Monthly water situation report: East Anglia

1 Summary - August 2025

Rainfall for August 2025 was below average across all catchments in East Anglia, with rainfall totals ranging from 29% to 46% of the long term average for the month. The soil moisture deficit for East Anglia increased to 124mm at the end of August 2025, with South Essex and Central Area Fenland recording the highest soil moisture deficit values. River flows in the Ouse, Ivel and Rhee catchments maintained normal flow rates, with all other catchments classified as below normal or lower for the time of year. Groundwater levels at all sites continued to fall, with sites ranging from above normal to exceptionally low. Public water supply reservoirs in East Anglia ended August 2025 with levels ranging from 61% to 77% of full storage capacity.

1.1 Rainfall

August 2025 rainfall totals across East Anglia ranged from 29% to 46% of the long term average [LTA] for the month. The month began and ended with rainfall, with little to no rainfall received between 5 to 26 August. Average rainfall across East Anglia for August 2025 was 21mm, which is 35% of the historic LTA. The highest rainfall totals were recorded towards the west of the area, with the lowest rainfall recorded in East Suffolk. All catchments recorded notably low rainfall for August 2025, except the Little Ouse and Lark catchment, which recorded below normal rainfall. Cumulative rainfall totals over the past 6 months have been exceptionally low in all catchments, except for East Suffolk which has been notably low.

1.2 Soil moisture deficit and recharge

The soil moisture deficit [SMD] for East Anglia at the end of August 2025 was 124mm. South Essex and Central Area Fenland recorded the highest SMD values, ranging between 131mm to 160mm. Across East Anglia SMD was recorded as exceptionally high, with SMD ranging from 6mm to 50mm above the LTA for the time of year. Central Area Fenland and the Upper Bedford Ouse recorded the largest difference from the LTA.

1.3 River flows

River flows across East Anglia during August 2025 continued to recede, with most catchments responding to rainfall at the end of the month. River flows in August 2025 ranged from 3% to 90% of the LTA, with flows ranging from normal to exceptionally low for the time of year. The highest flows were recorded in the south west of the area, with the lowest flows concentrated towards the centre of the area. The Ely Ouse at Denver continued to record exceptionally low flows in August 2025, with the month mean flow recorded as 3% of the LTA.

1.4 Groundwater levels

Groundwater levels continued to fall in line with the expected seasonal pattern. Groundwater levels at the end of August 2025 ranged from above normal, at Therfield Rectory, North Hertfordshire Chalk to exceptionally low at The Spinney, Wensum Chalk. The majority of sites were categorised as normal or below normal for the time of year.

1.5 Reservoir stocks

Public water supply reservoirs within East Anglia finished August 2025 with levels ranging from 61% to 77% of full storage capacity. Alton, Ardleigh, Grafham and Hanningfield all ended August with levels below their respective normal operating curve. Abberton reservoir level was just above the respective normal operating curve for August.

1.6 Forward look

1.6.1 Probabilistic ensemble projections for river flows at key sites

River flow projections for the Bedford Ouse, Ivel, Kym and Ouse catchments all show a high probability of normal or higher flows for September 2025. Flow projections for the Ely Ouse show a high probability of below normal or lower flows for September 2025. River flow projections for December 2025 are varied with a high probability of normal to below normal flows.

1.6.2 Probabilistic ensemble projections for groundwater levels in key aquifers

Groundwater level projections for September 2025 are expected to be within the normal to below normal range, with the exception of Therfield Rectory which is expected to be above normal. Groundwater level projections for March 2026, show a high probability of below normal to notably low levels, again with the exception of Therfield Rectory which shows a high probability of normal or above groundwater levels.

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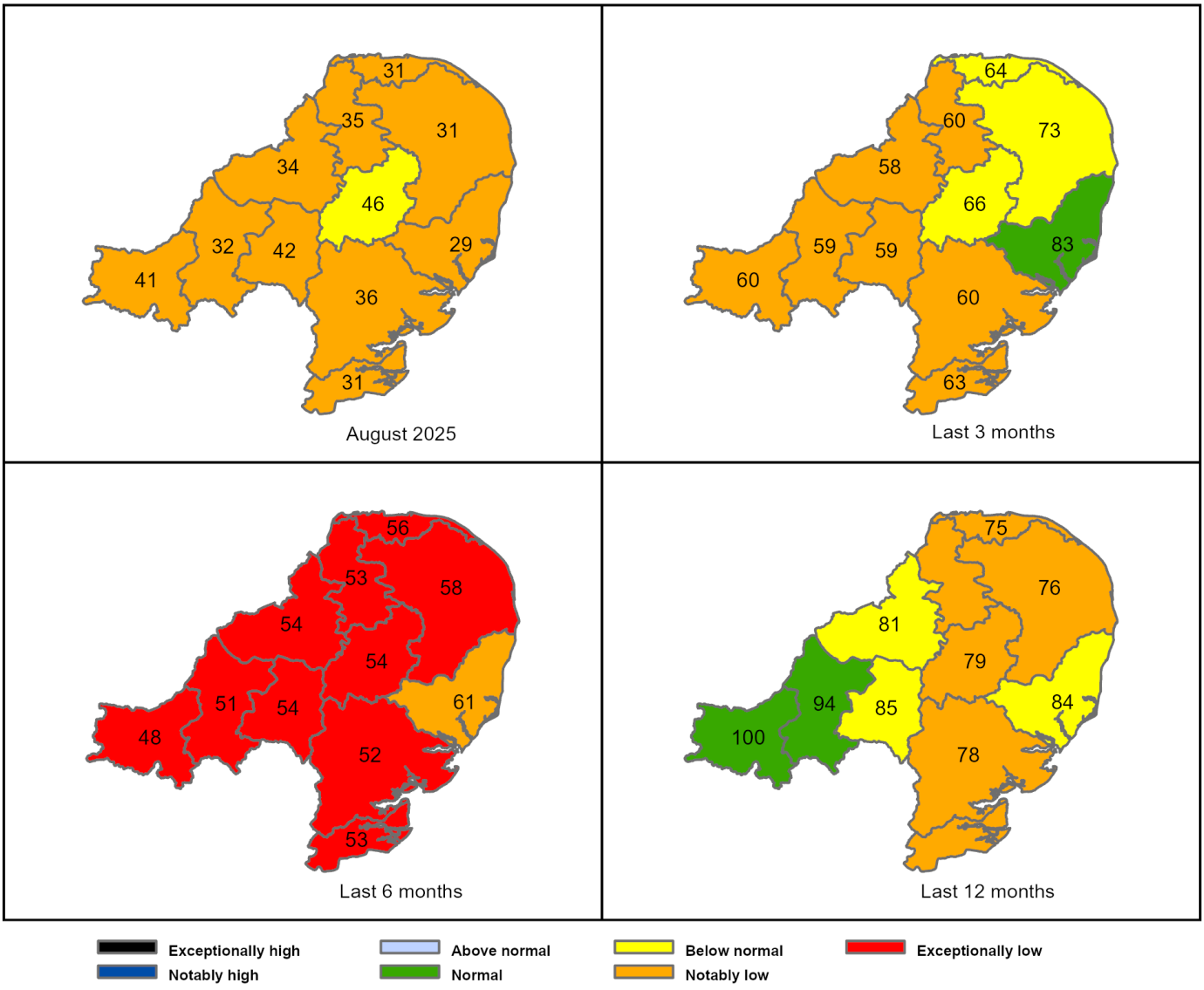
2 Rainfall

2.1 Rainfall map

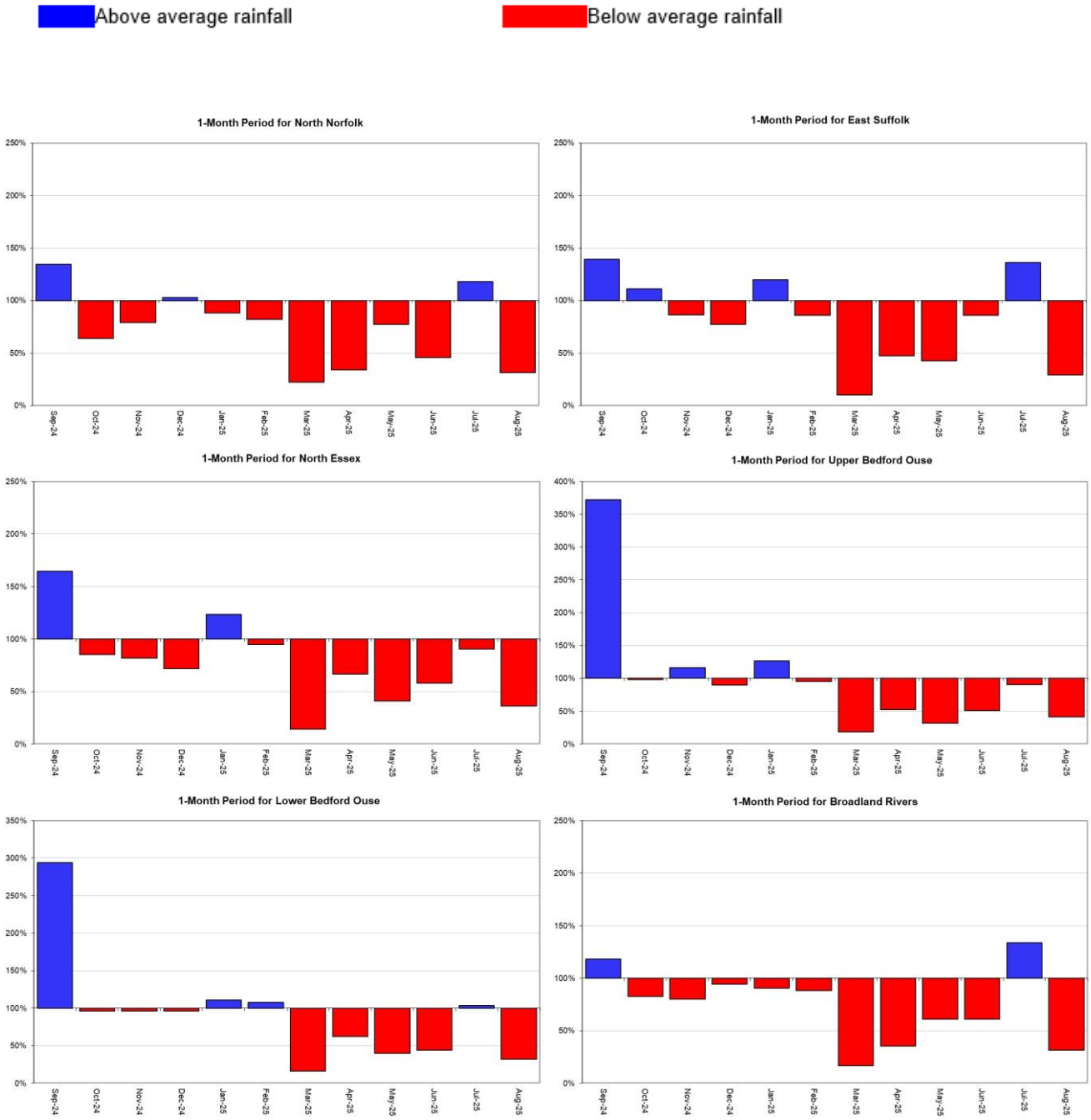
Figure 2.1: Total rainfall for hydrological areas across East Anglia, expressed as a percentage of long term average rainfall for the current month (up to 31 August 2025), the last 3 months, the last 6 months, and the last 12 months. Category classes are based on an analysis of respective historic totals.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

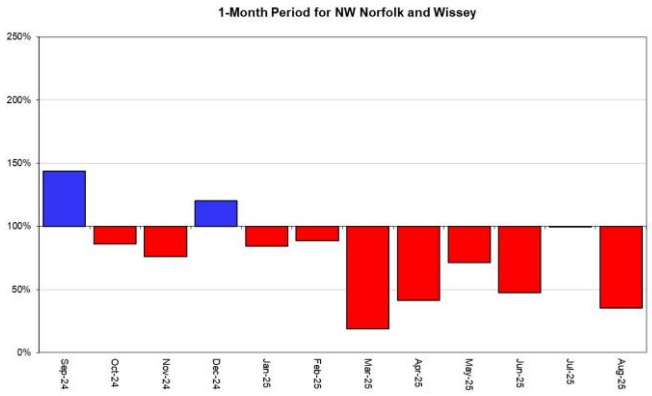


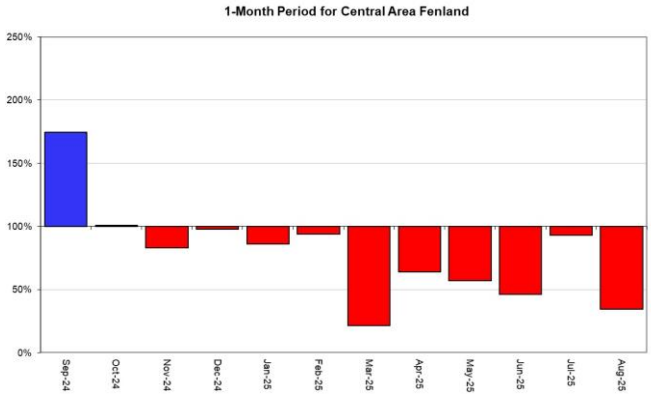
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2025). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved.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

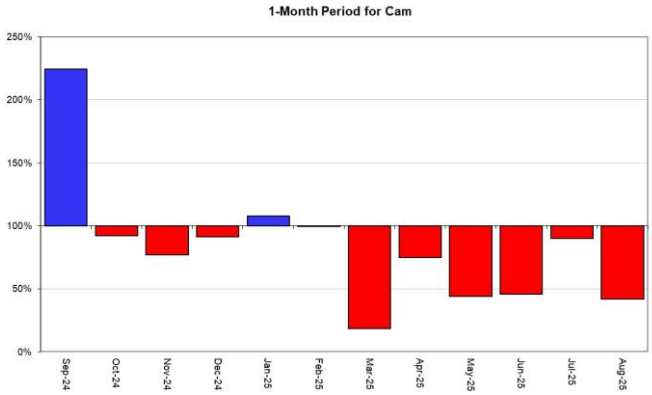
2.2 Rainfall charts

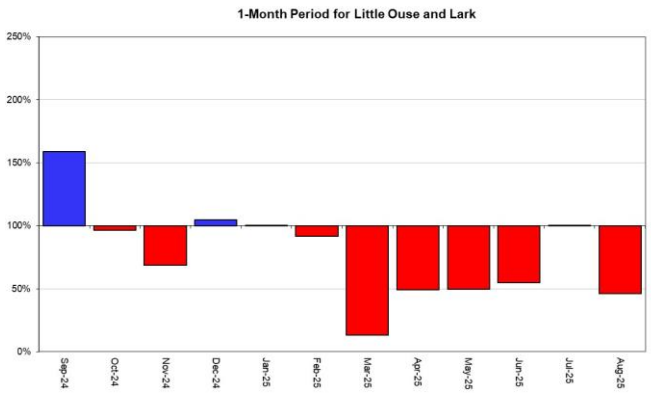
Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each region and for England.

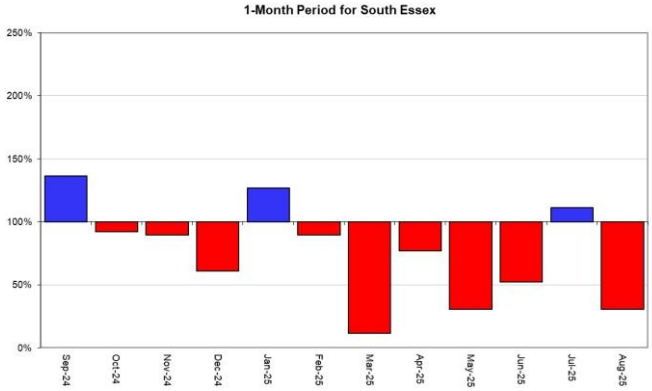






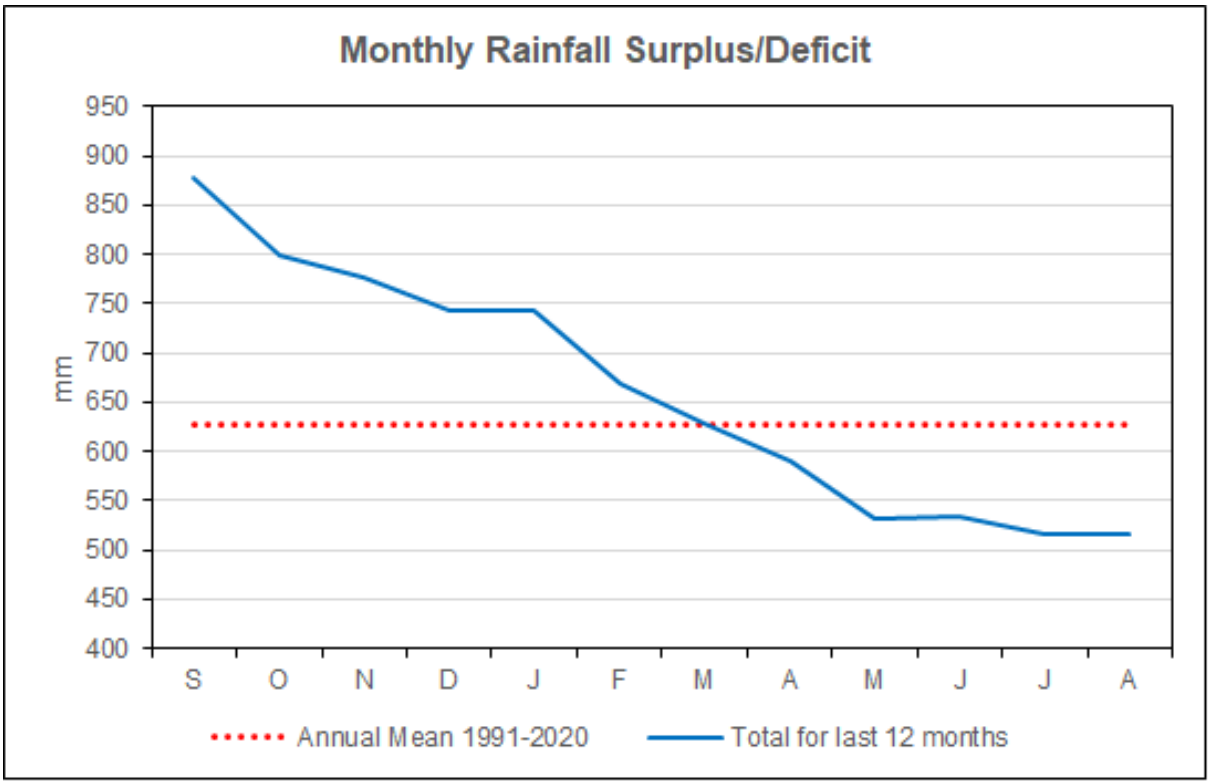






HadUK rainfall data. (Source: Met Office. Crown copyright, 2025).

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 August 2025. Values based on the weekly MORECS data for real land use.

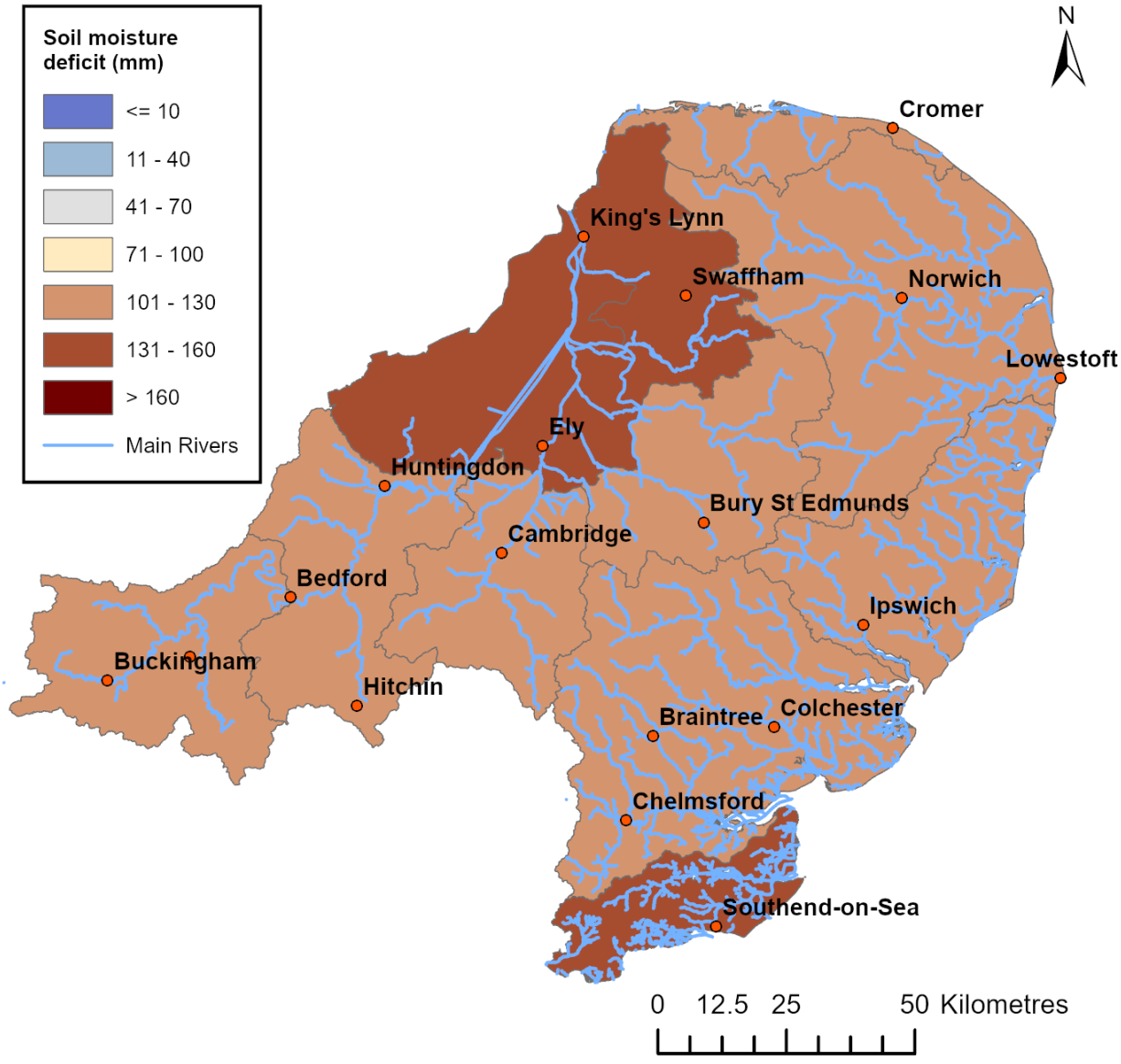
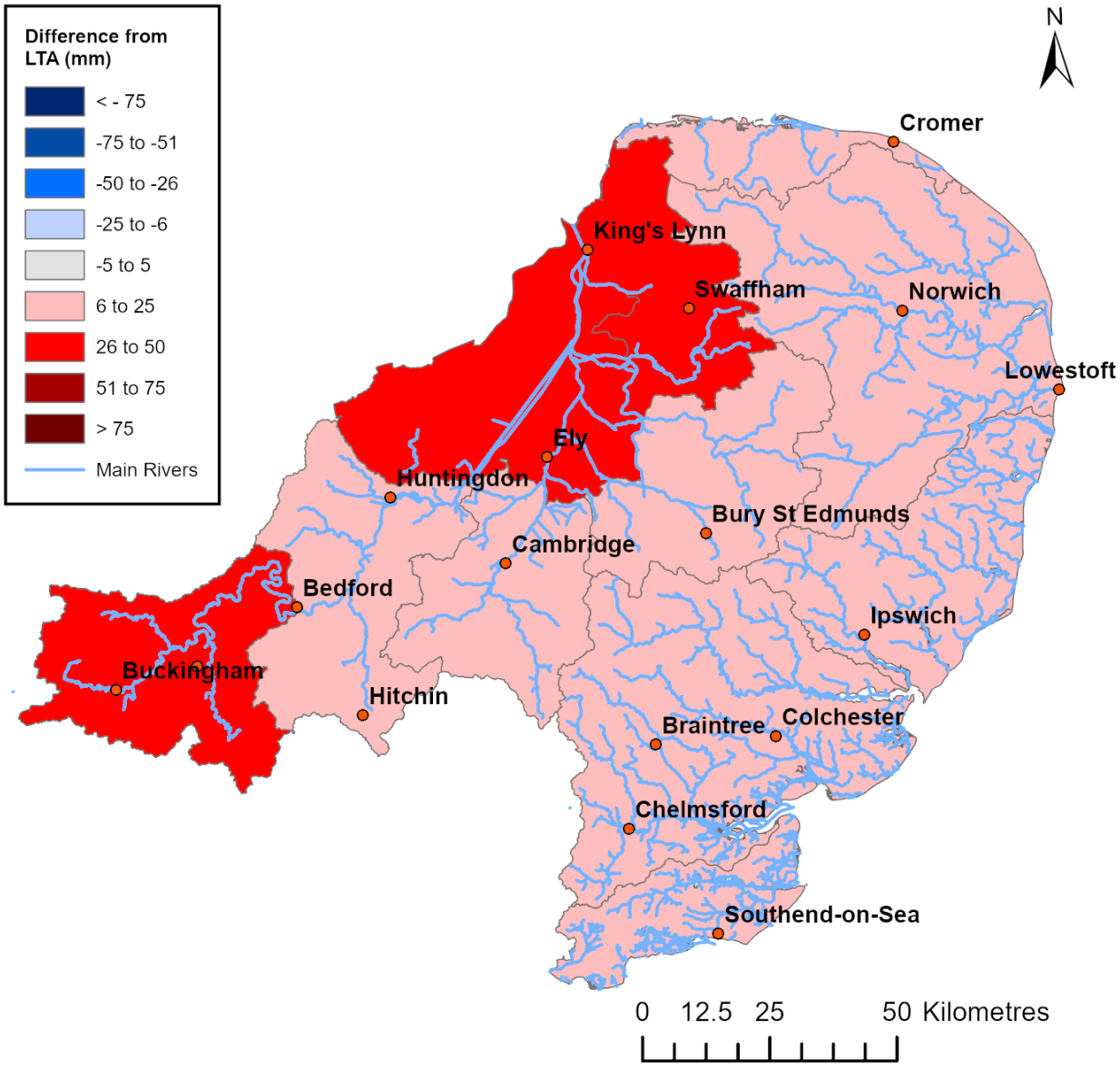
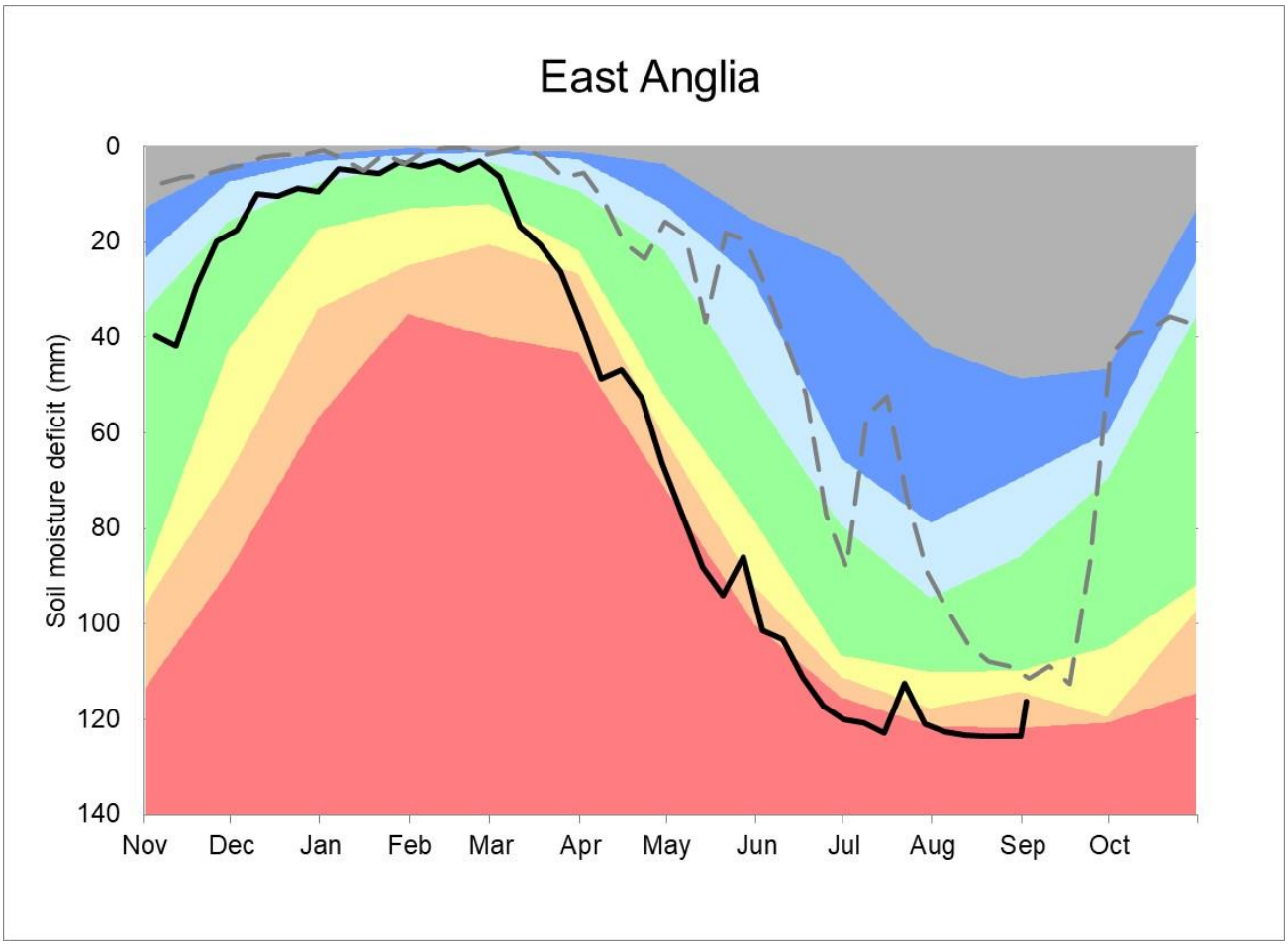


Figure 3.2b: A map displaying soil moisture deficit values (for 31 August 2025) relative to long term average end of August soil moisture deficit values, for hydrological catchments across East Anglia. Values based on the weekly MORECS data for real land use.



3.2 Soil moisture deficit charts

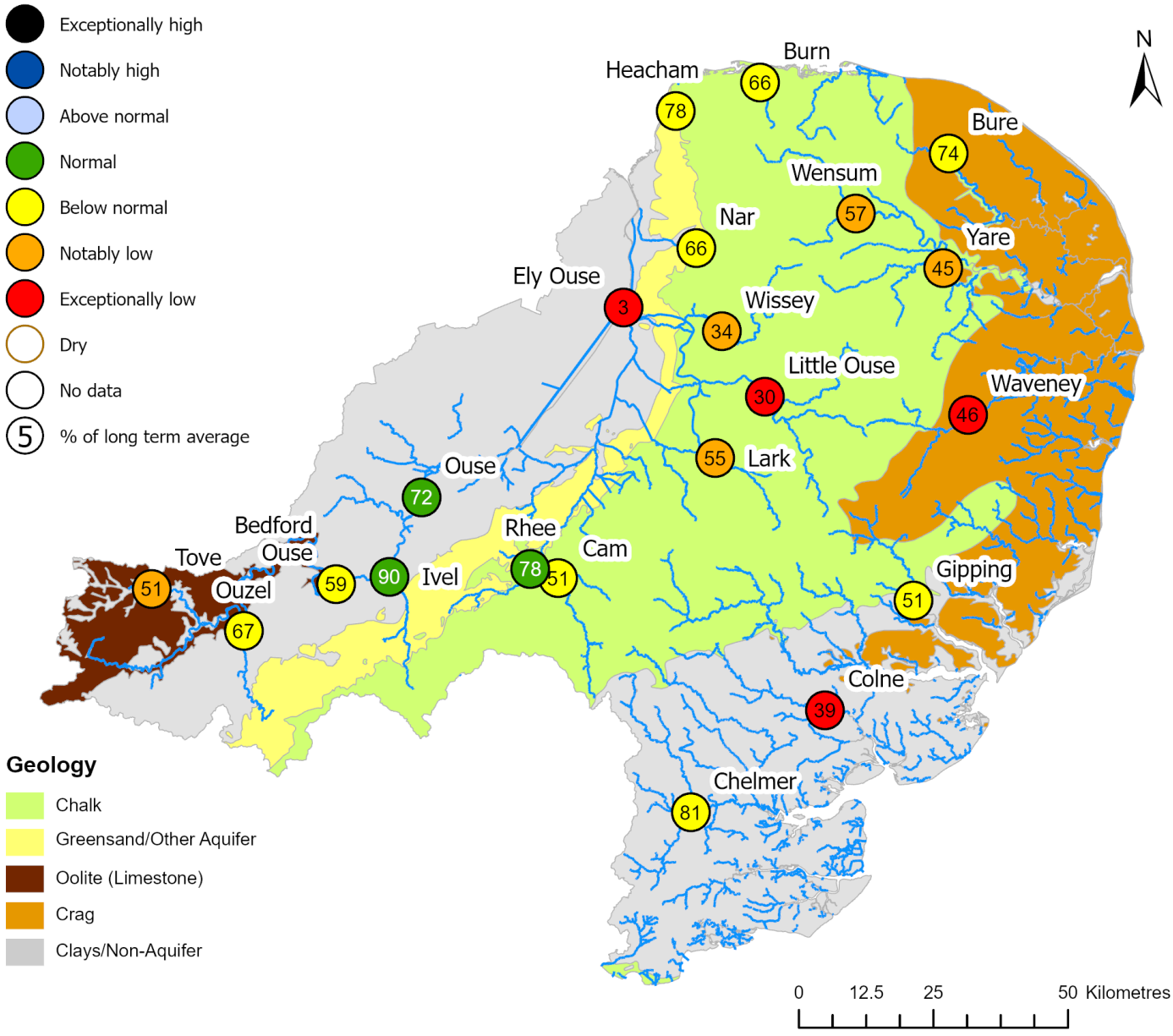
Figure 3.2: Latest soil moisture deficit compared to an analysis of historic 1991 to 2020 long term data set. Weekly MORECS data for real land use.



4 River flows

4.1 River flows map

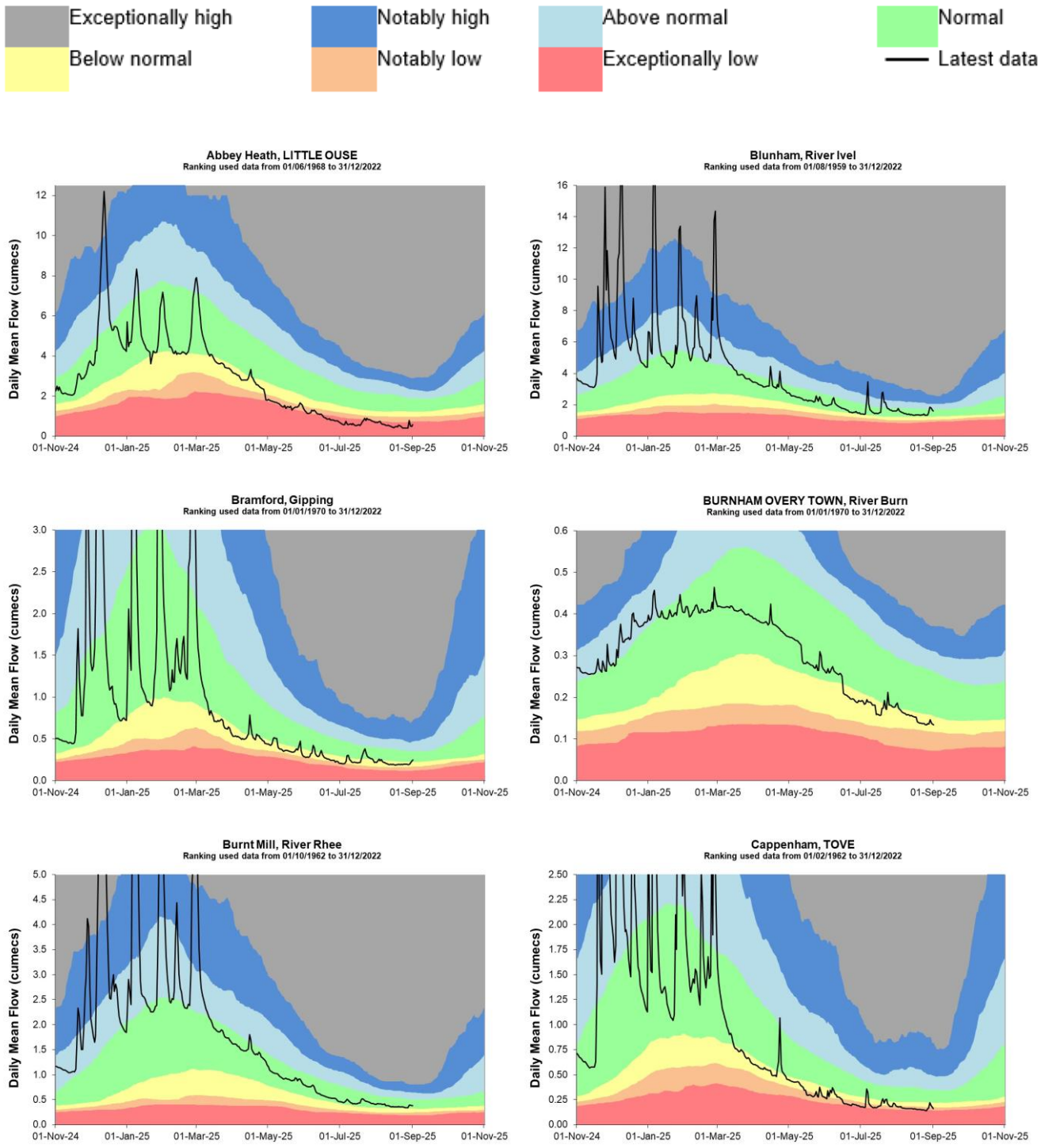
Figure 4.1: Monthly mean river flow for indicator sites for August 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic August monthly means. Table available in the appendices with detailed information.

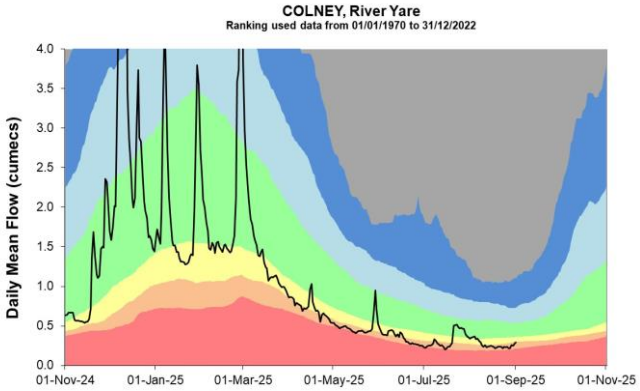


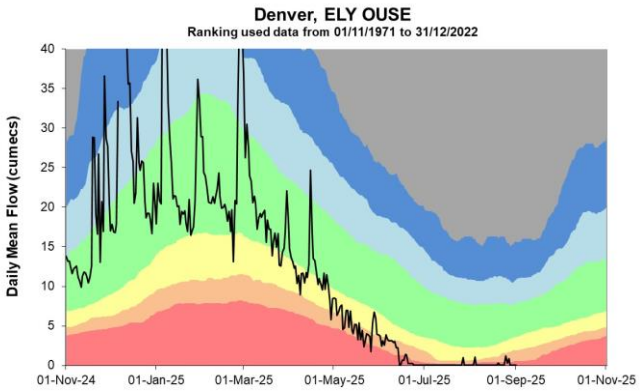
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

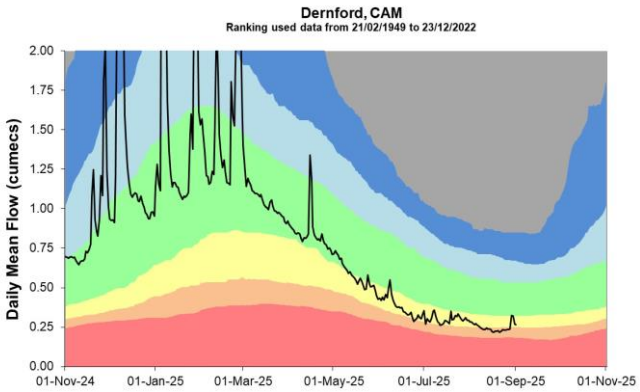
4.2 River flow charts

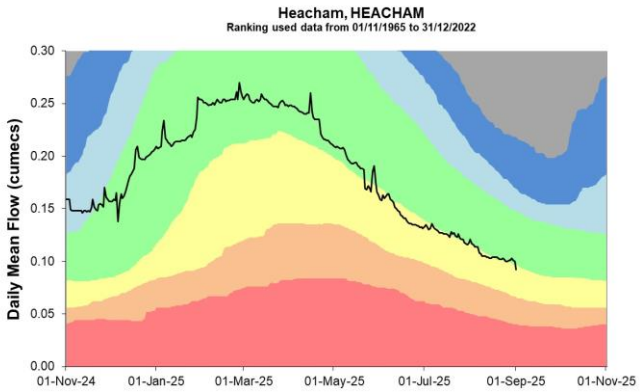
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

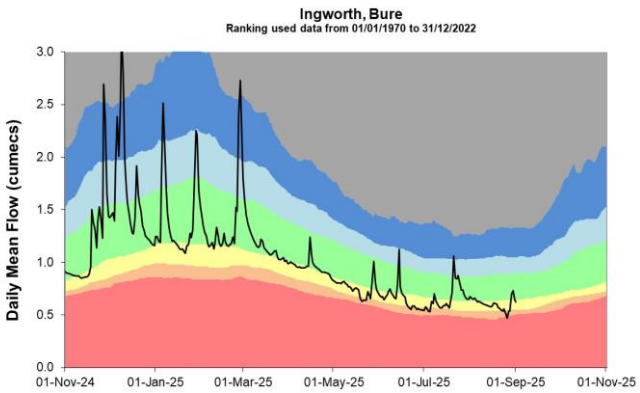


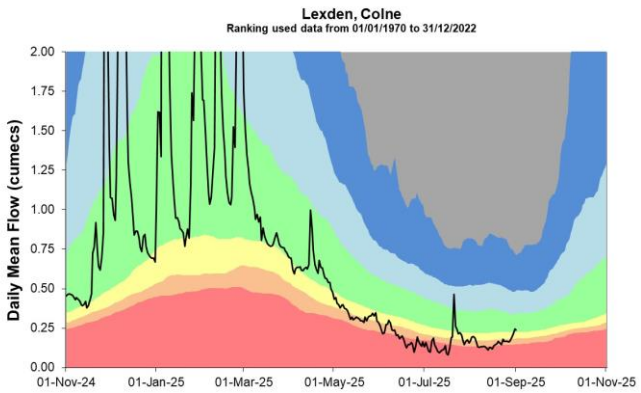

COLNEY, River Yare
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
01-Nov-24
01-Jan-25
01-Mar-25
01-May-25
01-Jul-25
01-Sep-25
01-Nov-25


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
01-Nov-24
01-Jan-25
01-Mar-25
01-May-25
01-Jul-25
01-Sep-25
01-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
01-Nov-24
01-Jan-25
01-Mar-25
01-May-25
01-Jul-25
01-Sep-25
01-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
01-Nov-24
01-Jan-25
01-Mar-25
01-May-25
01-Jul-25
01-Sep-25
01-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
01-Nov-24
01-Jan-25
01-Mar-25
01-May-25
01-Jul-25
01-Sep-25
01-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
01-Nov-24
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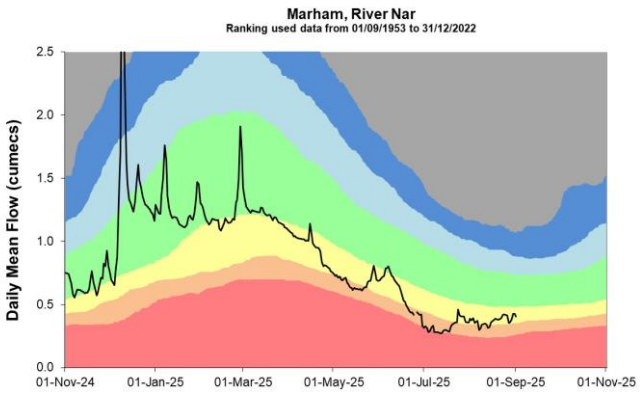
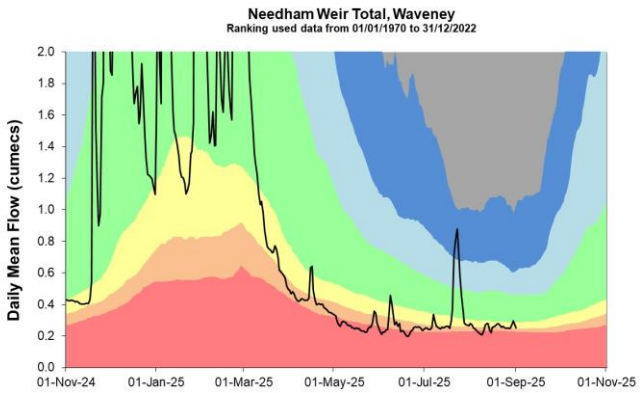
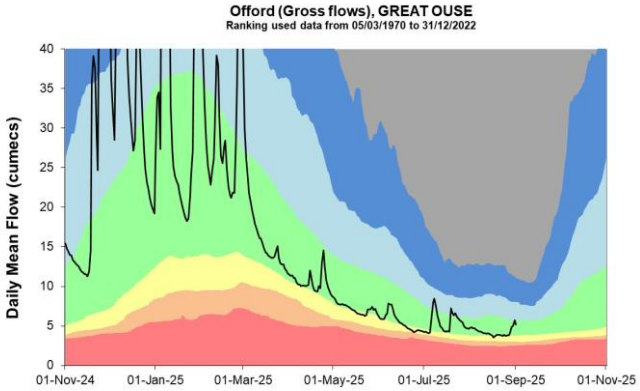
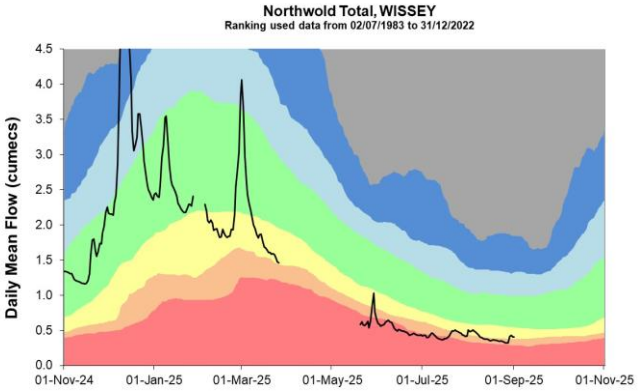
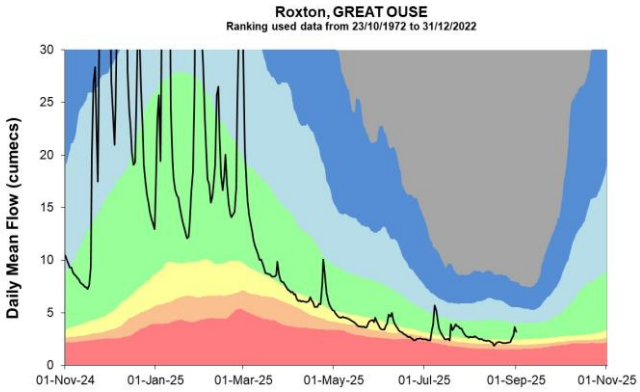
01-May-25
01-Jul-25
01-Sep-25
01-Nov-25

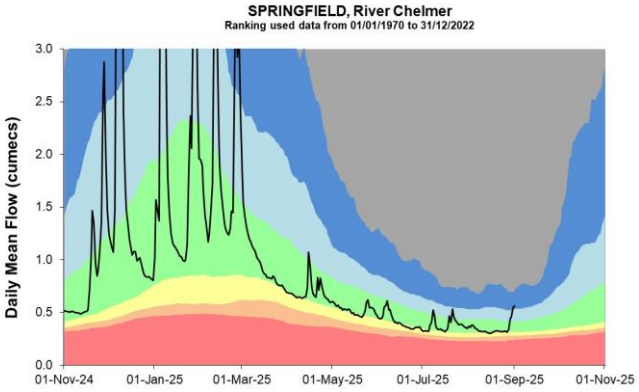

Marham, River Nar
Ranking used data from 01/09/1953 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.5
1.0
1.5
2.0
2.5
01-Nov-24
01-Jan-25
01-Mar-25
01-May-25
01-Jul-25
01-Sep-25
01-Nov-25

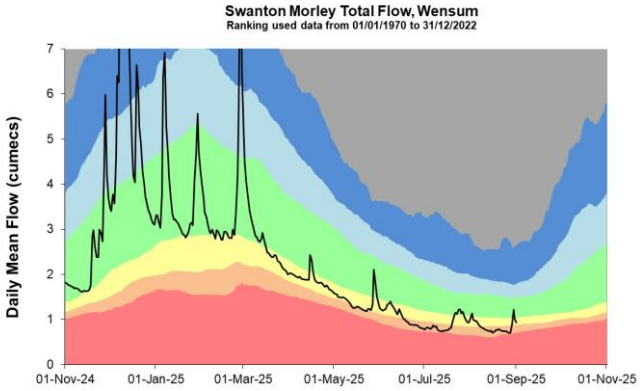

Needham Weir Total, Waveney
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
01-Nov-24
01-Jan-25
01-Mar-25
01-May-25
01-Jul-25
01-Sep-25
01-Nov-25

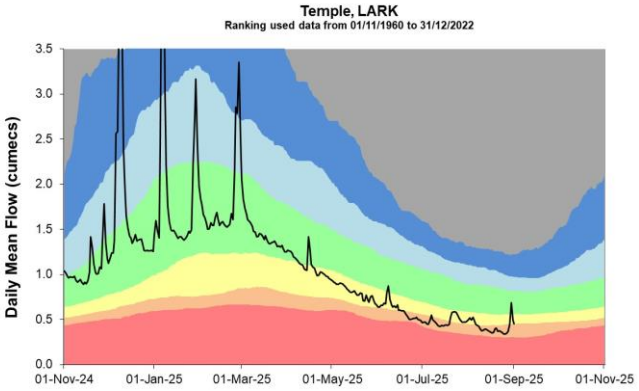


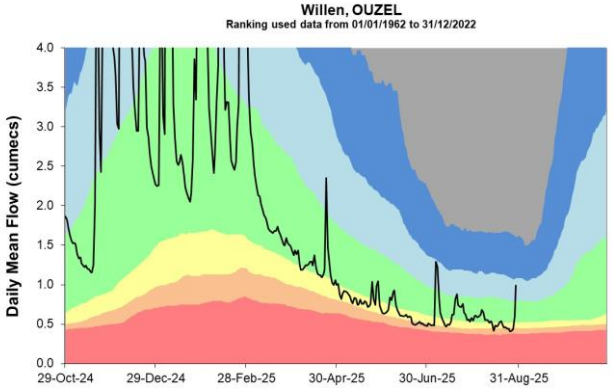










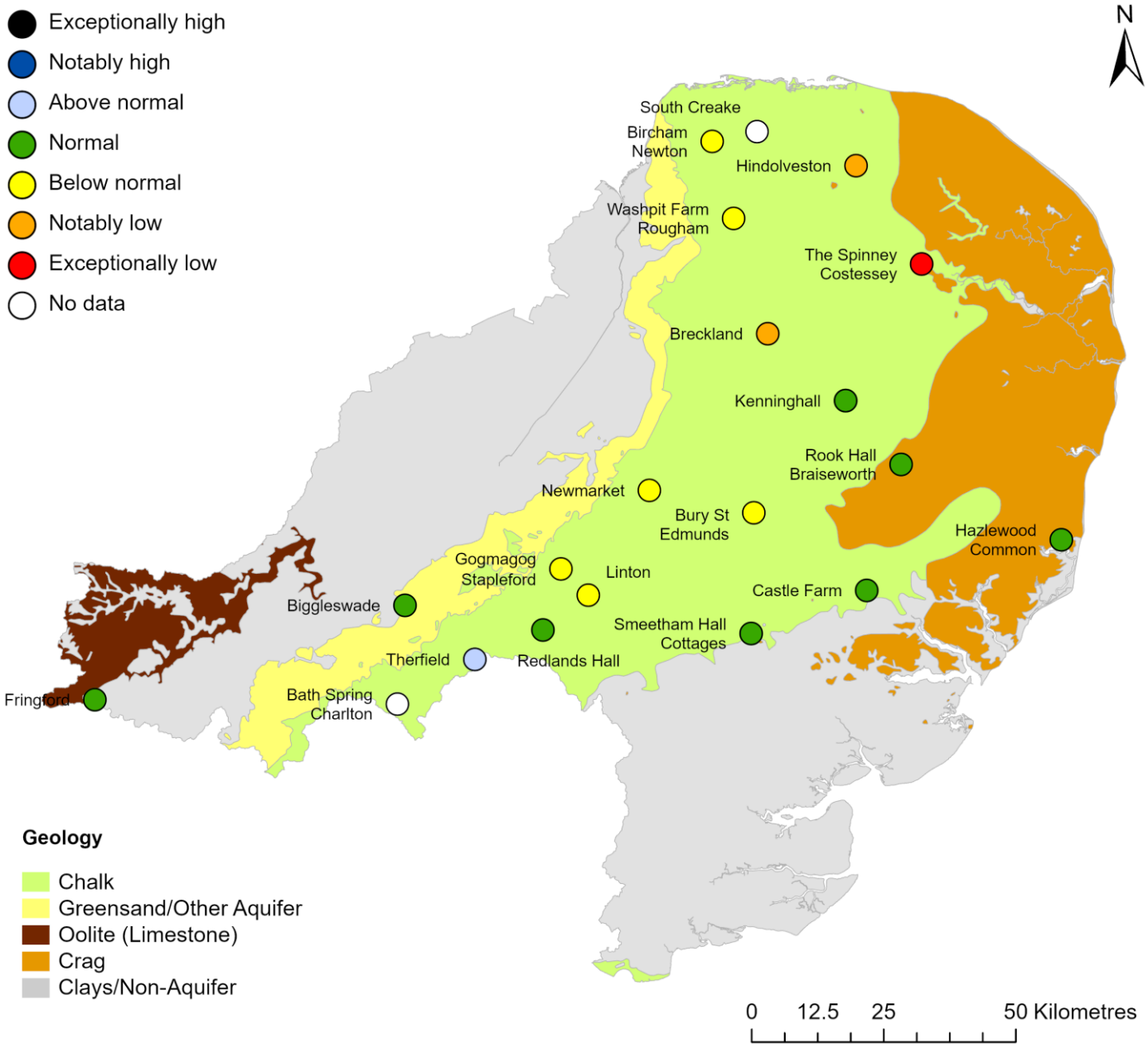


Source: Environment Agency.

5 Groundwater levels

5.1 Groundwater levels map

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



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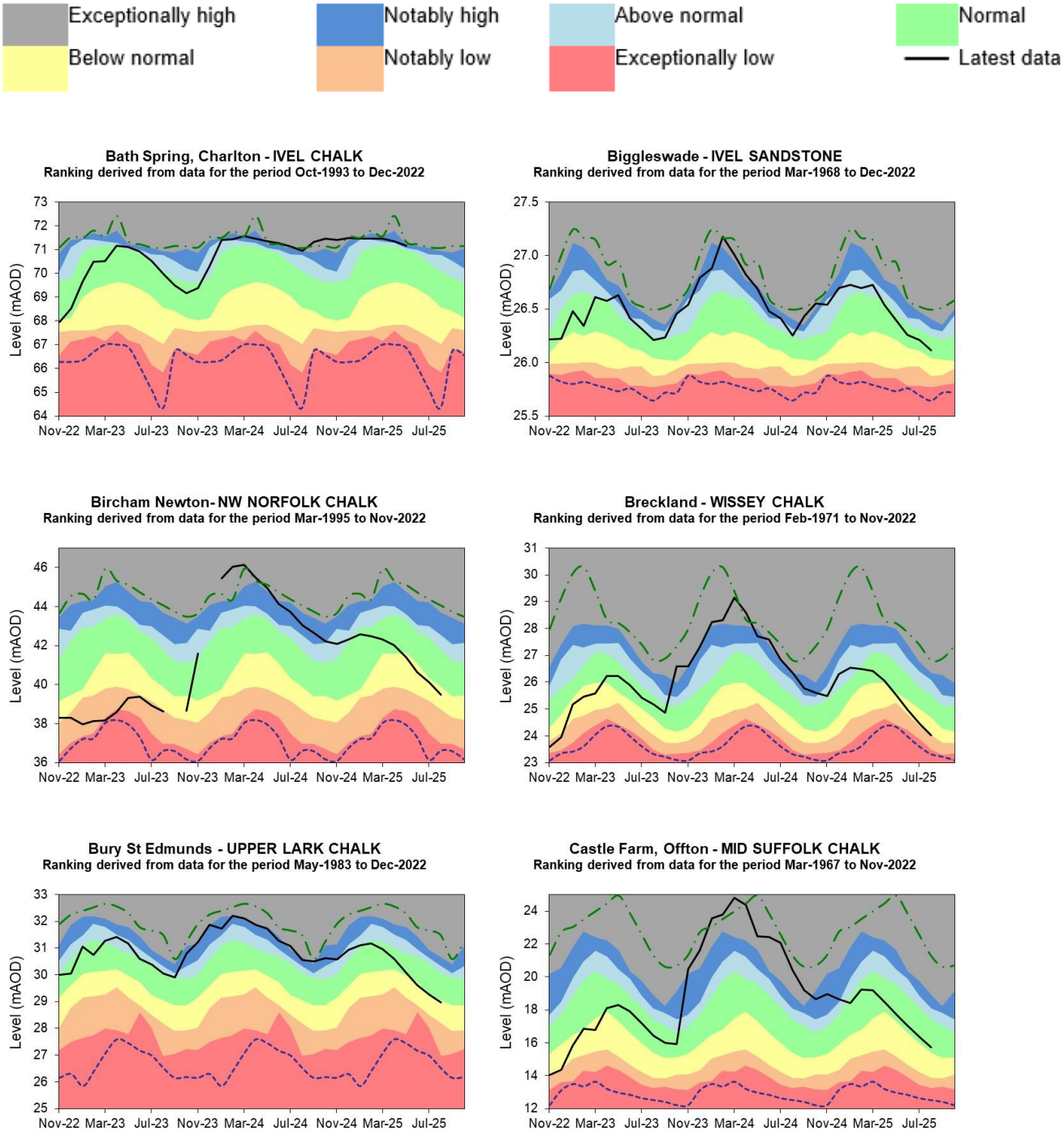
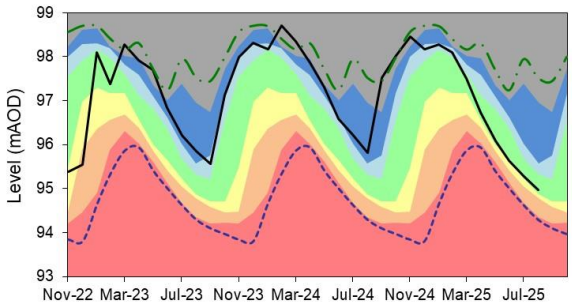
5.2 Groundwater level charts

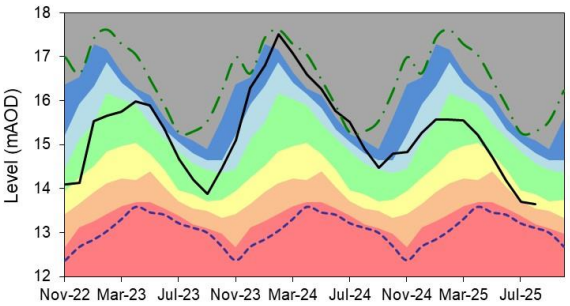
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.



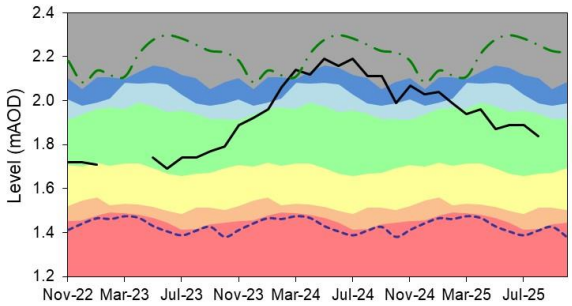
Fringford - GREAT OOLITE
Ranking derived from data for the period Sep-1980 to Dec-2022



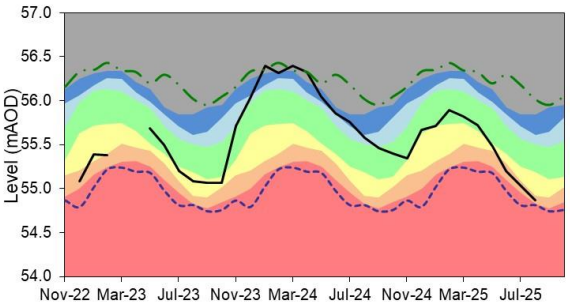
Gog Magog, Stapleford - CAM CHALK
Ranking derived from data for the period Jan-1980 to Dec-2022



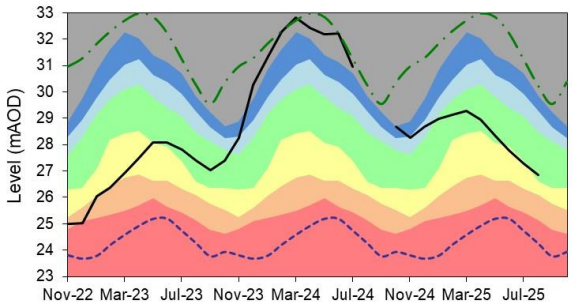
Hazlewood Common - SUFFOLK CRAG
Ranking derived from data for the period Oct-1988 to Nov-2022



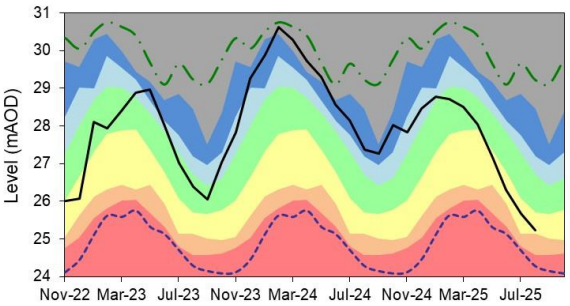
Hindolveston - NORFOLK CHALK
Ranking derived from data for the period Sep-1984 to Nov-2022



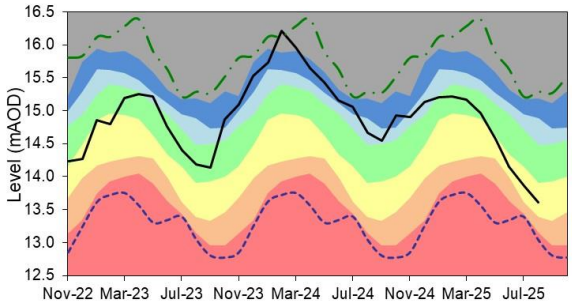
Kenninghall - LITTLE OUSE CHALK
Ranking derived from data for the period Aug-1973 to Dec-2022



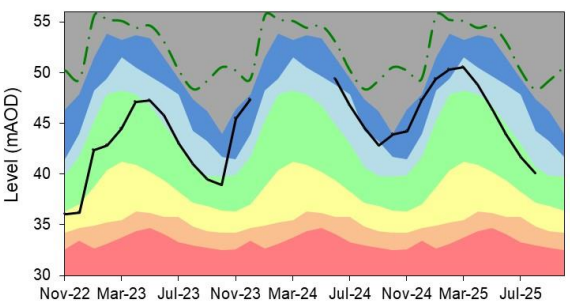
Linton - CAM CHALK
Ranking derived from data for the period Jan-1980 to Dec-2022

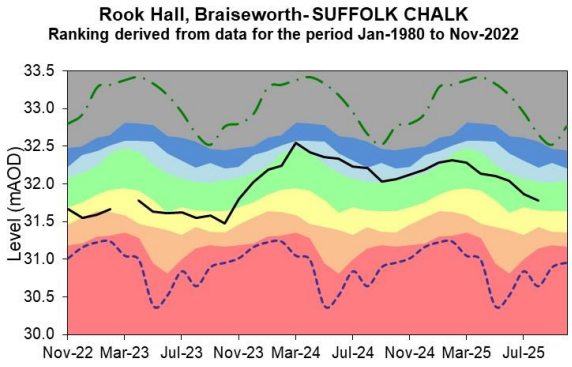


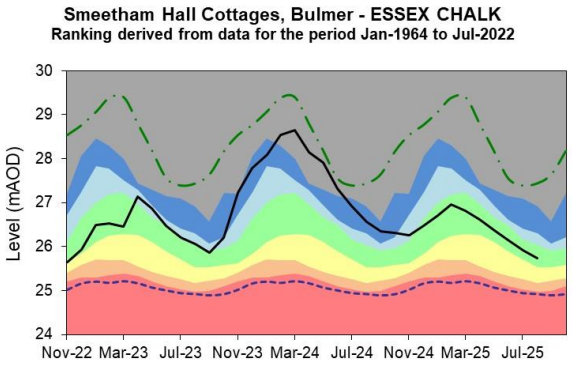
Newmarket - SNAIL CHALK
Ranking derived from data for the period Feb-1983 to Dec-2022

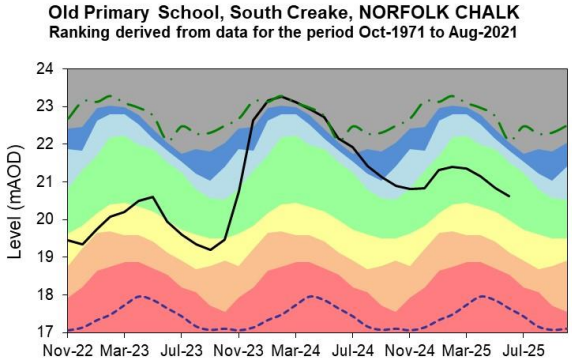


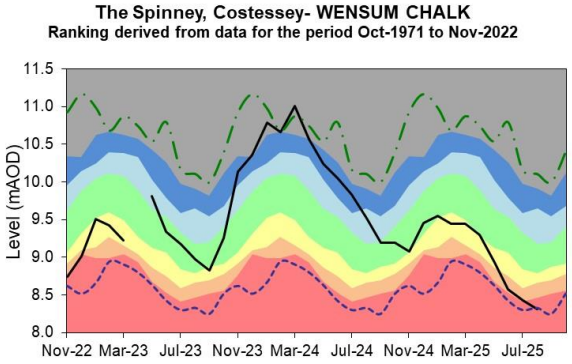
Redlands Hall, Ickleton - CAM CHALK
Ranking derived from data for the period Aug-1963 to Dec-2022

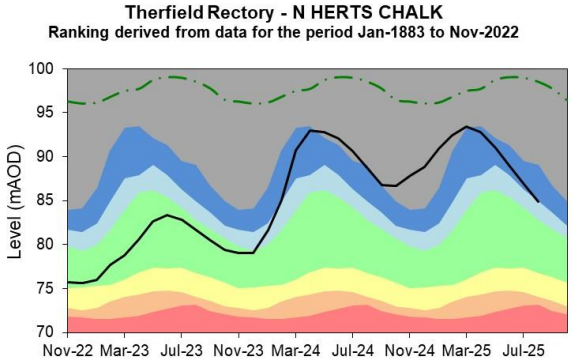


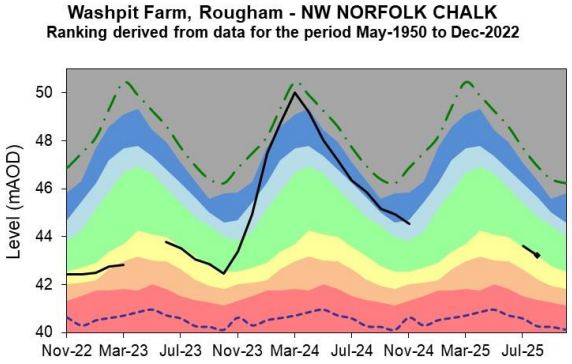








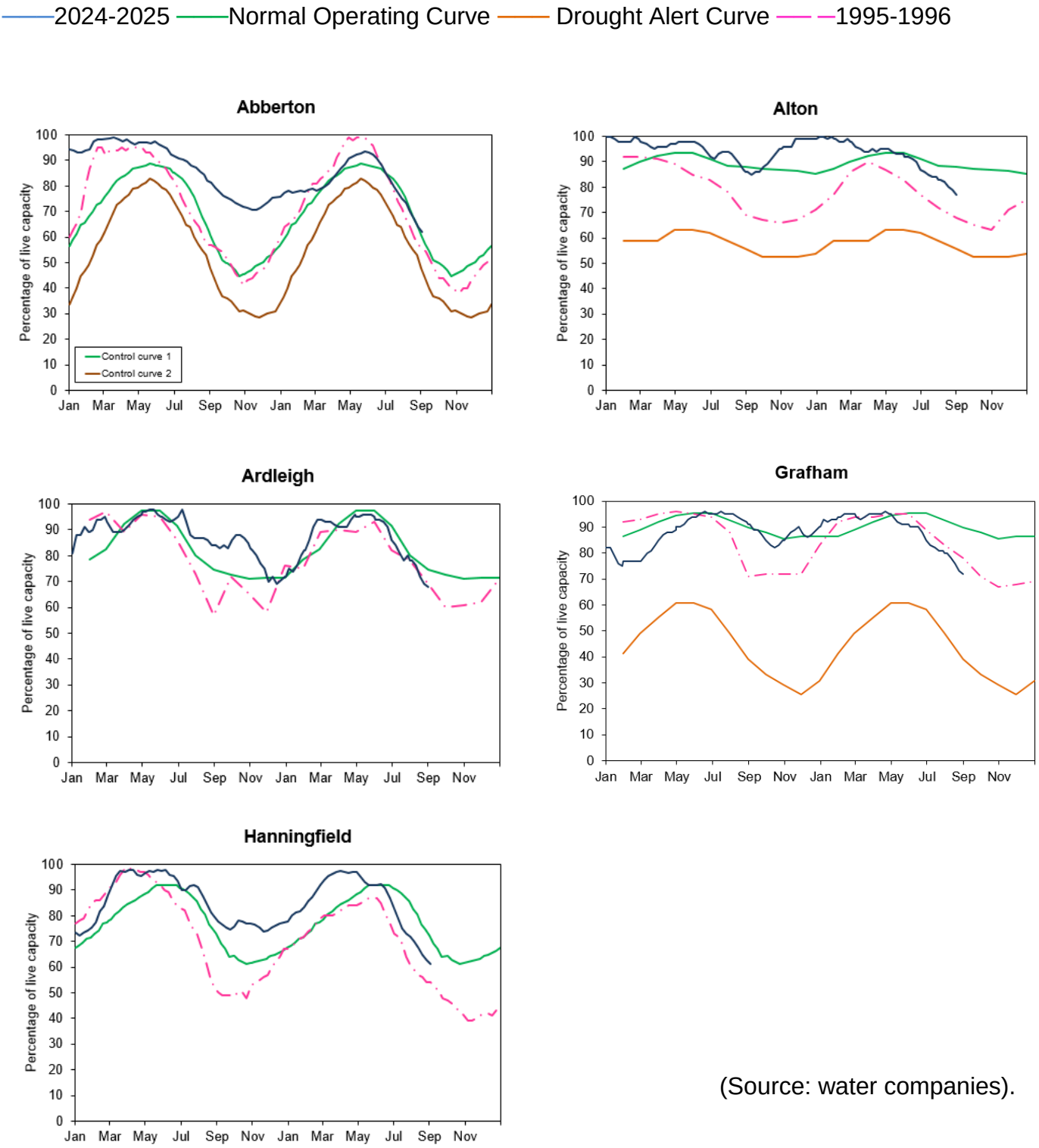




Source: Environment Agency, 2025.

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.

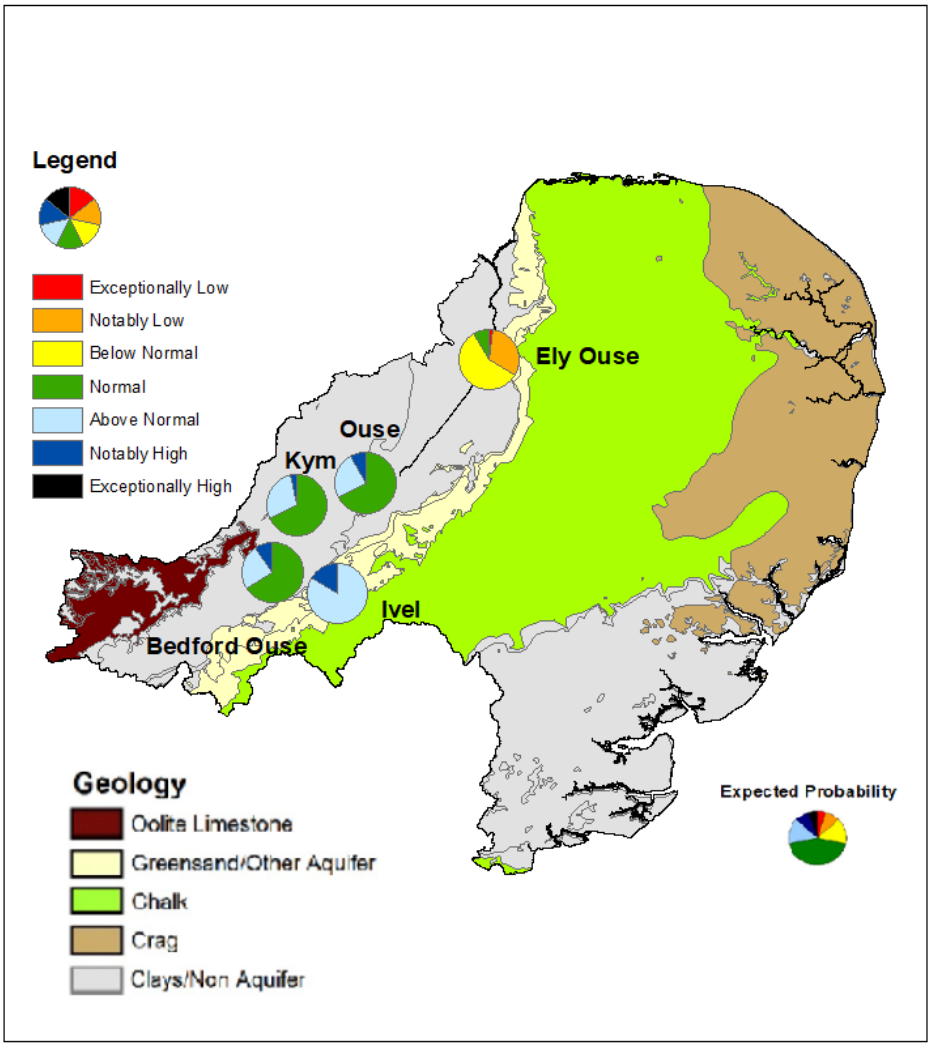


(Source: water companies).

7 Forward look

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

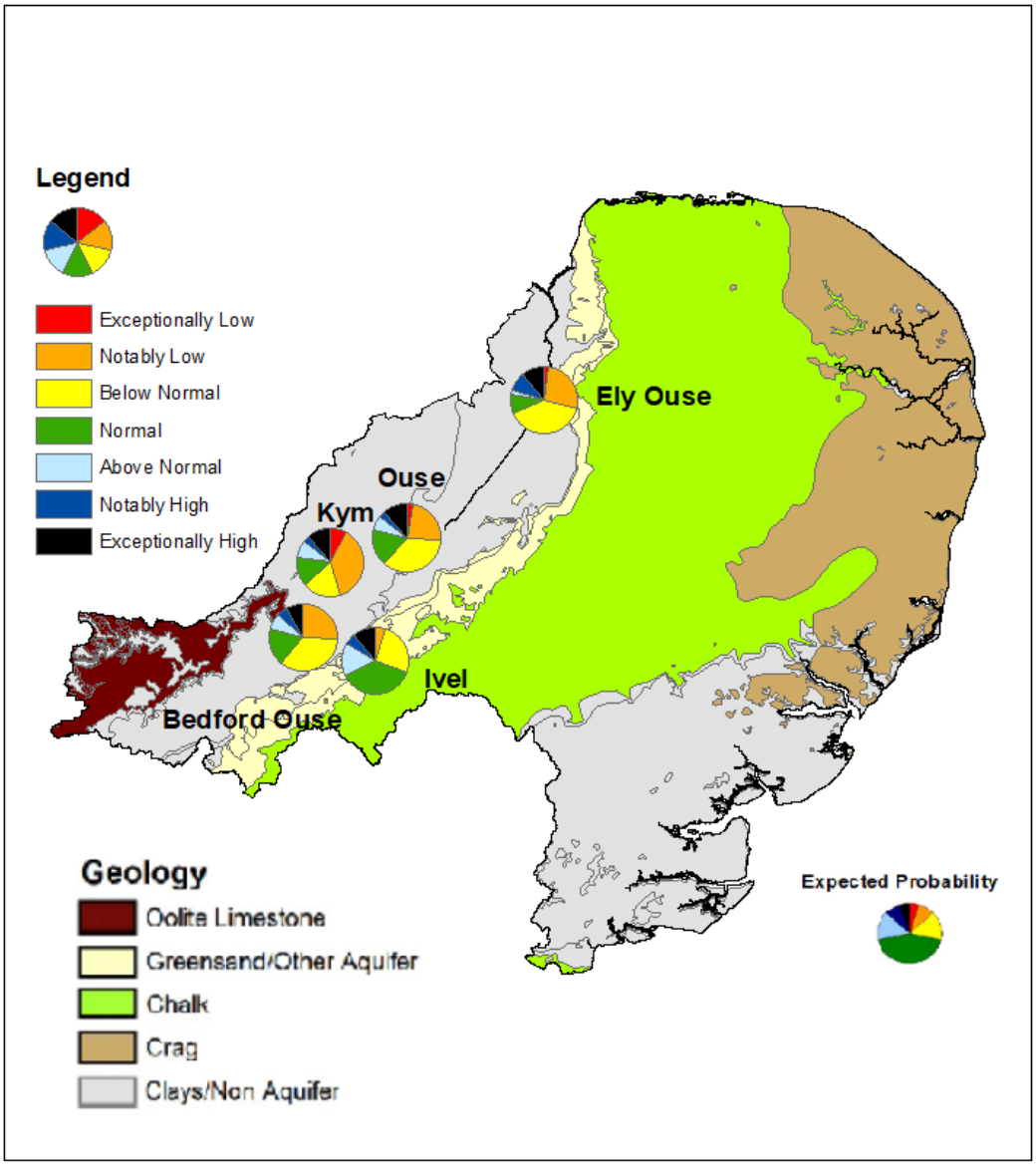
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those 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 December 2025

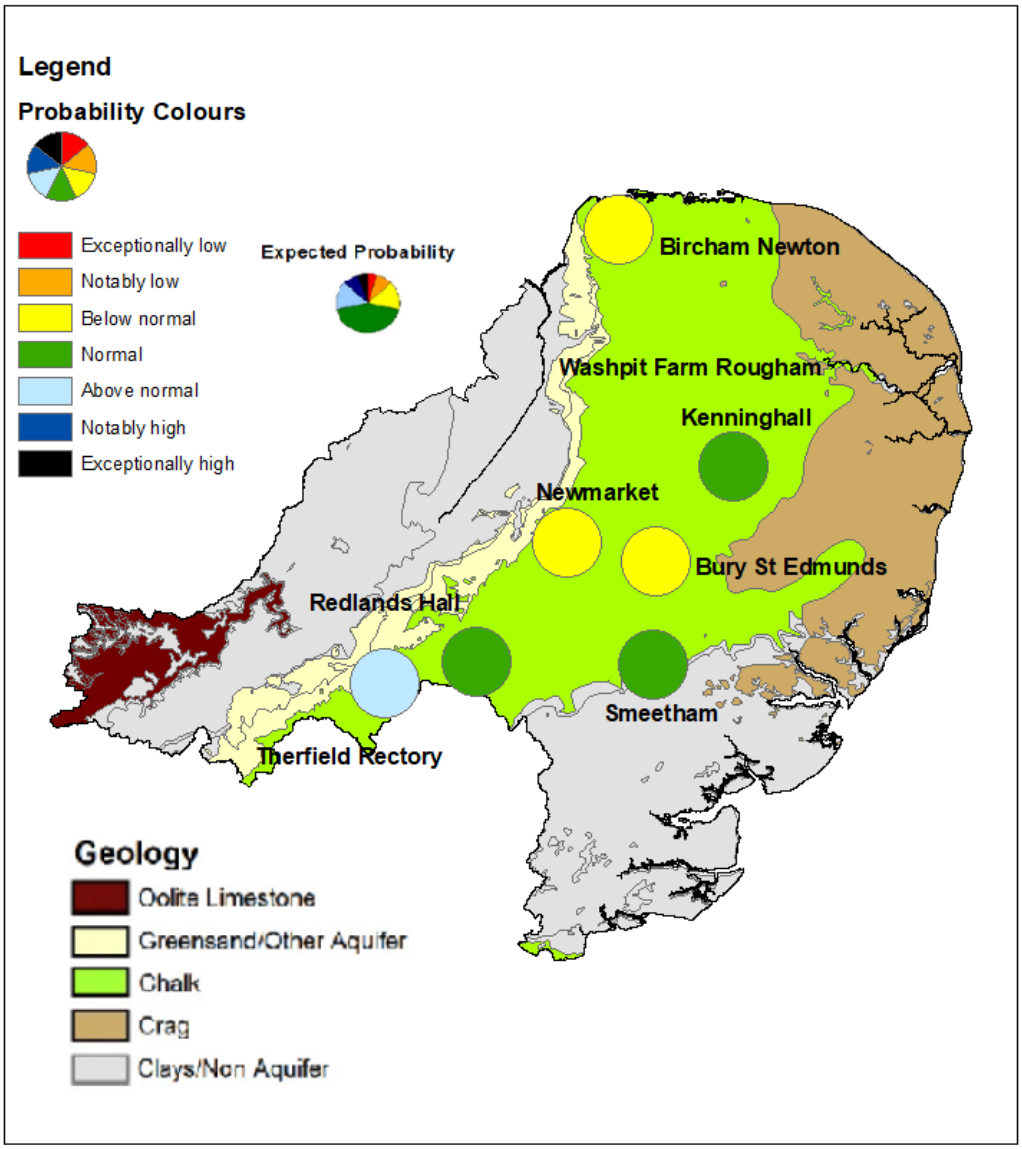
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those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

7.3 Probabilistic ensemble projection of groundwater levels at key sites in September 2025

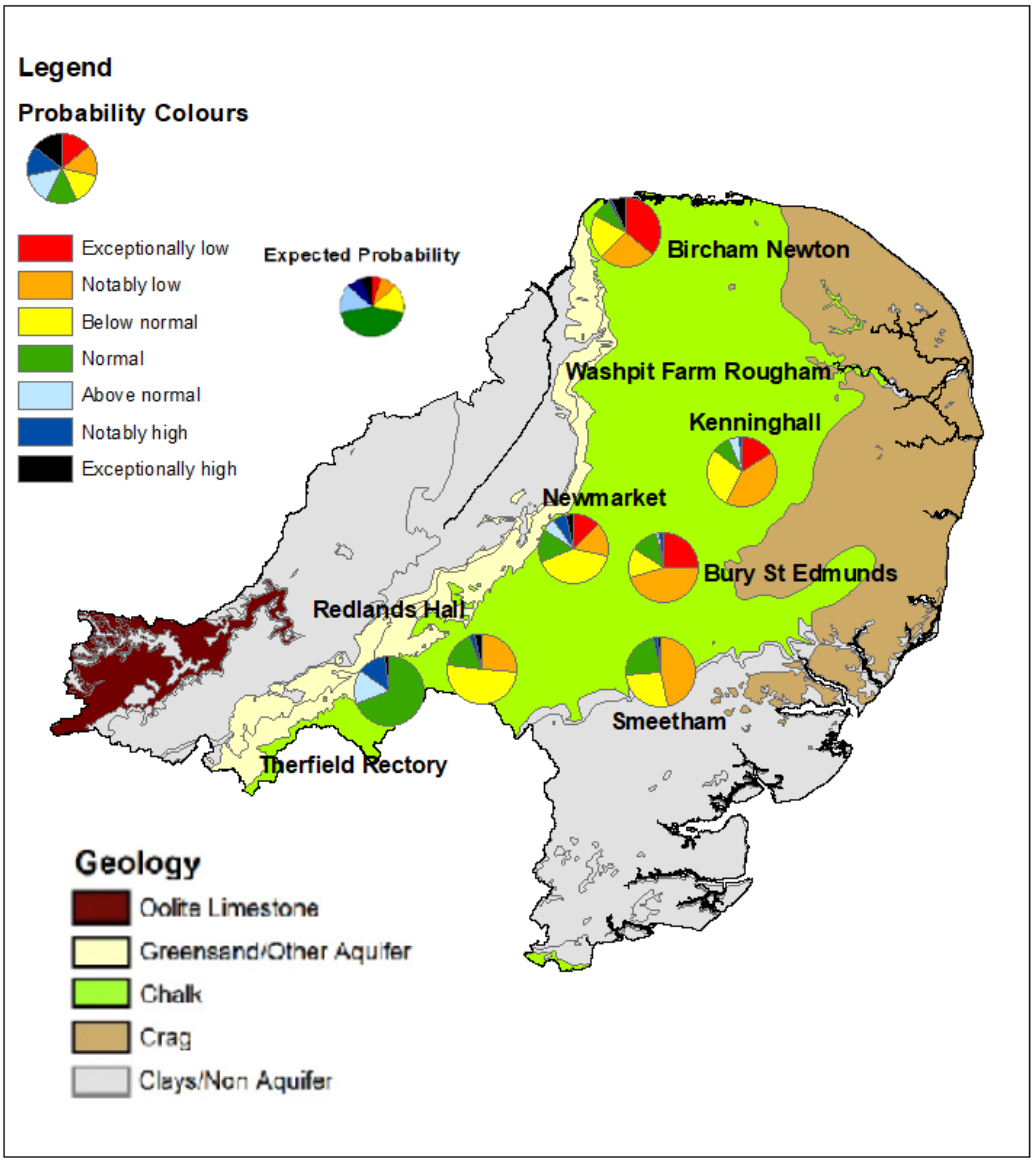
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those 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 groundwater level at each site being, for example, exceptionally low for the time of year. (Source: Environment Agency)

7.4 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)

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	Aug 2025 rainfall % of long term average 1991 to 2020	Aug 2025 band	Jun 2025 to August cumulative band	Mar 2025 to August cumulative band	Sep 2024 to August cumulative band
Broadland Rivers	31	Notably Low	Below normal	Exceptionally low	Notably low
Cam	42	Notably Low	Notably low	Exceptionally low	Below normal
Central Area Fenland	34	Notably Low	Notably low	Exceptionally low	Below normal
East Suffolk	29	Notably Low	Normal	Notably low	Below normal
Little Ouse And Lark	46	Below Normal	Below normal	Exceptionally low	Notably low
Lower Bedford Ouse	32	Notably Low	Notably low	Exceptionally low	Normal
North Essex	36	Notably Low	Notably low	Exceptionally low	Notably low
North Norfolk	31	Notably Low	Below normal	Exceptionally low	Notably low
Nw Norfolk And Wissey	35	Notably Low	Notably low	Exceptionally low	Notably low

South Essex	31	Notably Low	Notably low	Exceptionally low	Notably low
Upper Bedford Ouse	41	Notably Low	Notably low	Exceptionally low	Normal

9.2 River flows table

Site name	River	Catchment	Aug 2025 band	Jul 2025 band
Abbey Heath	Little Ouse	Little Ouse	Exceptionally low	Exceptionally low
Blunham	Ivel	Ivel	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	Notably low	Below normal
Colney	Yare	Yare	Notably low	Notably low
Denver	Ely Ouse	Cutoff and Renew Channel	Exceptionally 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	Exceptionally low	Exceptionally low
Marham	Nar	Nar	Below normal	Notably low
Needham Weir Total	Waveney (lower)	Waveney	Exceptionally low	Below normal

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

9.3 Groundwater table

Site name	Aquifer	End of Aug 2025 band	End of Jul 2025 band
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	Below normal	Normal
Castle Farm, Offton	East Suffolk Chalk	Normal	Normal
Gog Magog, Stapleford	Cam Chalk	Below normal	Below normal
Hazlewood Common	East Suffolk Crag	Normal	Normal
Hindolveston	Norfolk Chalk	Notably low	Exceptionally low
Kenninghall	Little Ouse Chalk	Normal	Below 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	No Data

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	Notably low
Washpit Farm, Rougham	North West Norfolk Chalk	Below normal	Normal
Therfield Rectory	Upper Lee Chalk	Above normal	Notably high
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 September 2025

Percentage of pie chart for each band

Site	Bedford Ouse	Kym	Ivel	Ouse	Ely Ouse
Exceptionally low	0	0	0	0	2
Notably low	0	0	0	0	31
Below normal	0	0	0	0	58
Normal	66	68	0	68	9
Above normal	24	29	84	24	0
Notably high	10	3	16	8	0
Exceptionally high	0	0	0	0	0

9.4.2 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	0	8	0	3	2
Notably low	26	37	5	23	27
Below normal	35	18	26	35	40
Normal	18	15	37	18	9
Above normal	8	8	16	6	2
Notably high	5	3	5	3	9
Exceptionally high	8	11	11	11	11

9.4.3 Probabilistic ensemble projection of groundwater levels at key sites in September 2025

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	0.0	0.0	0.0	0.0	0.0
Notably low	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Below normal	0.0	0.0	100.0	100.0	0.0	100.0	0.0
Normal	0.0	100.0	0.0	0.0	100.0	0.0	100.0
Above normal	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Notably high	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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 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	12.5	35.9	15.6	25.0	0.0
Notably low	0.0	26.6	15.6	26.6	42.2	45.3	46.9
Below normal	0.0	50.0	40.6	20.3	28.1	14.1	26.6
Normal	68.9	17.2	15.6	9.4	7.8	12.5	23.4
Above normal	16.4	0.0	6.3	0.0	4.7	1.6	0.0
Notably high	13.1	3.1	6.3	1.6	1.6	1.6	1.6
Exceptionally high	1.6	3.1	3.1	6.3	0.0	0.0	1.6