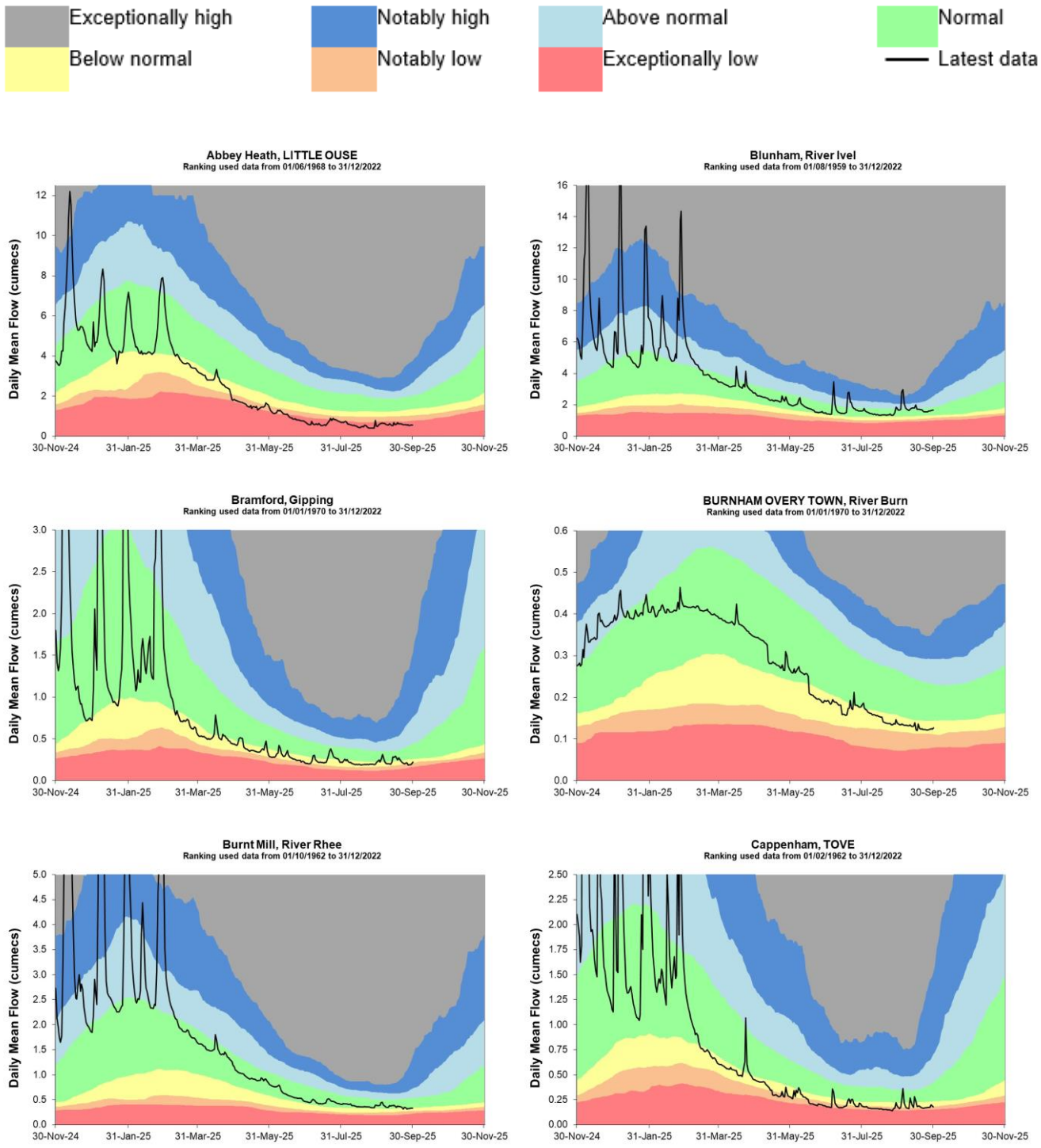
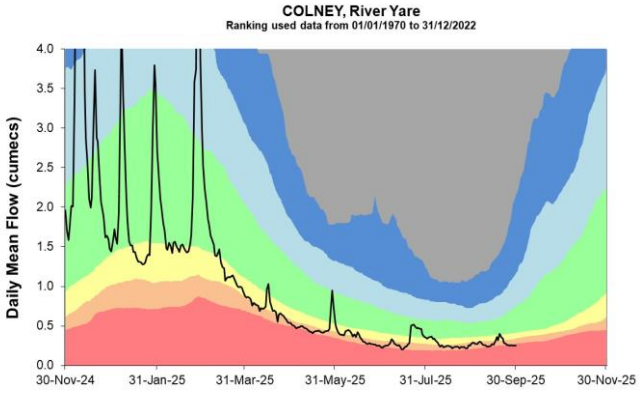
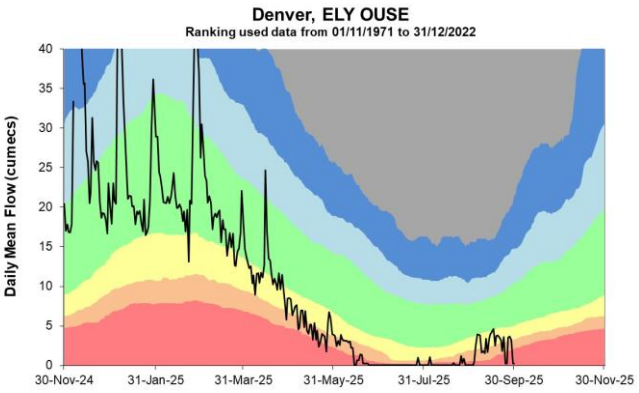
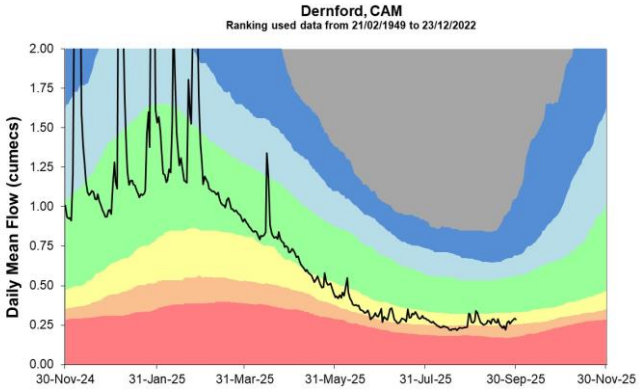
4.2 River flow charts

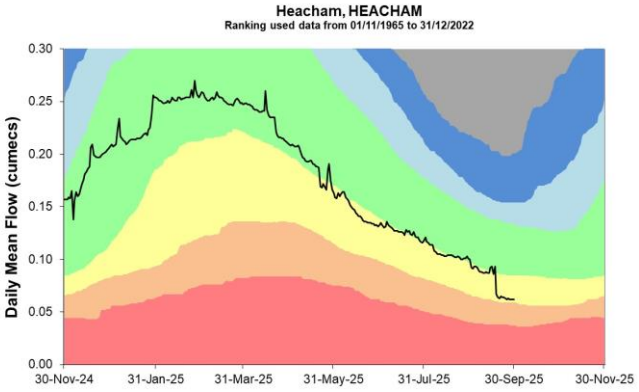
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

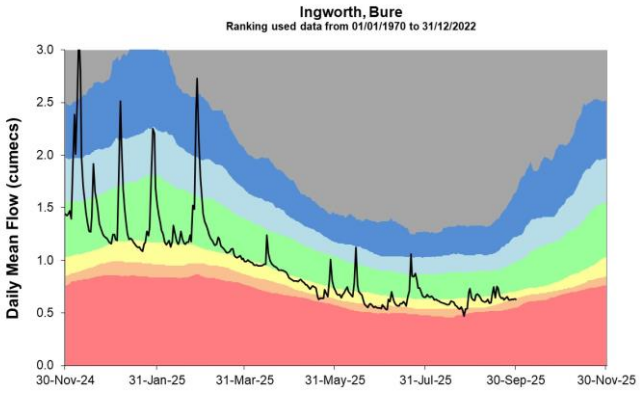


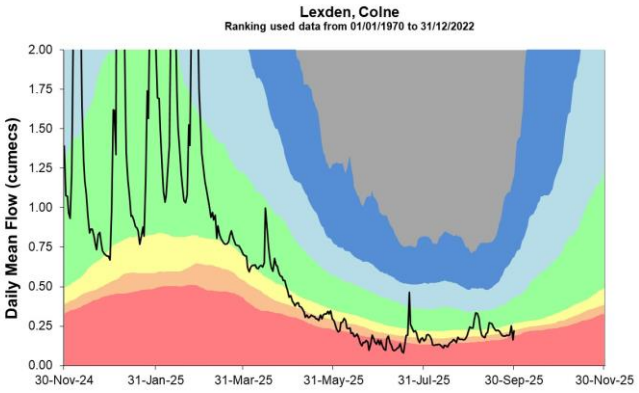

COLNEY, River Yare
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25

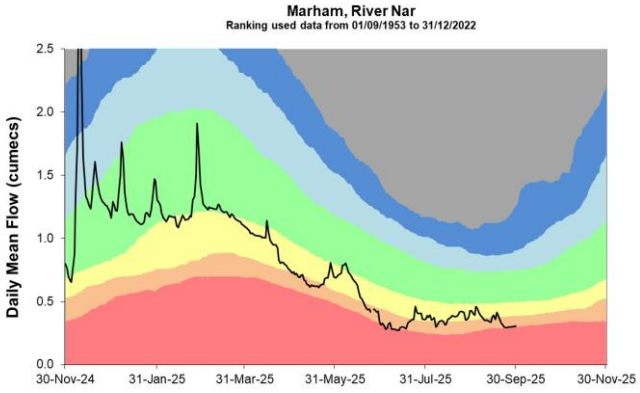

Denver, ELY OUSE
Ranking used data from 01/11/1971 to 31/12/2022
Daily Mean Flow (cumecs)
0
5
10
15
20
25
30
35
40
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25


Dernford, CAM
Ranking used data from 21/02/1949 to 23/12/2022
Daily Mean Flow (cumecs)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25


Heacham, HEACHAM
Ranking used data from 01/11/1965 to 31/12/2022
Daily Mean Flow (cumecs)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25


Ingworth, Bure
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25


Lexden, Colne
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25


Marham, River Nar
Ranking used data from 01/09/1953 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.5
1.0
1.5
2.0
2.5
30-Nov-24
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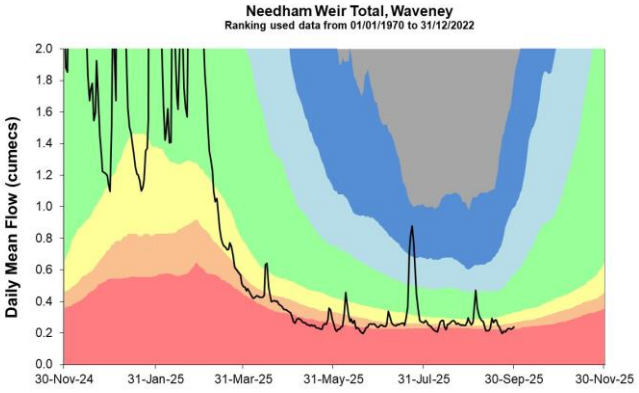
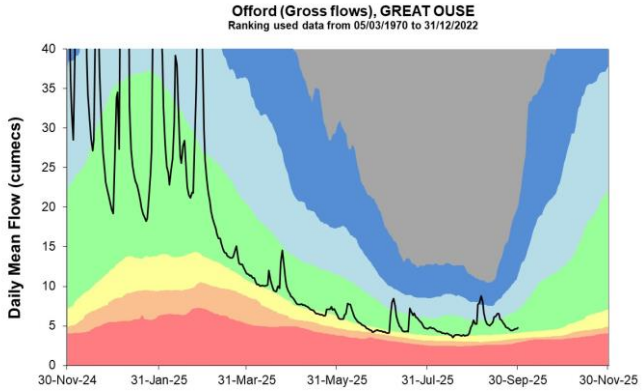
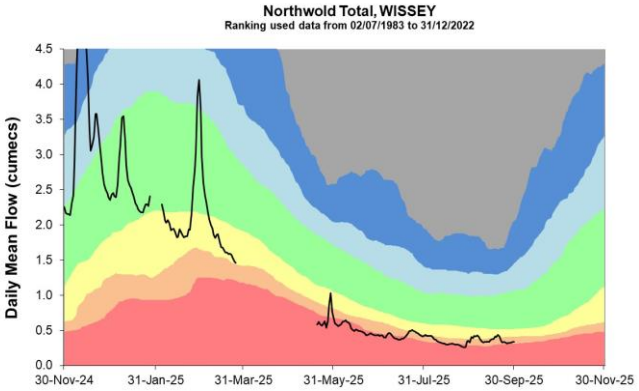
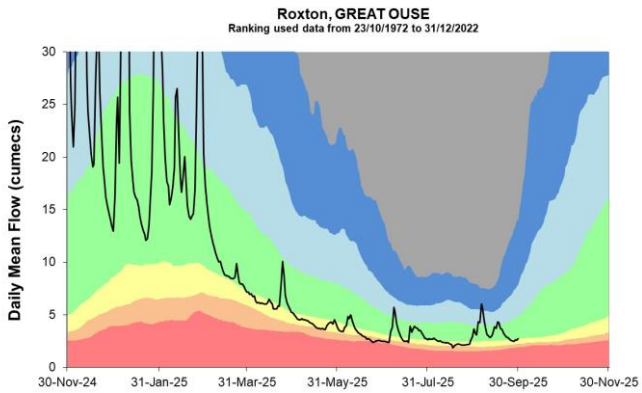
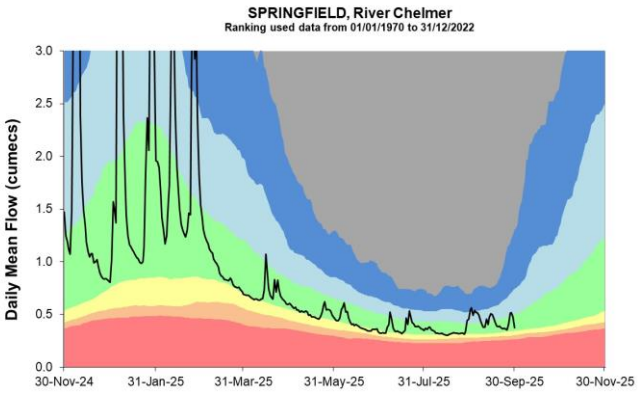
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25

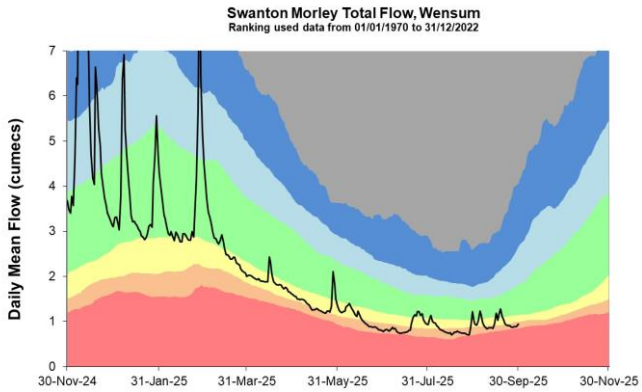

Needham Weir Total, Waveney
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25
30-Nov-25

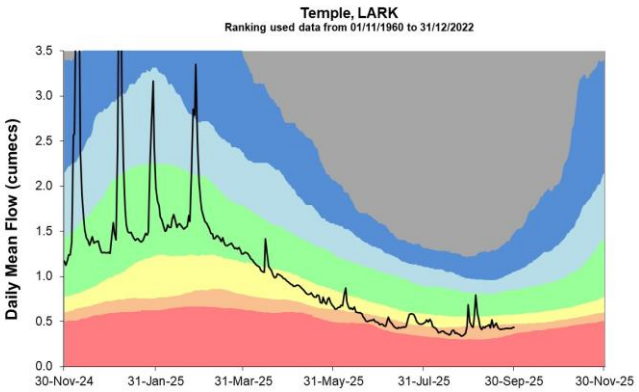


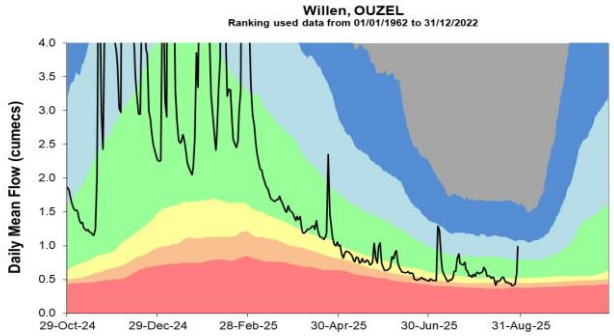










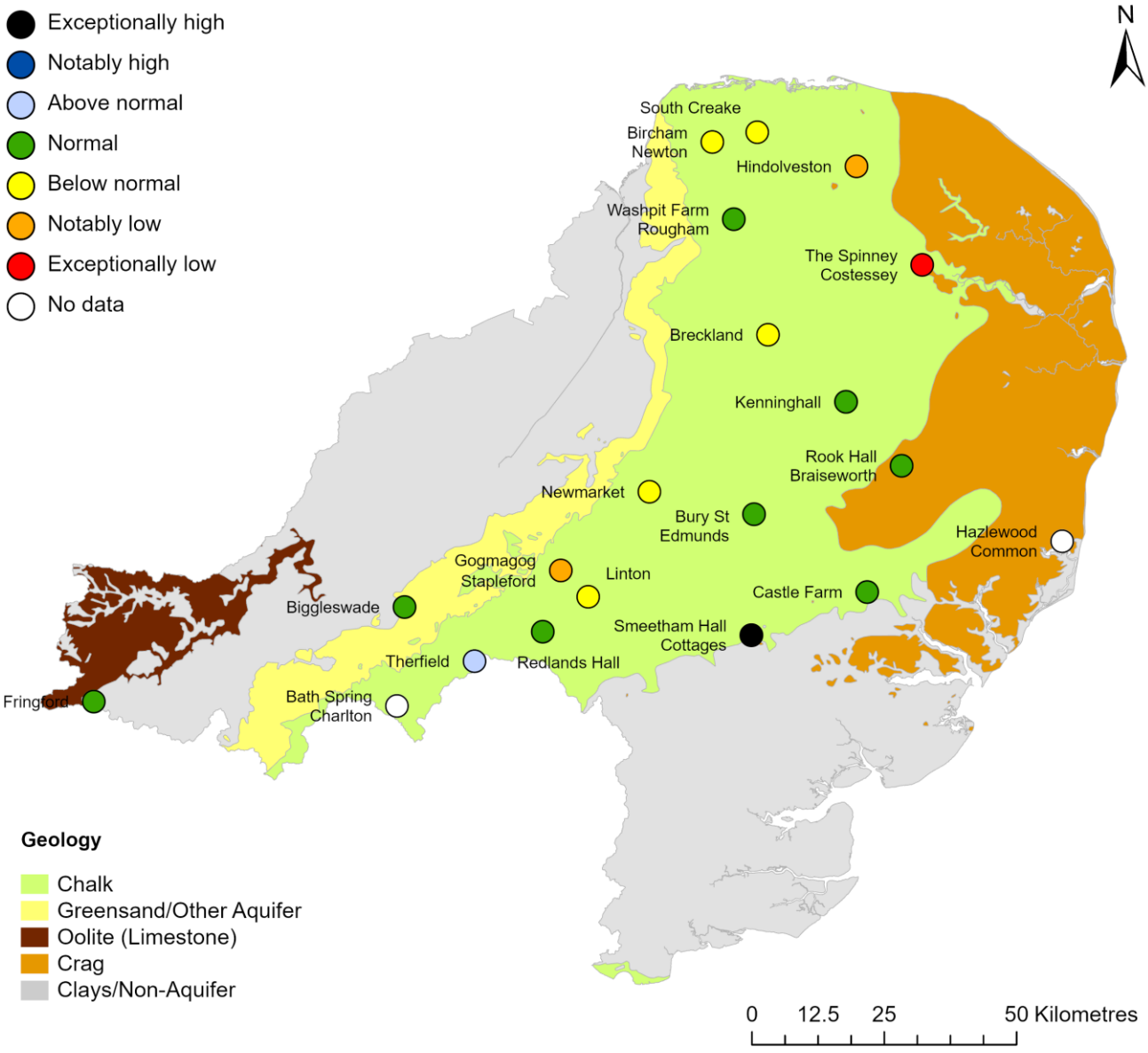


Source: Environment Agency.

5 Groundwater levels

5.1 Groundwater levels map

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



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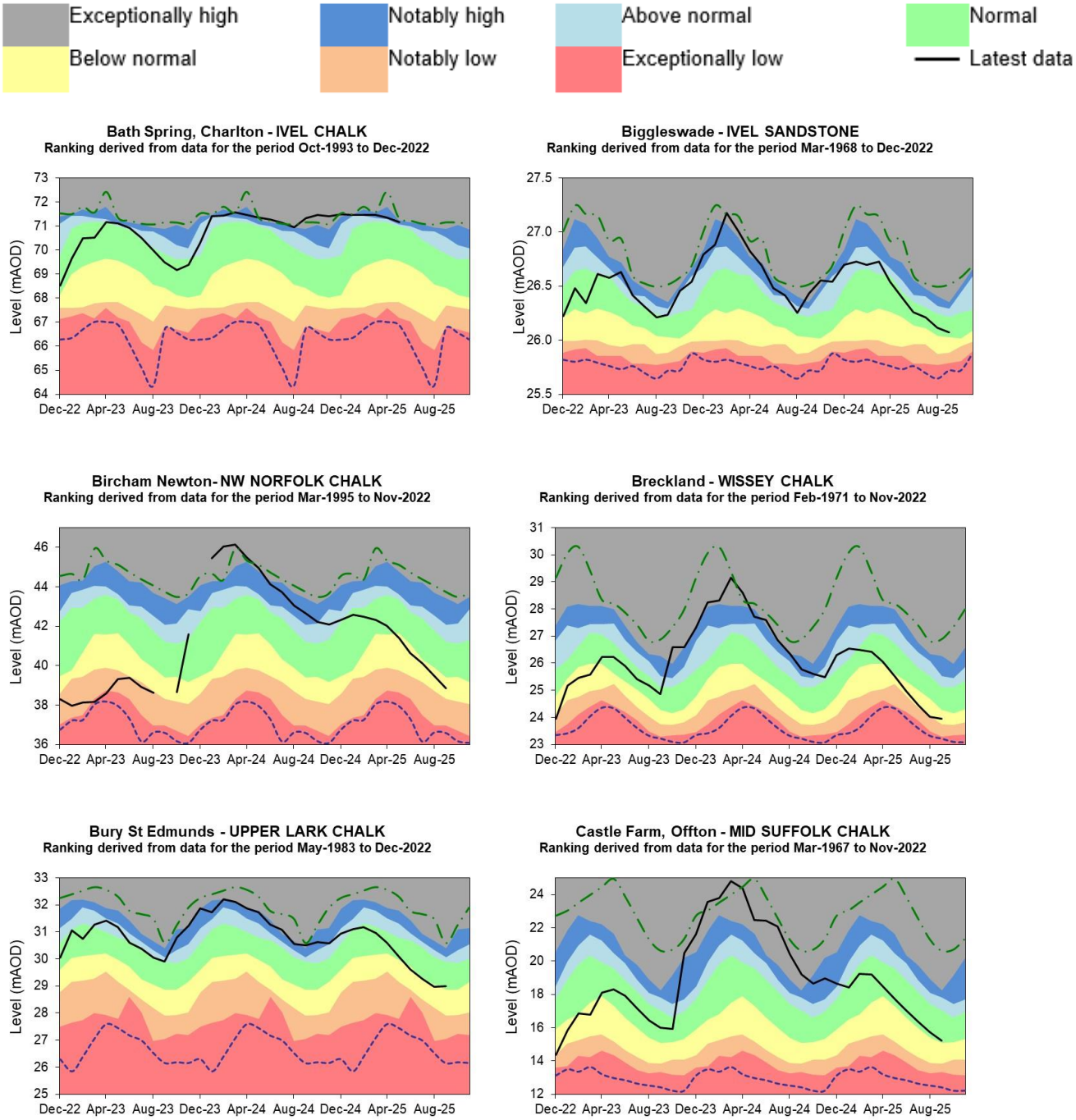
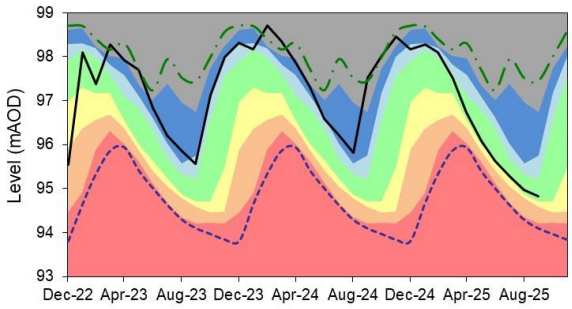
5.2 Groundwater level charts

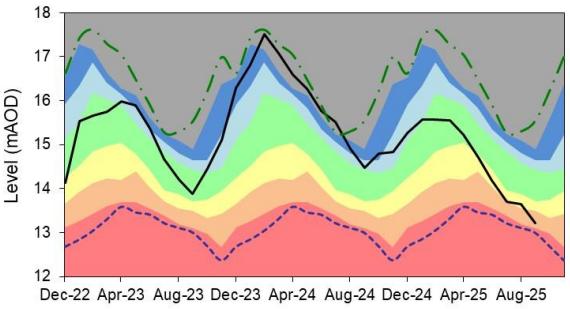
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.



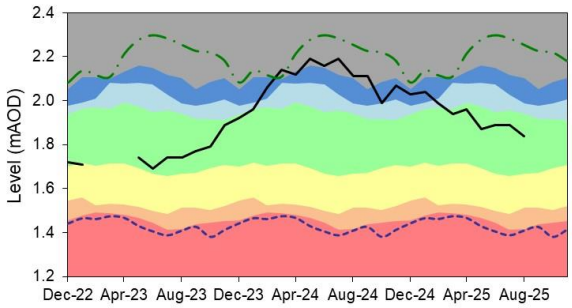
Fringford - GREAT OOLITE
Ranking derived from data for the period Sep-1980 to Dec-2022



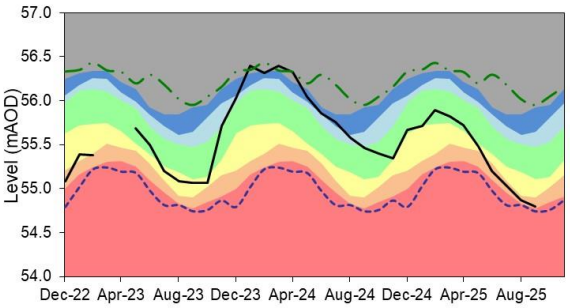
Gog Magog, Stapleford - CAM CHALK
Ranking derived from data for the period Jan-1980 to Dec-2022



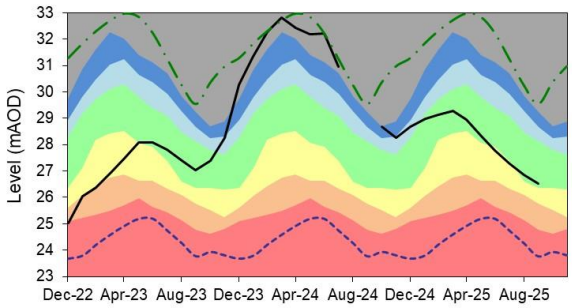
Hazlewood Common - SUFFOLK CRAG
Ranking derived from data for the period Oct-1988 to Nov-2022



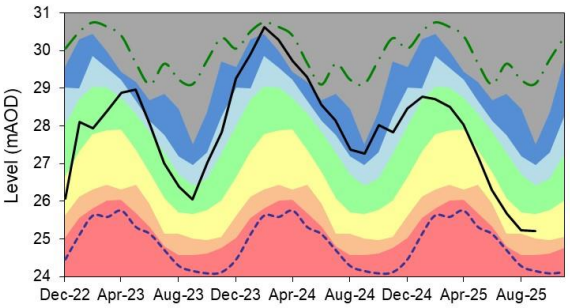
Hindolveston - NORFOLK CHALK
Ranking derived from data for the period Sep-1984 to Nov-2022



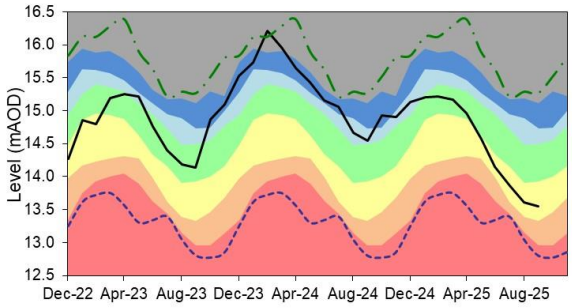
Kenninghall - LITTLE OUSE CHALK
Ranking derived from data for the period Aug-1973 to Dec-2022



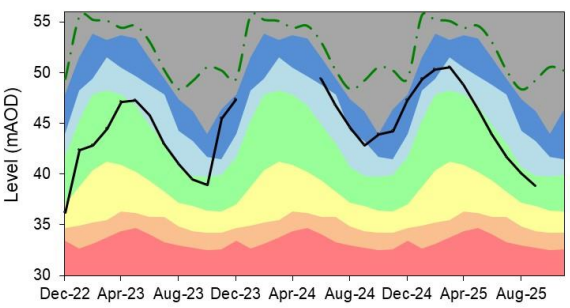
Linton- CAM CHALK
Ranking derived from data for the period Jan-1980 to Dec-2022

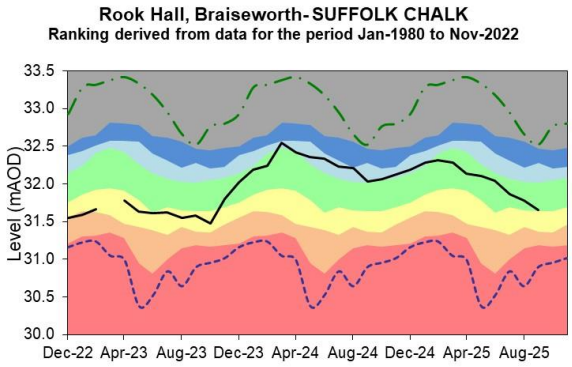


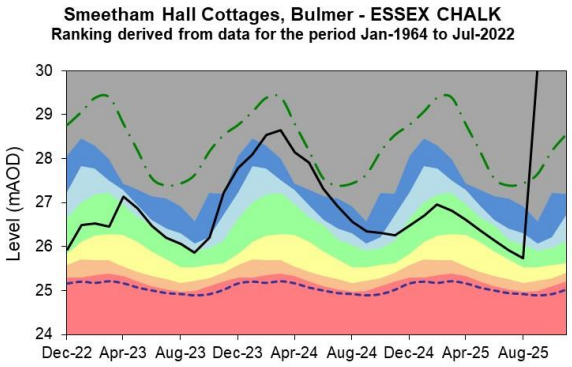
Newmarket - SNAIL CHALK
Ranking derived from data for the period Feb-1983 to Dec-2022

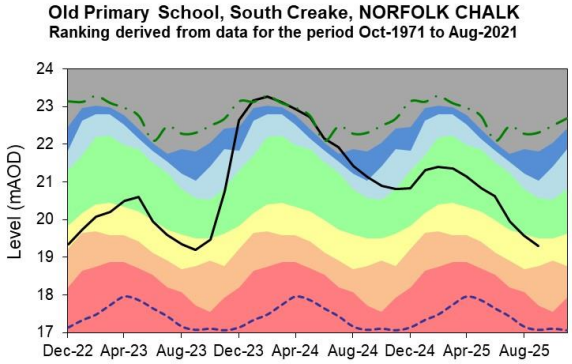


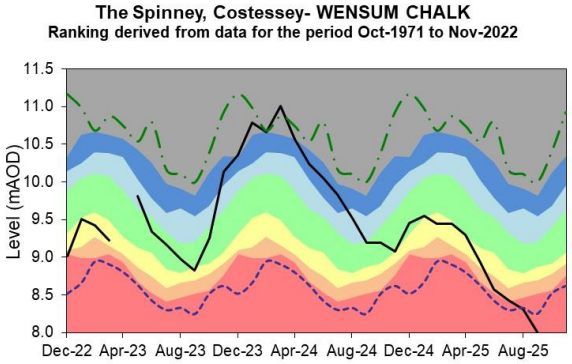
Redlands Hall, Ickleton - CAM CHALK
Ranking derived from data for the period Aug-1963 to Dec-2022

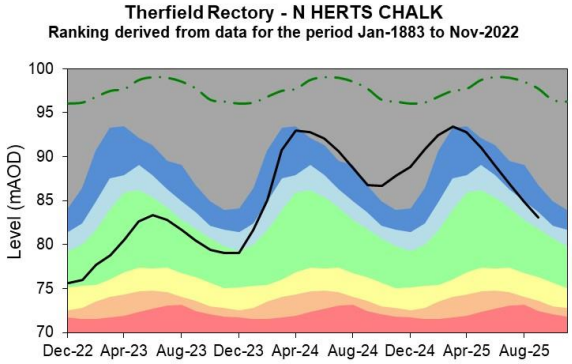


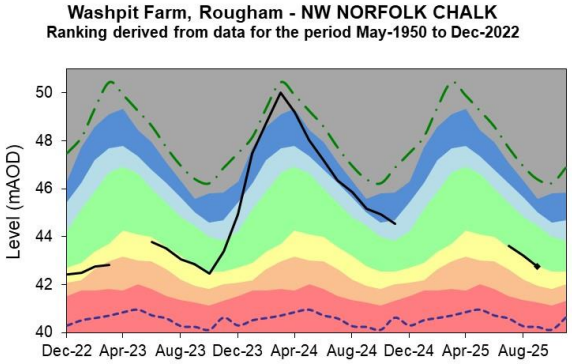








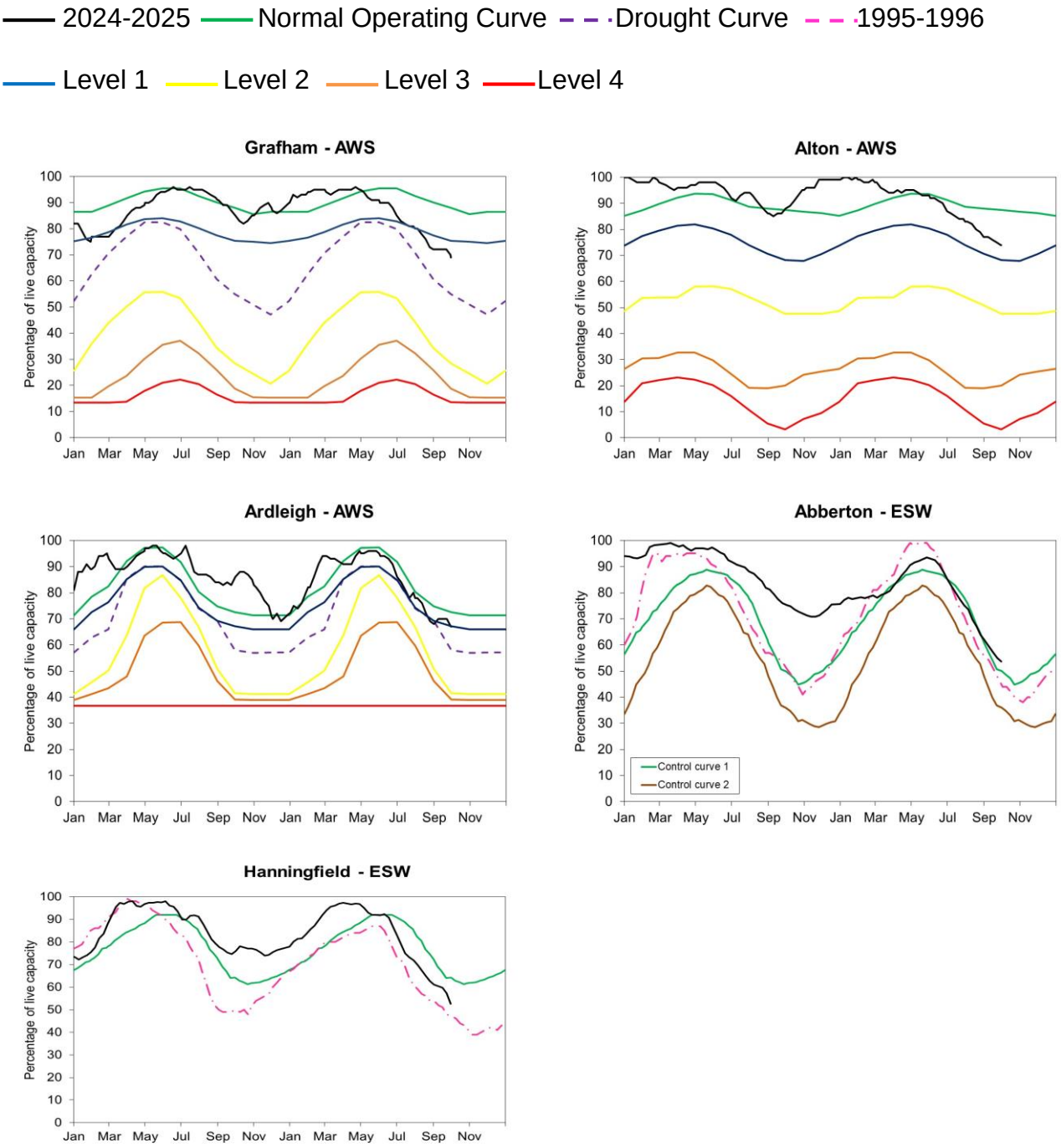




Source: Environment Agency, 2025.

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.

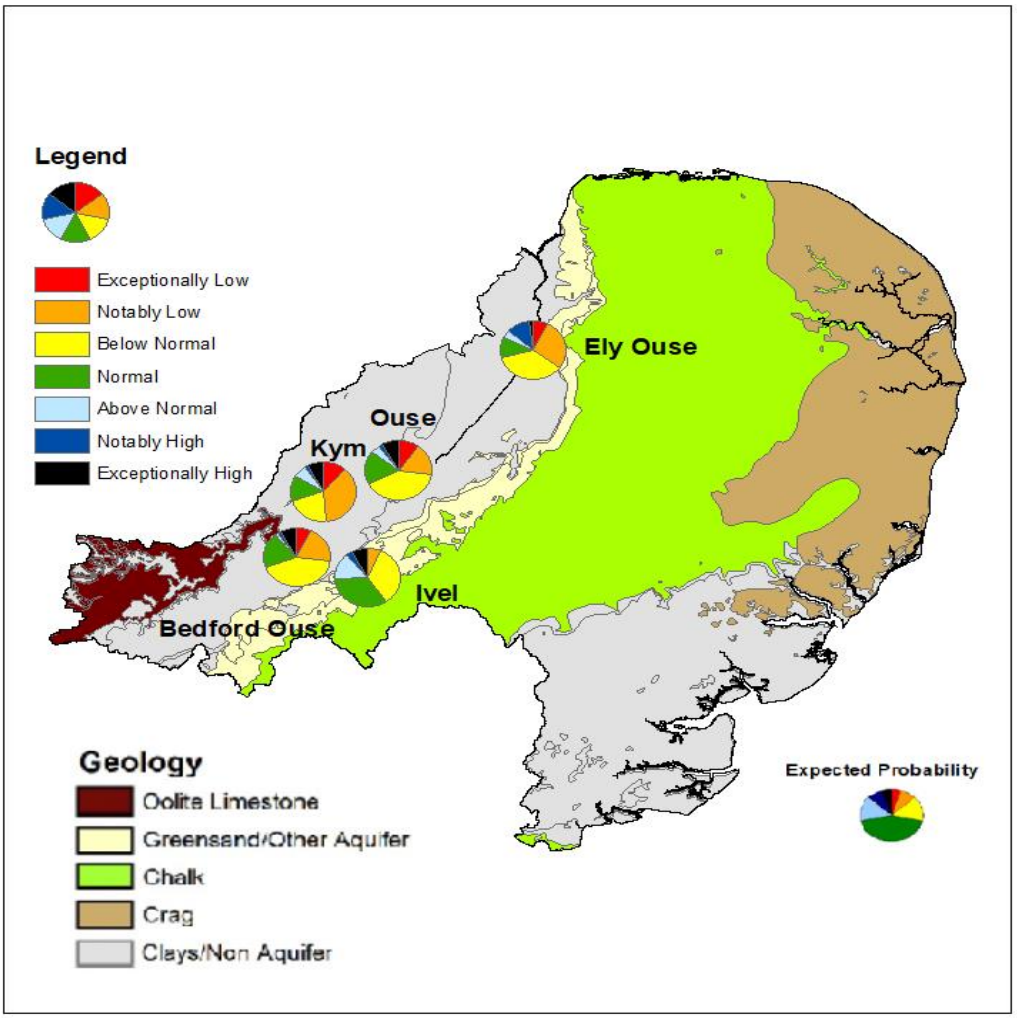


(Source: water companies. For more information on Anglian Water's reservoir level curves, please see Appendix 4 in their Drought Plan).

7 Forward look

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

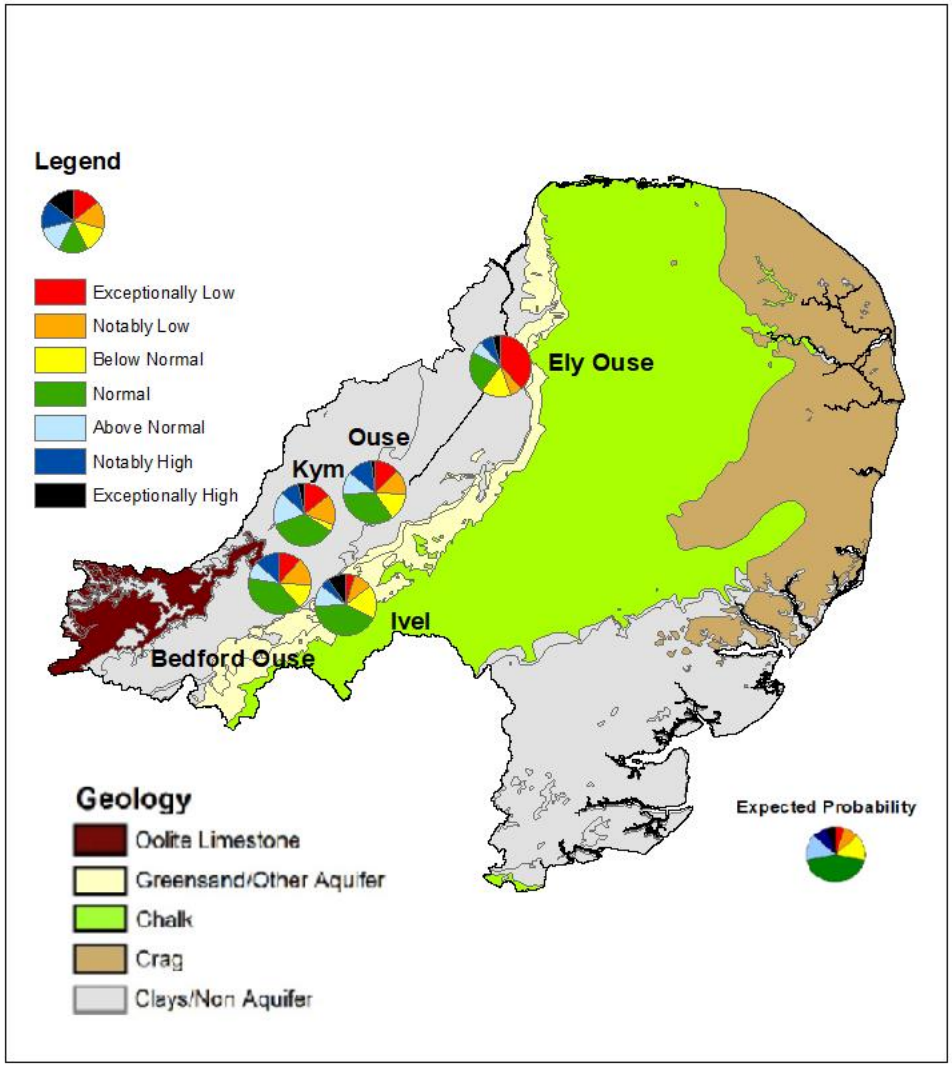
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those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

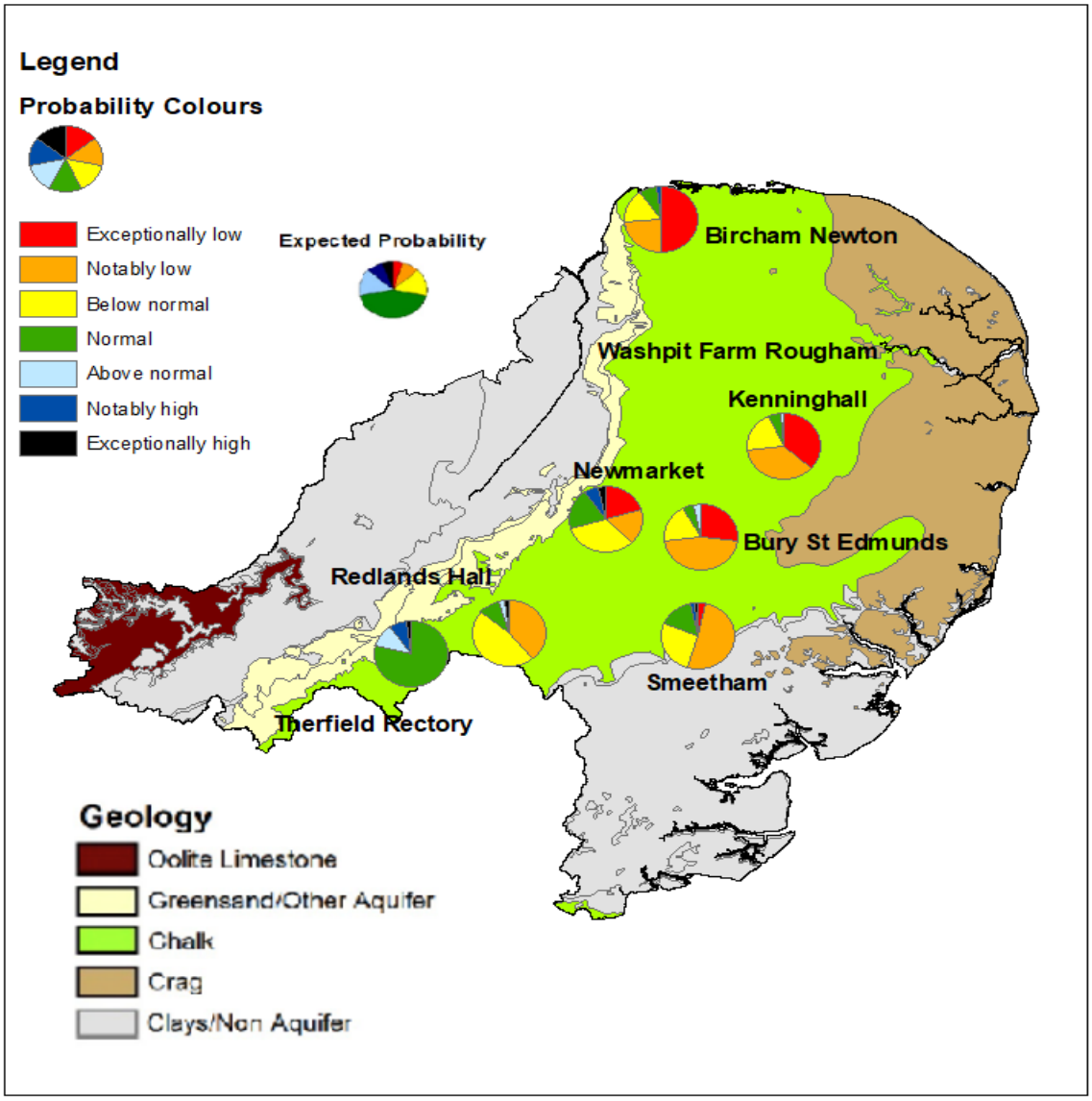
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those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

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

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

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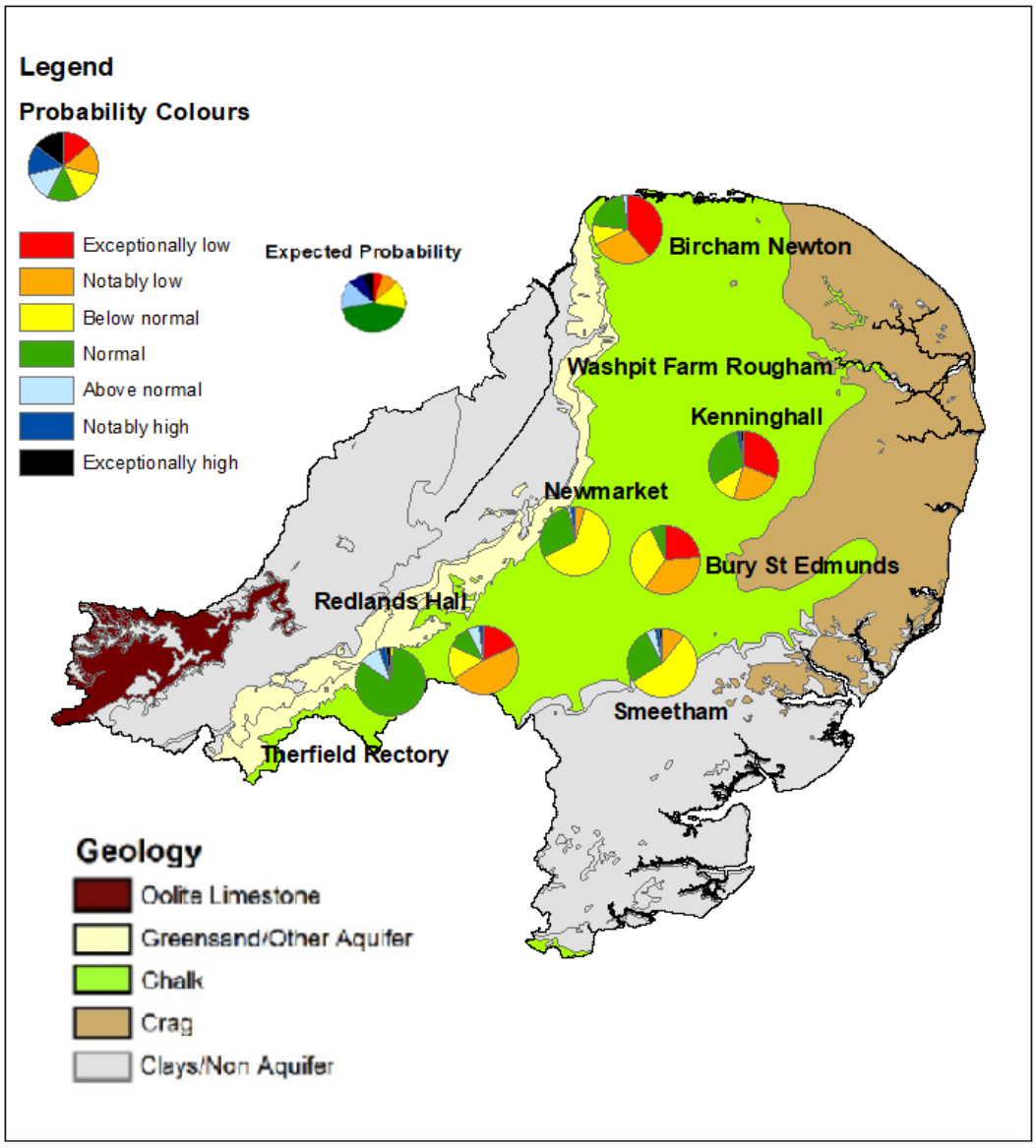

Pie charts indicate probability, based on climatology, of the groundwater level at each site being, for example, exceptionally low for the time of year. (Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum, BGS © NERC. Crown copyright. All rights reserved.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

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.

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	Sep 2025 rainfall % of long term average 1991 to 2020	Sep 2025 band	Jul 2025 to September cumulative band	Apr 2025 to September cumulative band	Oct 2024 to September cumulative band
Broadland Rivers	93	Normal	Normal	Notably low	Notably low
Cam	82	Normal	Below normal	Exceptionally low	Notably low
Central Area Fenland	83	Normal	Below normal	Exceptionally low	Notably low
East Suffolk	122	Normal	Normal	Below normal	Below normal
Little Ouse And Lark	98	Normal	Below normal	Notably low	Notably low
Lower Bedford Ouse	81	Normal	Below normal	Exceptionally low	Notably low
North Essex	98	Normal	Below normal	Exceptionally low	Notably low
North Norfolk	85	Normal	Below normal	Notably low	Exceptionally low
Nw Norfolk And Wissey	94	Normal	Below normal	Notably low	Notably low

South Essex	86	Normal	Below normal	Exceptionally low	Notably low
Upper Bedford Ouse	107	Normal	Below normal	Exceptionally low	Below normal

9.2 River flows table

Site name	River	Catchment	Sep 2025 band	Aug 2025 band
Abbey Heath	Little Ouse	Little Ouse	Exceptionally low	Exceptionally low
Blunham	Ivel	Ivel	Above normal	Normal
Bramford	Gipping	Gipping	Below normal	Below normal
Burnham Overy	Burn	Burn	Below normal	Below normal
Burnt Mill	Rhee	Rhee	Normal	Normal
Cappenham	Tove	Tove	Below normal	Notably low
Colney	Yare	Yare	Notably low	Notably low
Denver	Ely Ouse	Cutoff and Renew Channel	Notably low	Exceptionally 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	Exceptionally low
Marham	Nar	Nar	Below normal	Below normal
Needham Weir Total	Waveney (lower)	Waveney	Notably low	Exceptionally low

Northwold Total	Wissey	Wissey	Notably low	Notably low
Offord (gross Flows)	Great Ouse	Ouse Beds	Normal	Normal
Roxton	Great Ouse	Ivel	Normal	Below normal
Springfield	Chelmer	Chelmer Upper	Normal	Below normal
Swanton Morley Total	Wensum	Wensum	Below normal	Notably low
Temple	Lark	Lark	Notably low	Notably low
Willen	Ouzel	Ouzel		Below normal

9.3 Groundwater table

Site name	Aquifer	End of Sep 2025 band	End of Aug 2025 band
Biggleswade	Ivel Woburn Sands	Normal	Normal
Bircham Newton	North West Norfolk Chalk	Below normal	Below normal
Breckland	Wissey Chalk	Below normal	Notably low
Bury St Edmunds	Upper Lark Chalk	Normal	Below normal
Castle Farm, Offton	East Suffolk Chalk	Normal	Normal
Gog Magog, Stapleford	Cam Chalk	Notably low	Below normal
Hazlewood Common	East Suffolk Crag		Normal
Hindolveston	Norfolk Chalk	Notably low	Notably low
Kenninghall	Little Ouse Chalk	Normal	Normal
Linton	Cam Chalk	Below normal	Below normal
Newmarket	Snail Chalk	Below normal	Below normal
Old Primary School, South Creake	North Norfolk Chalk	Below normal	Below normal

Redlands Hall, Ickleton	Cam Chalk	Normal	Normal
Rook Hall, Braiseworth	East Suffolk Chalk	Normal	Normal
Smeetham Hall Cottages, Bulmer	North Essex Chalk	Exceptionally high	Normal
The Spinney, Costessey	Wensum Chalk	Exceptionally low	Exceptionally low
Washpit Farm, Rougham	North West Norfolk Chalk	Normal	Below 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

Percentage of pie chart for each band

Site	Bedford Ouse	Kym	Ivel	Ouse	Ely Ouse
Exceptionally low	6	11	0	10	7
Notably low	21	37	6	18	29
Below normal	42	21	34	40	36
Normal	19	15	34	18	11
Above normal	2	6	15	5	4
Notably high	2	2	3	2	11
Exceptionally high	8	8	8	8	2

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

Percentage of pie chart for each band

Site	Bedford Ouse	Kym	Ivel	Ouse	Ely Ouse
Exceptionally low	11	15	5	13	38
Notably low	15	16	10	13	7
Below normal	13	3	18	15	16
Normal	39	35	42	34	22
Above normal	10	18	11	11	7
Notably high	13	10	5	13	7
Exceptionally high	0	3	10	2	4

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

Percentage of pie chart for each band

Site	Therfield Rectory	Redlands Hall	Newmarket	Bircham Newton	Kenninghall	Bury St Edmunds	Smeetham
Exceptionally low	0.0	0.0	20.3	50.0	26.6	26.6	3.1
Notably low	0.0	39.1	17.2	23.4	42.2	46.9	51.6
Below normal	0.0	46.9	32.8	17.2	23.4	18.8	26.6
Normal	78.7	9.4	20.3	7.8	6.3	4.7	15.6
Above normal	11.5	3.1	0.0	0.0	1.6	3.1	0.0
Notably high	8.2	0.0	6.3	1.6	0.0	0.0	1.6
Exceptionally high	1.6	1.6	3.1	0.0	0.0	0.0	1.6

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

Percentage of pie chart for each band

Site	Therfield Rectory	Redlands Hall	Newmarket	Bircham Newton	Kenninghall	Bury St Edmunds	Smeetham
Exceptionally low	0.0	18.8	0.0	39.1	31.3	23.4	0.0
Notably low	0.0	46.9	4.7	28.1	23.4	35.9	10.9
Below normal	1.6	15.6	62.5	9.4	10.9	34.4	54.7
Normal	83.6	10.9	29.7	21.9	31.3	6.3	26.6
Above normal	9.8	6.3	1.6	1.6	0.0	0.0	4.7
Notably high	3.3	1.6	1.6	0.0	1.6	0.0	1.6
Exceptionally high	1.6	0.0	0.0	0.0	1.6	0.0	1.6