Monthly water situation report: East Anglia

1 Summary - July 2025

The East Anglia rainfall for July 2025 ranged from 90% to 136% of the long term average for the month, with the wettest catchments being in the east of the area. There was a minor reduction in the area soil moisture deficit following a period of unsettled weather in the third week of the month. However, with above average temperatures in July, the soil moisture deficit for East Anglia remained notably high for the time of year at 121mm. For the majority of rivers, the flow for July 2025, when calculated as an average for the month, was less than the flow for June 2025. This is despite rainfall for July 2025 being approximately double the amount recorded for June 2025 in much of the area. Groundwater levels at the majority of report sites continue to fall, although remain normal to below normal for the time of year. Public water supply reservoirs within East Anglia ended July 2025 with levels ranging from 72% to 83% of full storage capacity.

1.1 Rainfall

July 2025 rainfall totals across East Anglia ranged from 90% to 136% 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 Broadlands both receiving approximately 76mm across the month. The average rainfall across East Anglia for July 2025 was 58mm, which is 107% of the historic LTA and is considered normal for the time of year. This approximately average July rainfall followed an exceptionally dry spring and start to summer. The East Anglia rainfall total for March 2025 to June 2025 was 81mm, which ranks as the fourth driest March to June period on record (1871 to 2025) for East Anglia.

1.2 Soil moisture deficit and recharge

The soil moisture deficit [SMD] for East Anglia at the end of July 2025 was 121mm. The SMD decreased following rainfall in the latter half of the month, although 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 between 146mm and 155mm.

1.3 River flows

For the majority of river flow report sites, the July 2025 month mean flow was less than the June 2025 month mean flow. This can largely be attributed to the expected steady recession in river base flows through the summer. Report sites along the Bedford Ouse, and its tributaries, recorded July 2025 flows considered 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. Most notably, the July 2025 month mean flow for the Ely Ouse at Denver was 1% of the LTA.

1.4 Groundwater levels

Groundwater levels continue to fall in line with the expected seasonal pattern. The majority of report sites ended July 2025 with groundwater levels categorised as normal or below normal for the time of year. The groundwater level at Therfield Rectory, North Hertfordshire Chalk, continues to be notably high 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 to 2025) for that catchment. The lowest groundwater levels are to the north-east with Hindolveston, Norfolk Chalk, and The Spinney, Wensum Chalk, respectively recording exceptionally low and notably low levels for July 2025.

1.5 Reservoir stocks

Public water supply reservoirs within East Anglia finished July 2025 with levels ranging from 72% to 83% of full storage capacity. In all cases, the end of July reservoir level was below the respective reservoir normal operating curve.

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 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. Whilst the flow at Denver is currently close to zero, we expect a significant recovery in flows with the end of the irrigation season.

1.6.2 Probabilistic ensemble projections for groundwater levels in key aquifers

The groundwater forecast for September 2025 reflects the current aquifer levels, with most forecast sites expected to be within the normal to below normal range, and Therfield Rectory expected to be within the notably high to above normal range. The majority of forecast sites show a greater than 50% chance of below normal or lower groundwater levels by March 2026, whilst Therfield Rectory is expected to have normal or higher groundwater levels.

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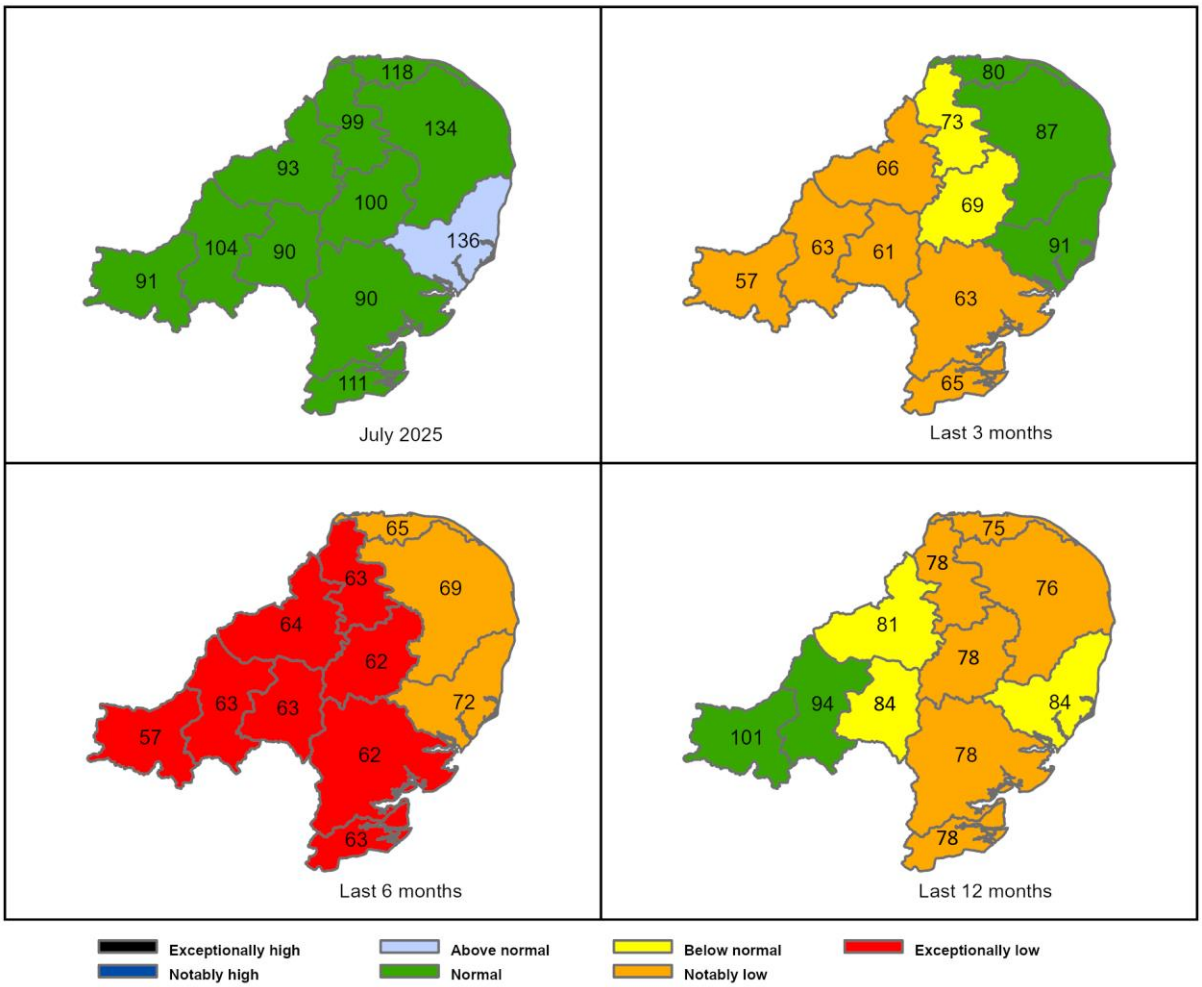
2 Rainfall

2.1 Rainfall map

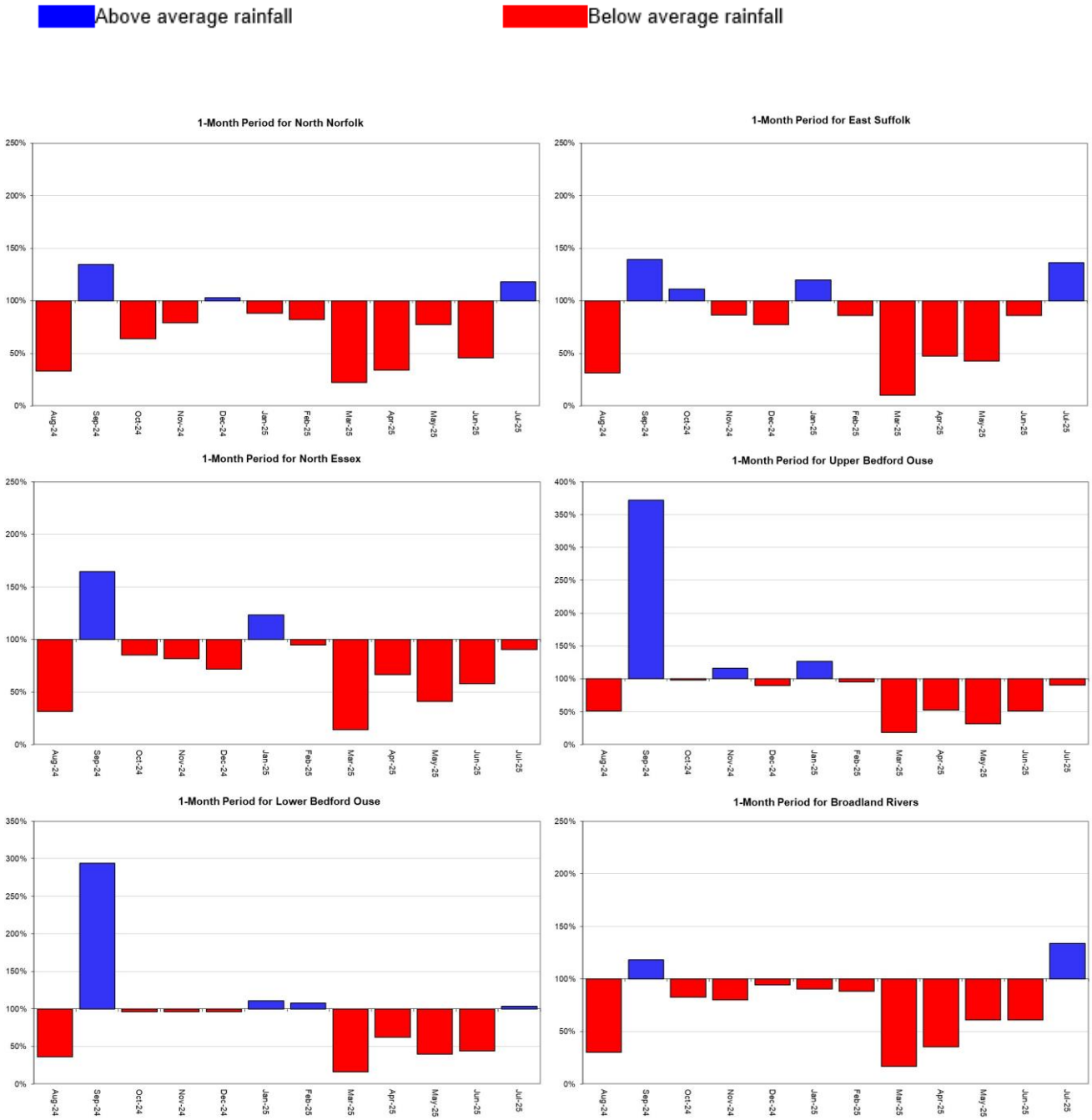
Figure 2.1: Total rainfall for hydrological areas across East Anglia, expressed as a percentage of long term average rainfall for the current month (up to 31 July 2025), the last 3 months, the last 6 months, and the last 12 months. Category classes are based on an analysis of respective historic totals.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

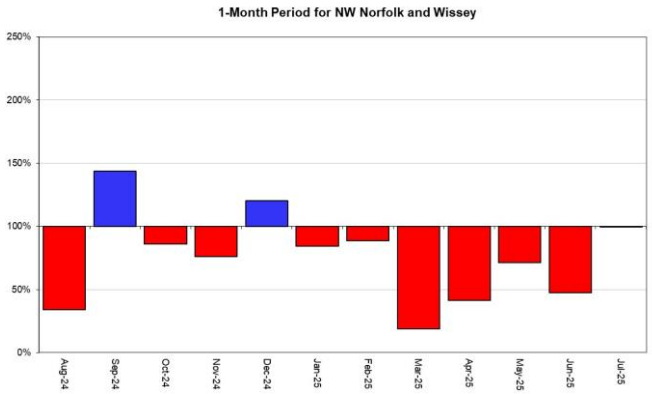


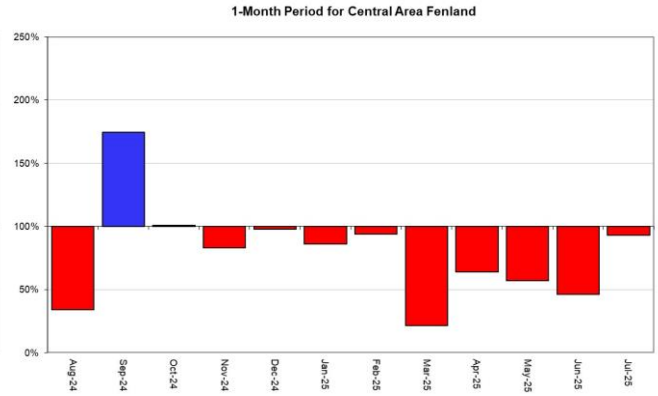
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2025). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved.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

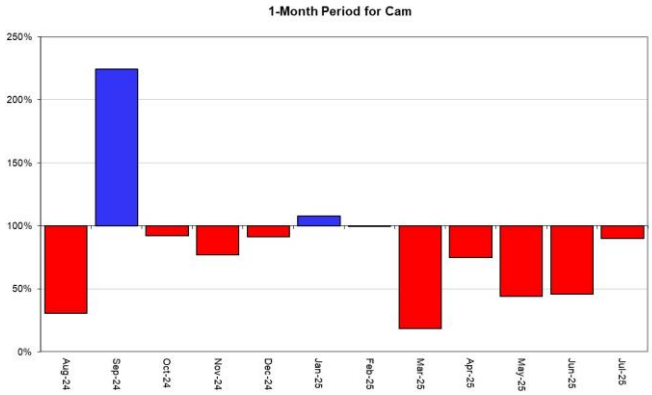
2.2 Rainfall charts

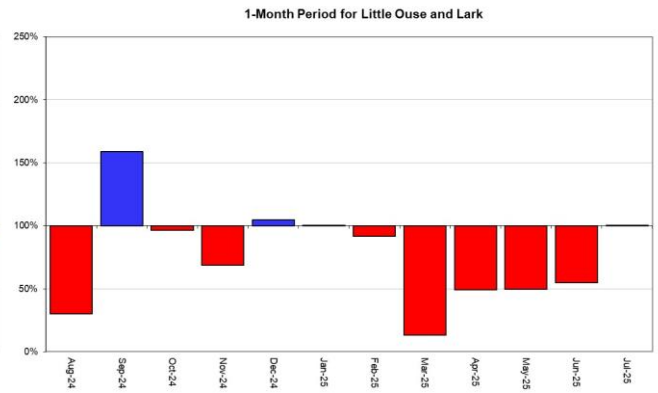
Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each region and for England.

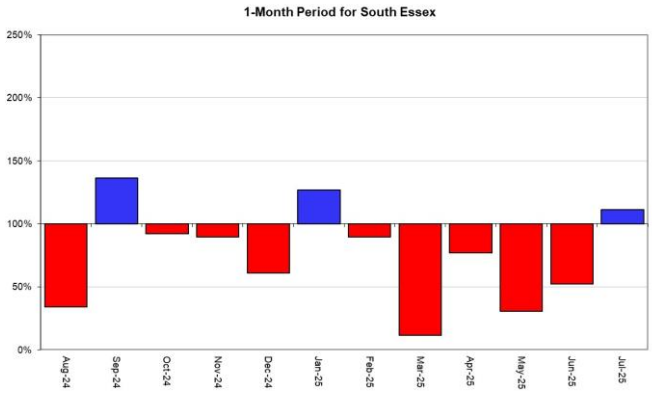






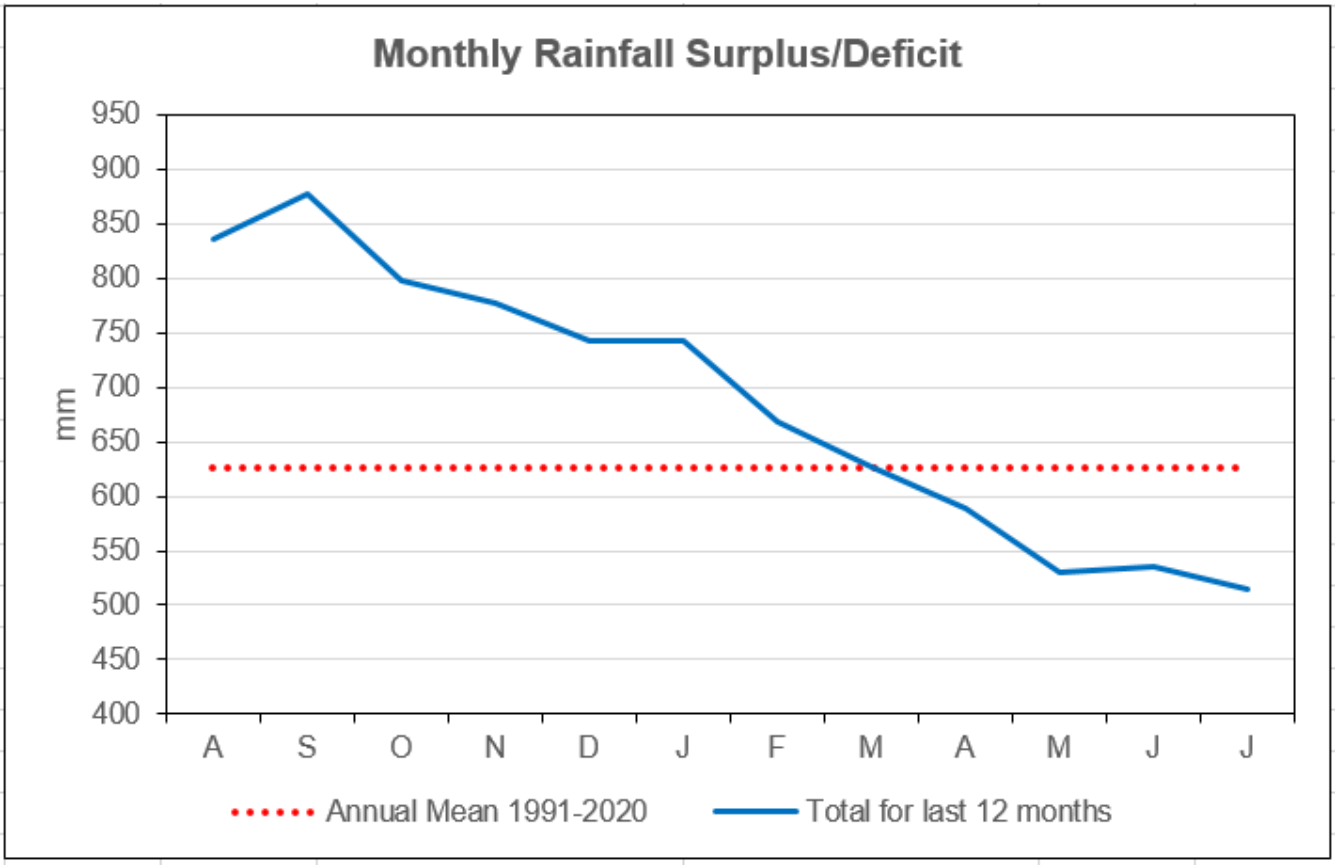






HadUK rainfall data. (Source: Met Office. Crown copyright, 2025).

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

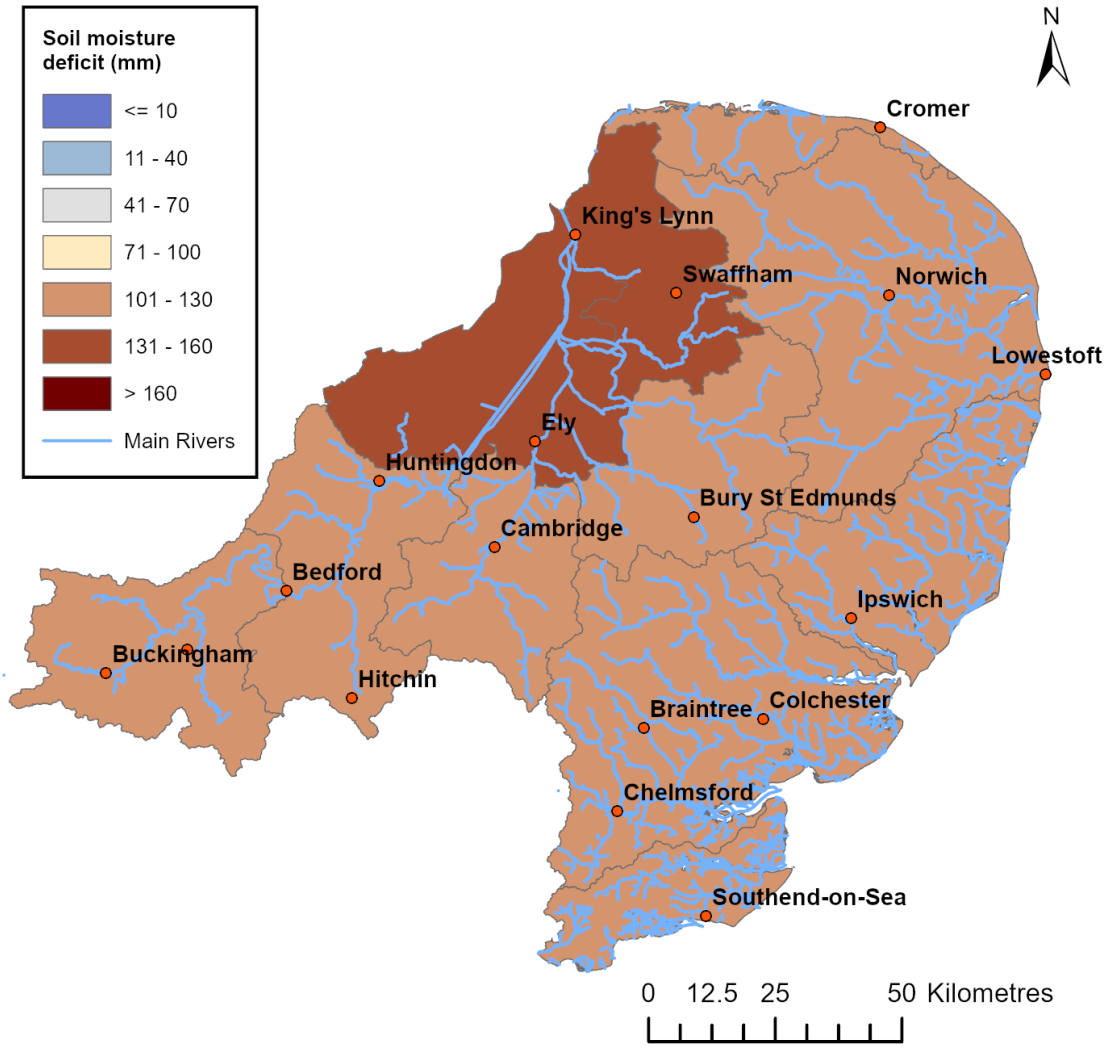
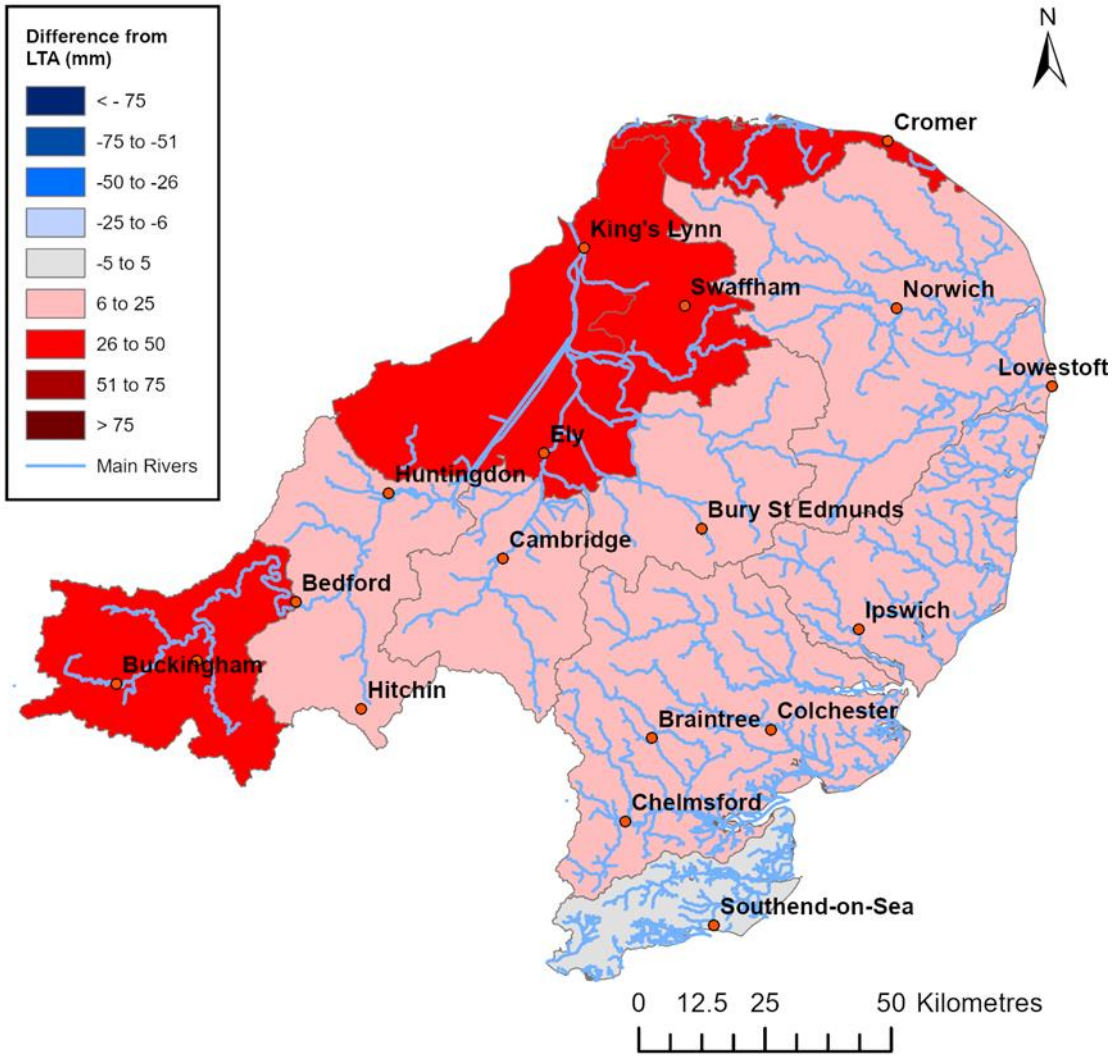
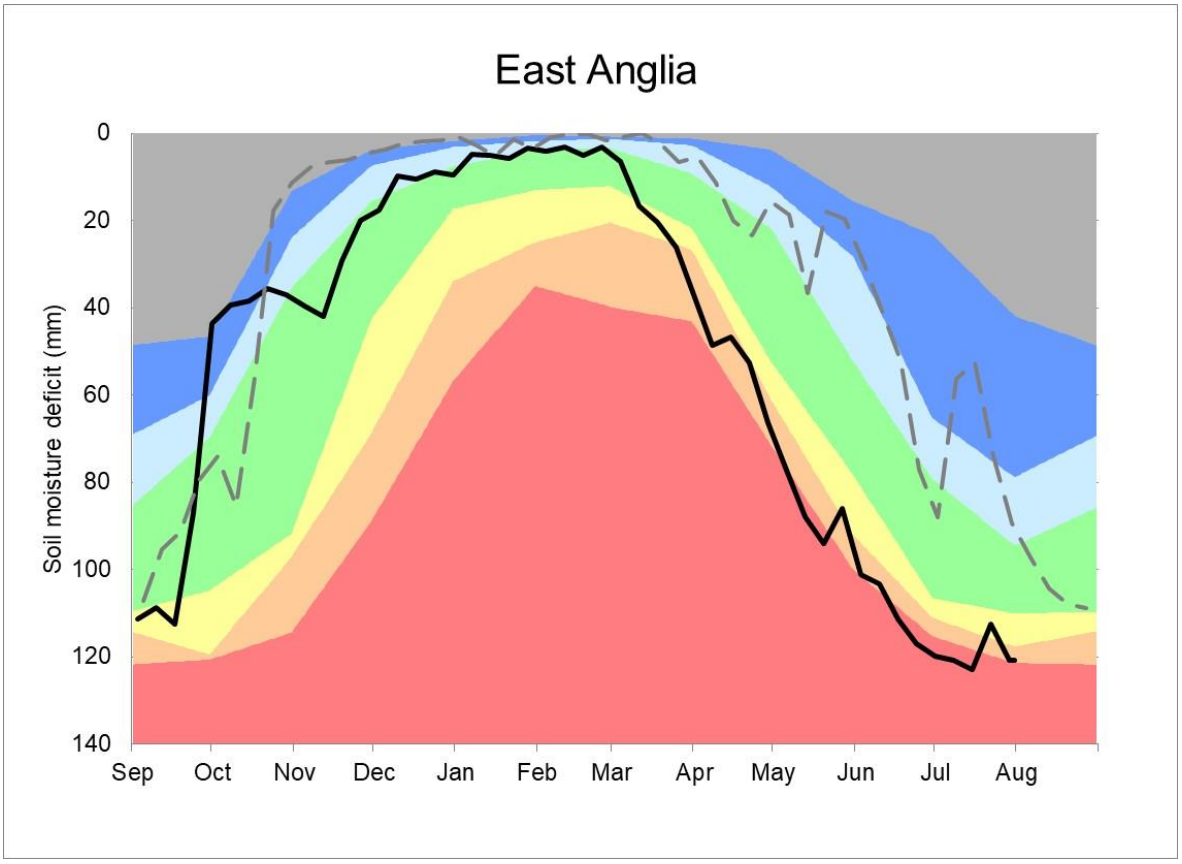


Figure 3.2b: A map displaying Soil moisture deficit values (for 31 July 2025) relative to long term average end of July soil moisture deficit values for hydrological catchments across East Anglia. Values based on the weekly MORECS data for real land use.



3.2 Soil moisture deficit charts

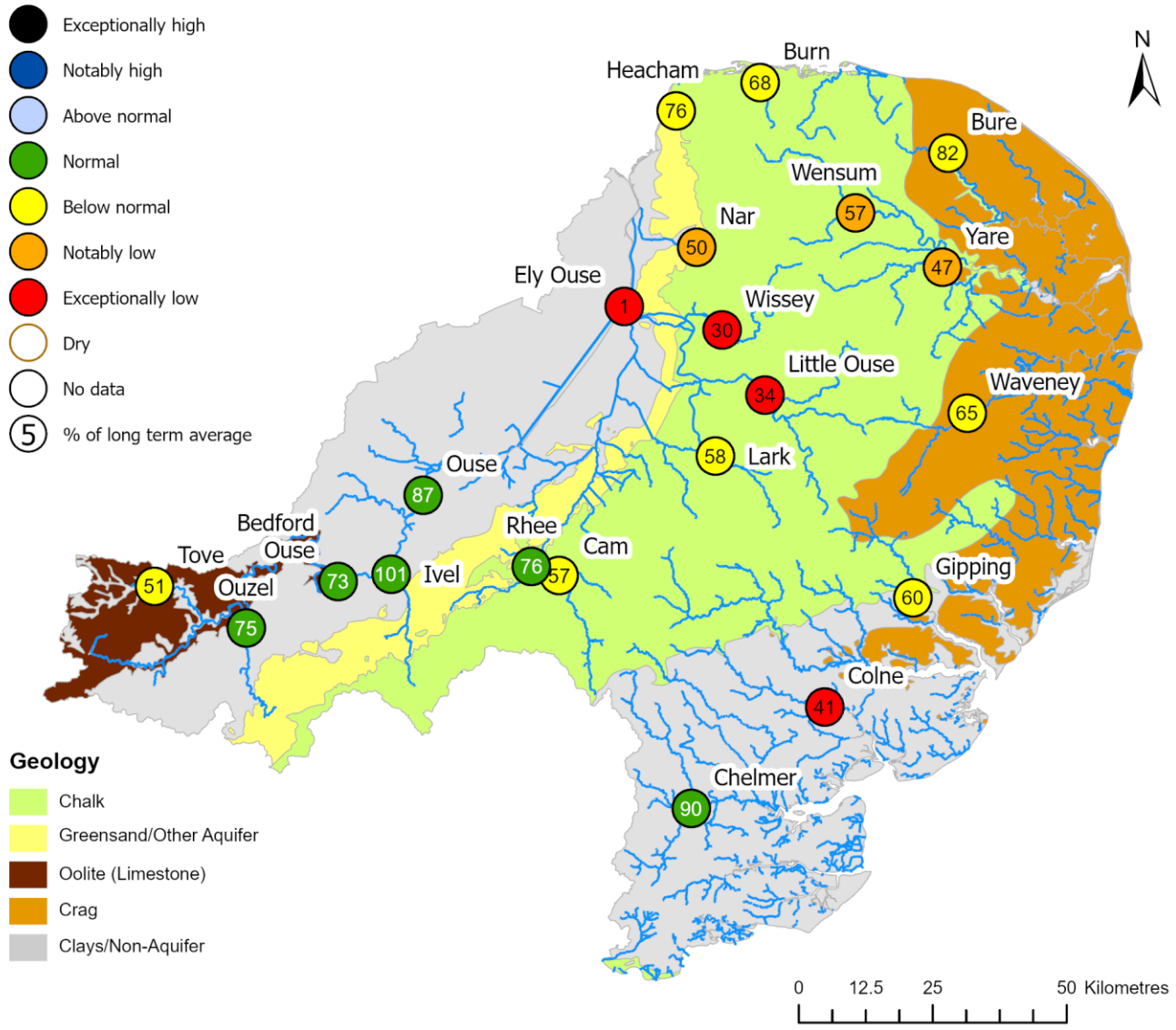
Figure 3.3: Latest soil moisture deficit compared to an analysis of historic 1991 to 2020 long term data set. Weekly MORECS data for real land use.



4 River flows

4.1 River flows map

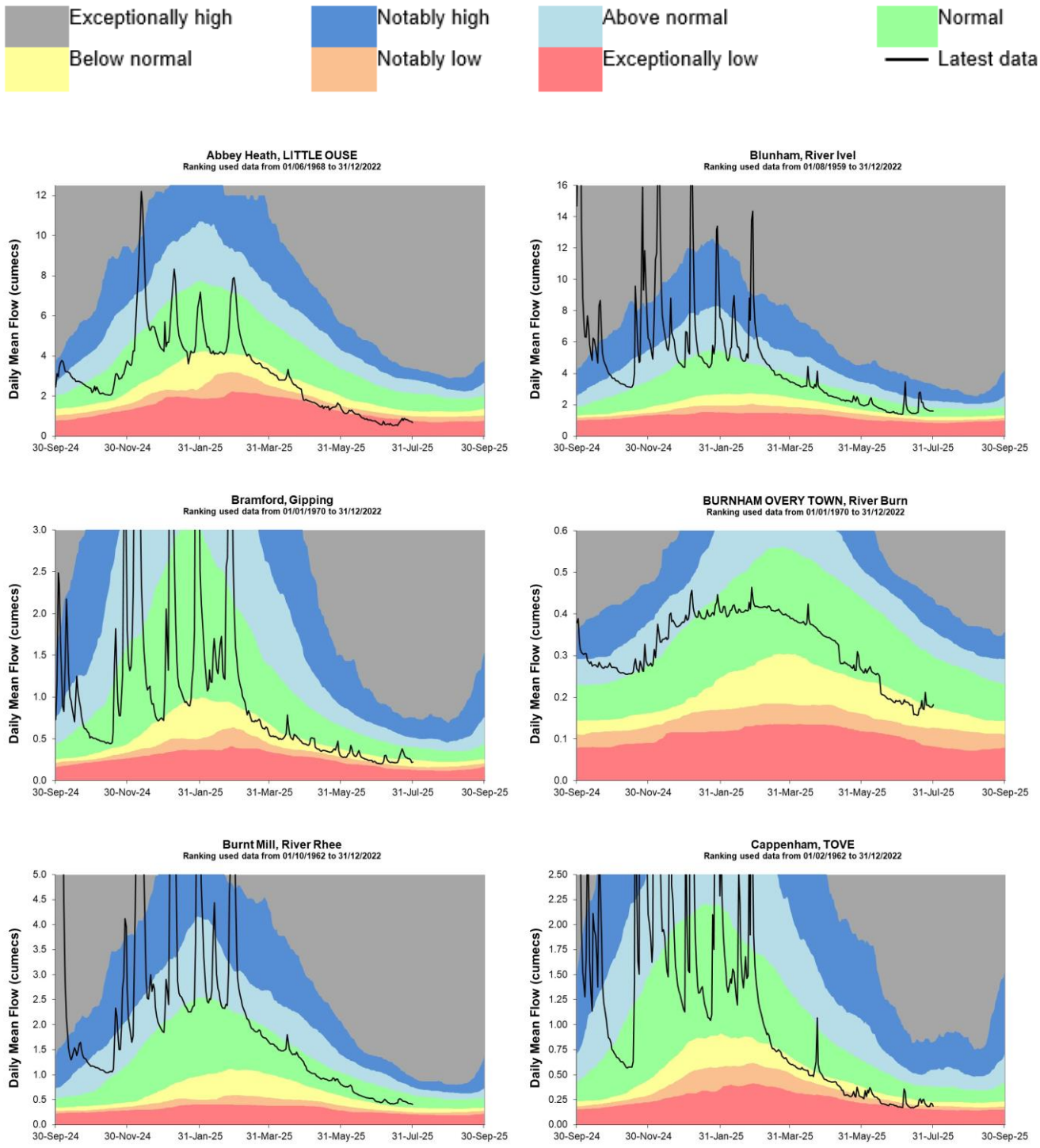
Figure 4.1: Monthly mean river flow for indicator sites for July 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic July monthly means Table available in the appendices with detailed information.

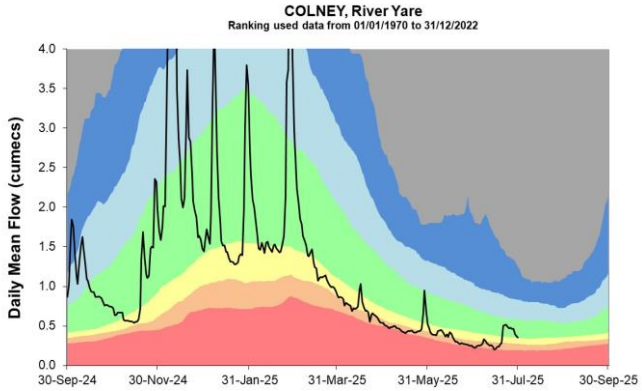


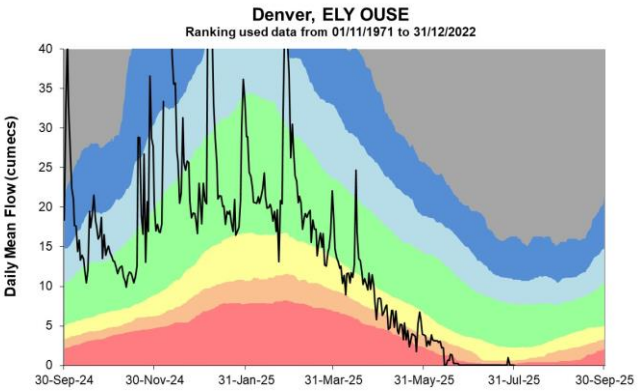
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

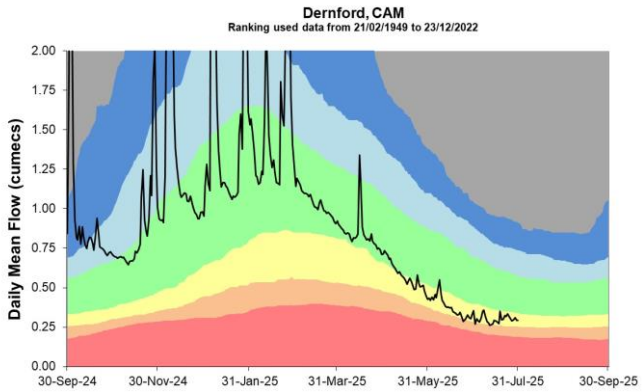
4.2 River flow charts

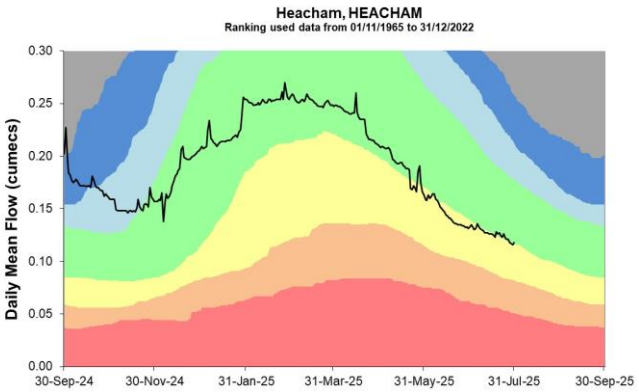
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

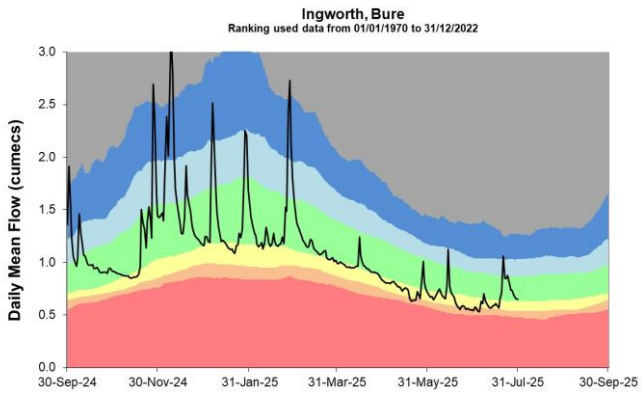


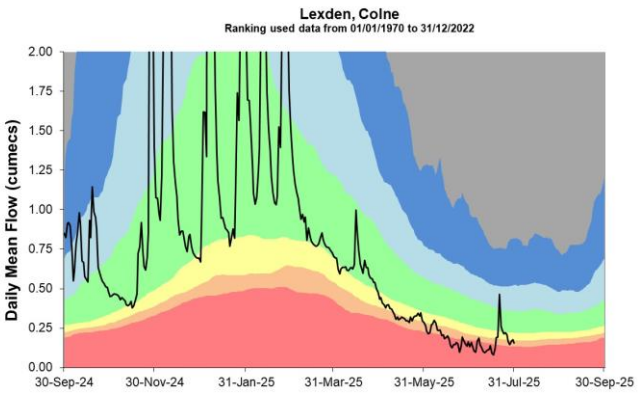

COLNEY, River Yare
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25


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

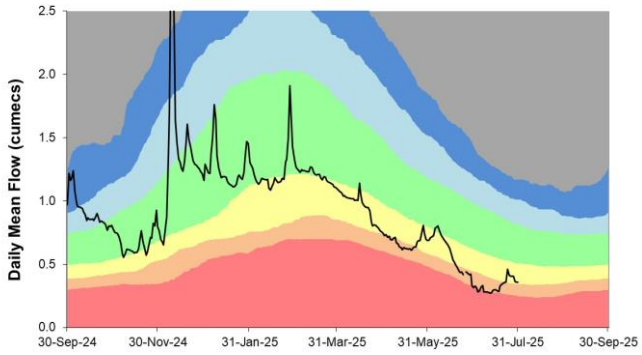

Dernford, CAM
Ranking used data from 21/02/1949 to 23/12/2022
Daily Mean Flow (cumecs)
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25


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

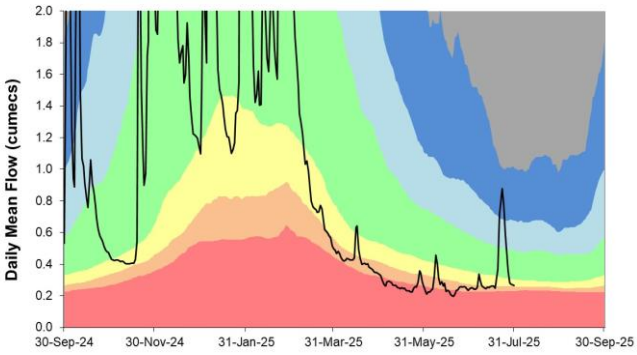

Ingworth, Bure
Ranking used data from 01/01/1970 to 31/12/2022
Daily Mean Flow (cumecs)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25


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

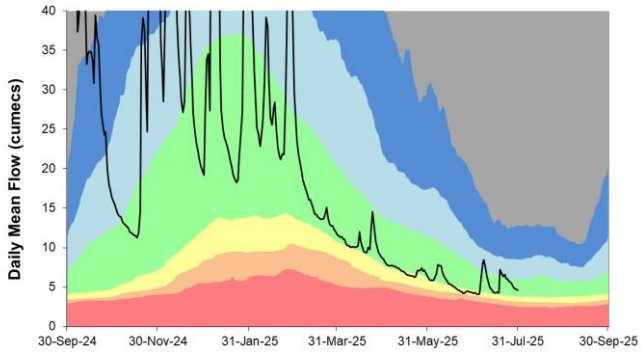
Marham, River Nar
Ranking used data from 01/09/1953 to 31/12/2022



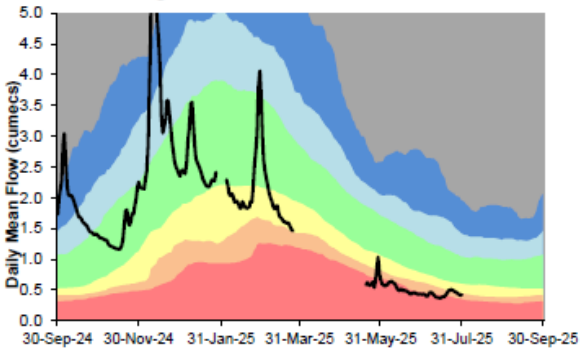
Needham Weir Total, Waveney
Ranking used data from 01/01/1970 to 31/12/2022



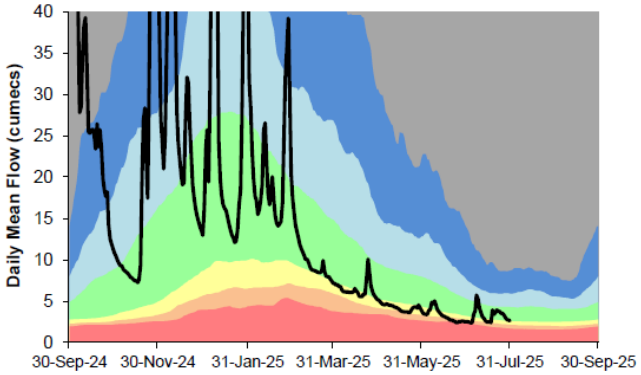
Offord (Gross flows), GREAT OUSE
Ranking used data from 05/03/1970 to 31/12/2022



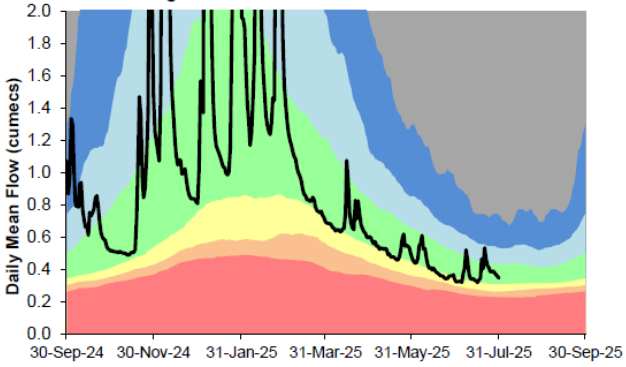
Northwold Total, WISSEY
Ranking used data from 02/07/1983 to 31/12/2022



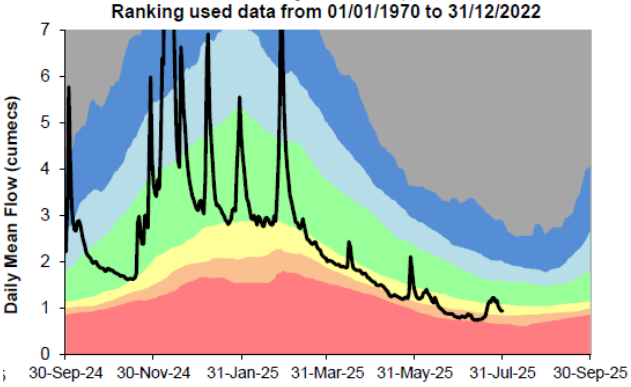
Roxton, GREAT OUSE
Ranking used data from 23/10/1972 to 31/12/2022



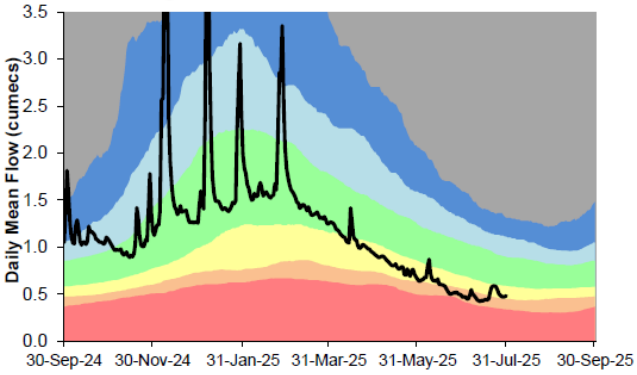
SPRINGFIELD, River Chelmer
Ranking used data from 01/01/1970 to 31/12/2022

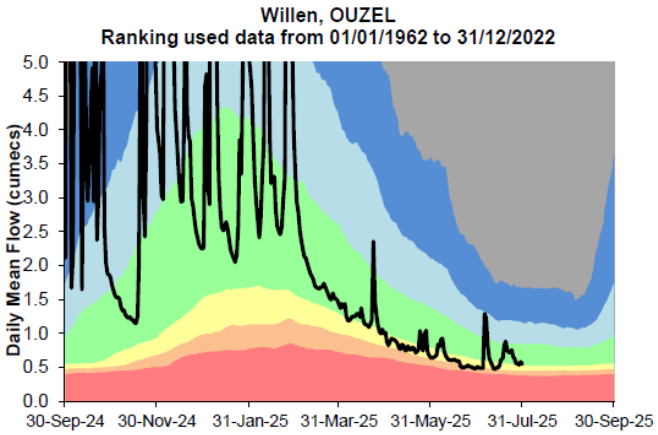


Swanton Morley Total Flow, Wensum
Ranking used data from 01/01/1970 to 31/12/2022



Temple, LARK
Ranking used data from 01/11/1960 to 31/12/2022



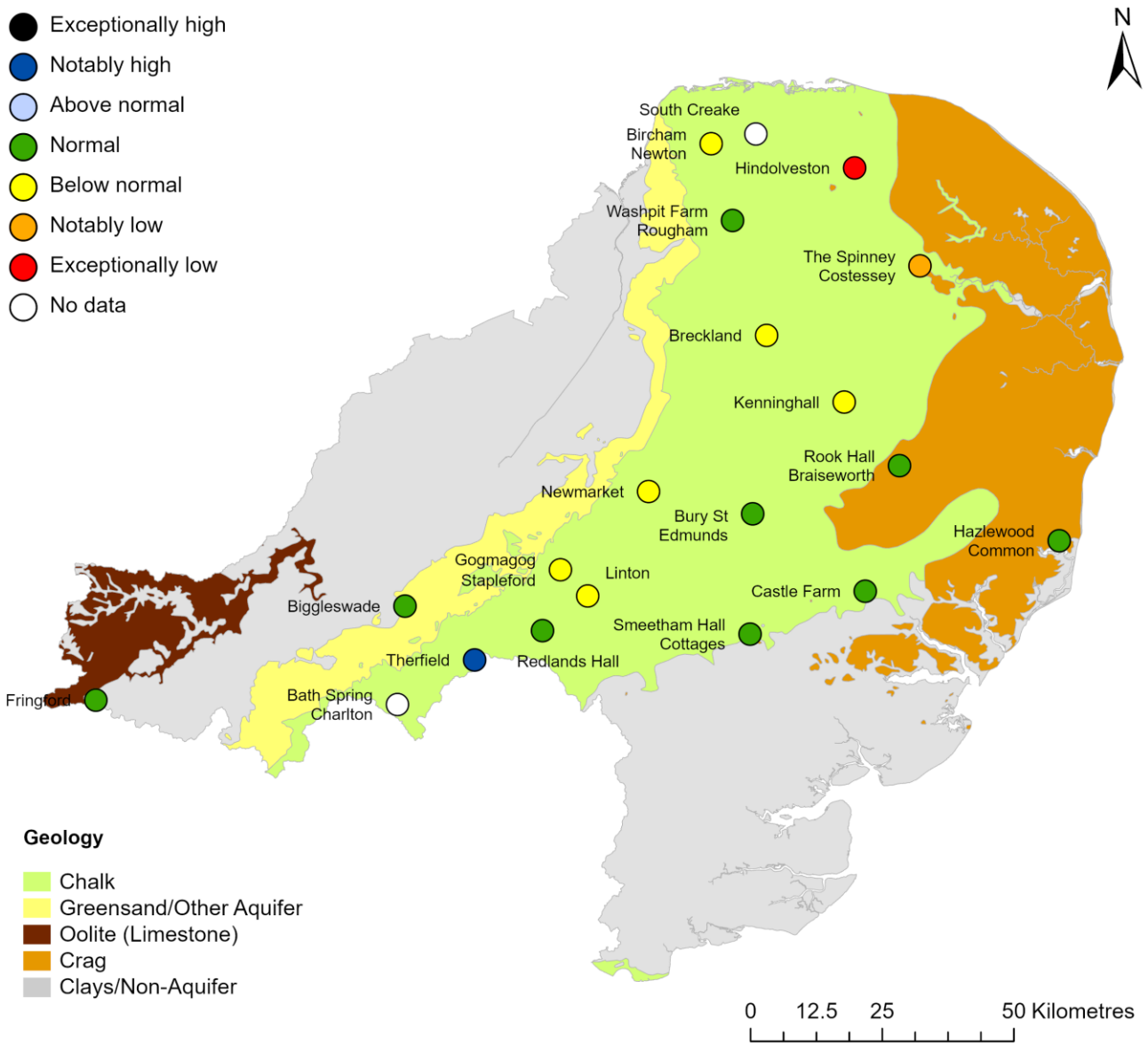


Source: Environment Agency.

5 Groundwater levels

5.1 Groundwater levels map

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



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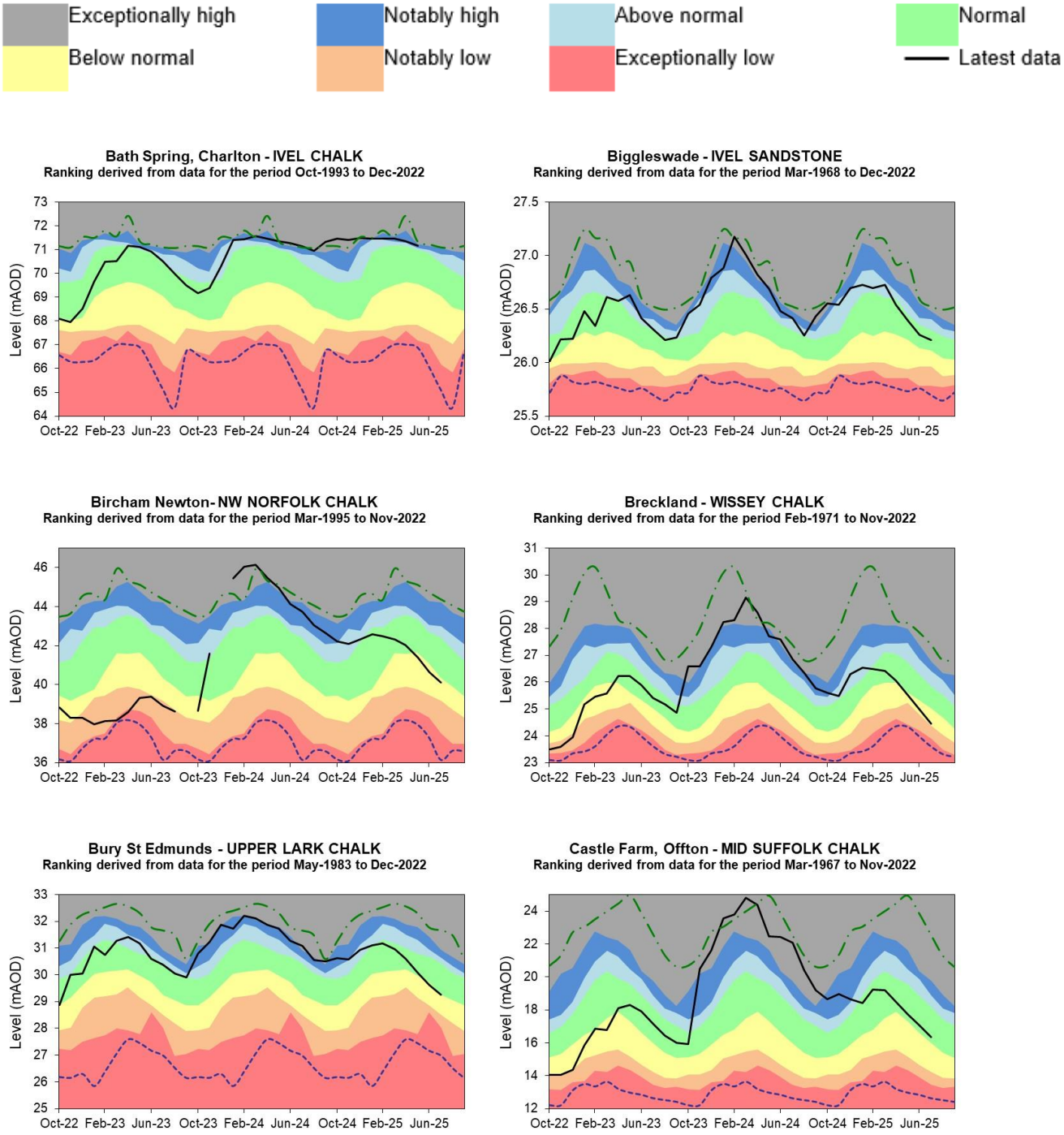
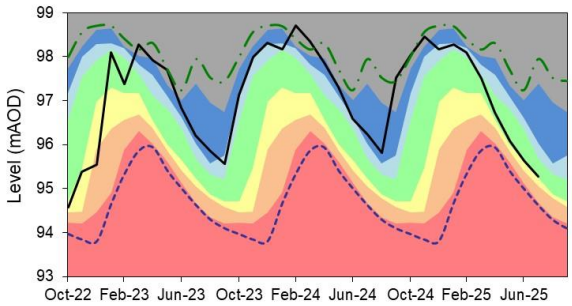
5.2 Groundwater level charts

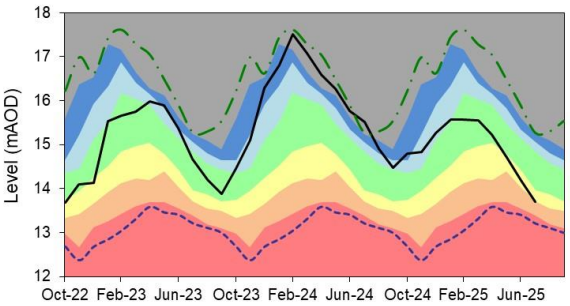
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.



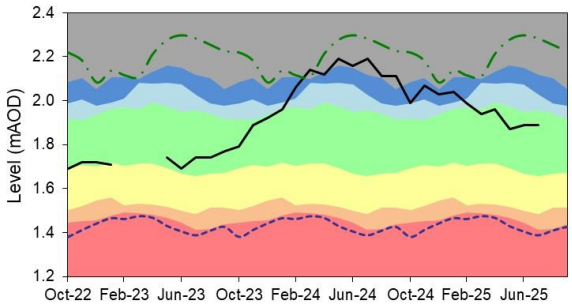
Fringford - GREAT OOLITE
Ranking derived from data for the period Sep-1980 to Dec-2022



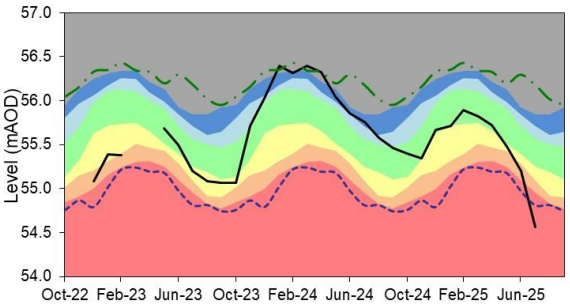
Gog Magog, Stapleford - CAM CHALK
Ranking derived from data for the period Jan-1980 to Dec-2022



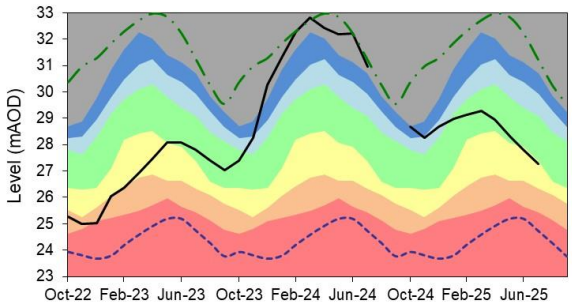
Hazlewood Common - SUFFOLK CRAG
Ranking derived from data for the period Oct-1988 to Nov-2022



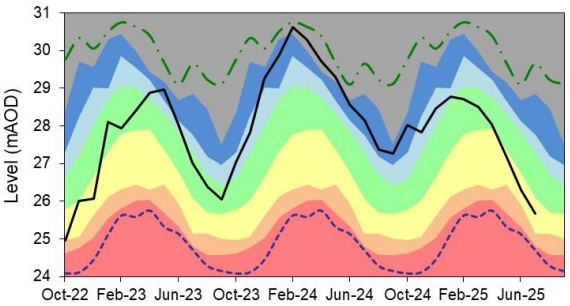
Hindolveston - NORFOLK CHALK
Ranking derived from data for the period Sep-1984 to Nov-2022



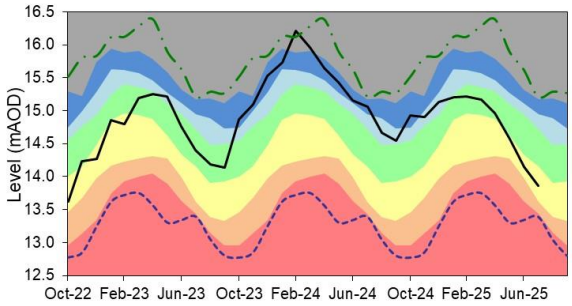
Kenninghall - LITTLE OUSE CHALK
Ranking derived from data for the period Aug-1973 to Dec-2022



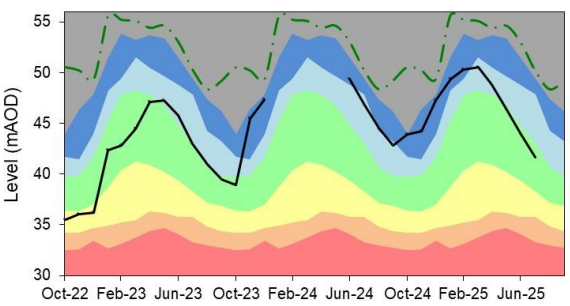
Linton- CAM CHALK
Ranking derived from data for the period Jan-1980 to Dec-2022

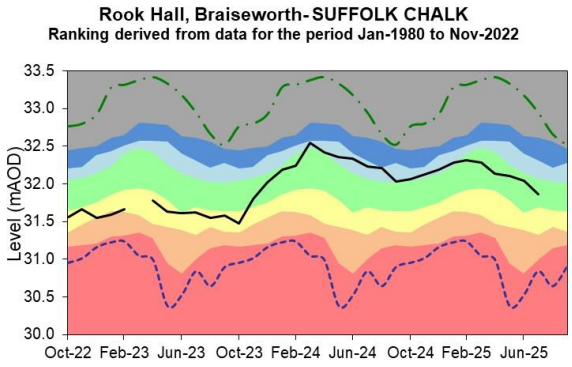


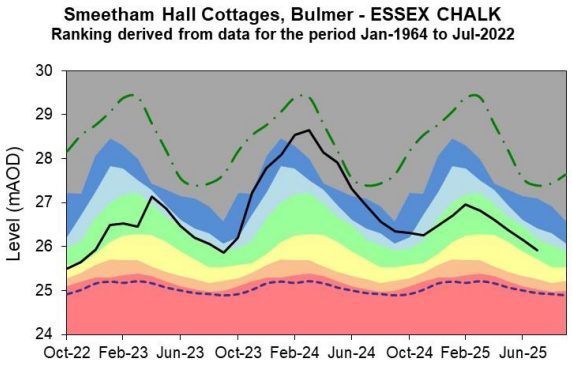
Newmarket - SNAIL CHALK
Ranking derived from data for the period Feb-1983 to Dec-2022

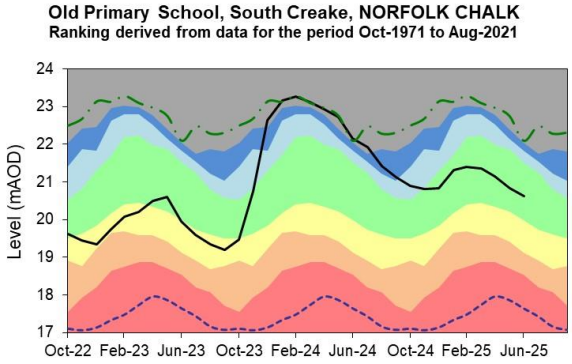


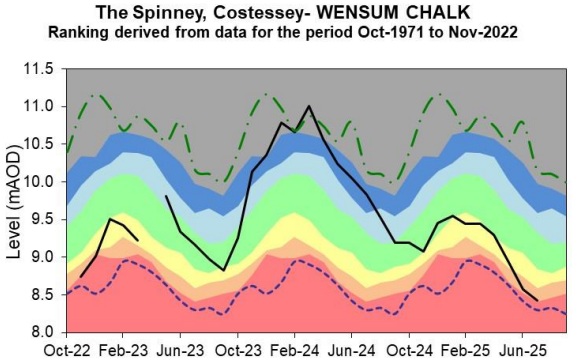
Redlands Hall, Ickleton - CAM CHALK
Ranking derived from data for the period Aug-1963 to Dec-2022

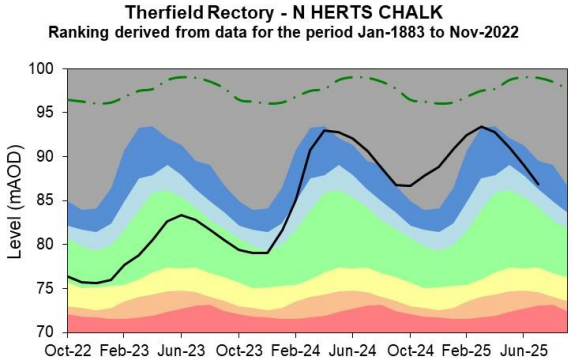


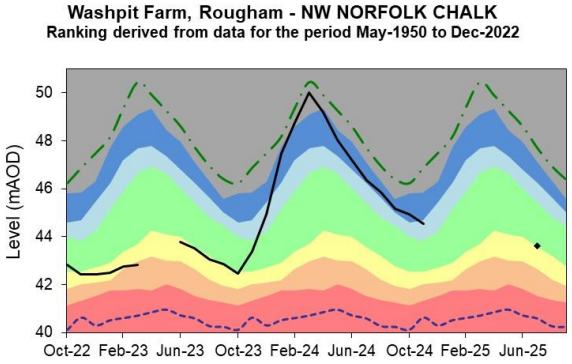








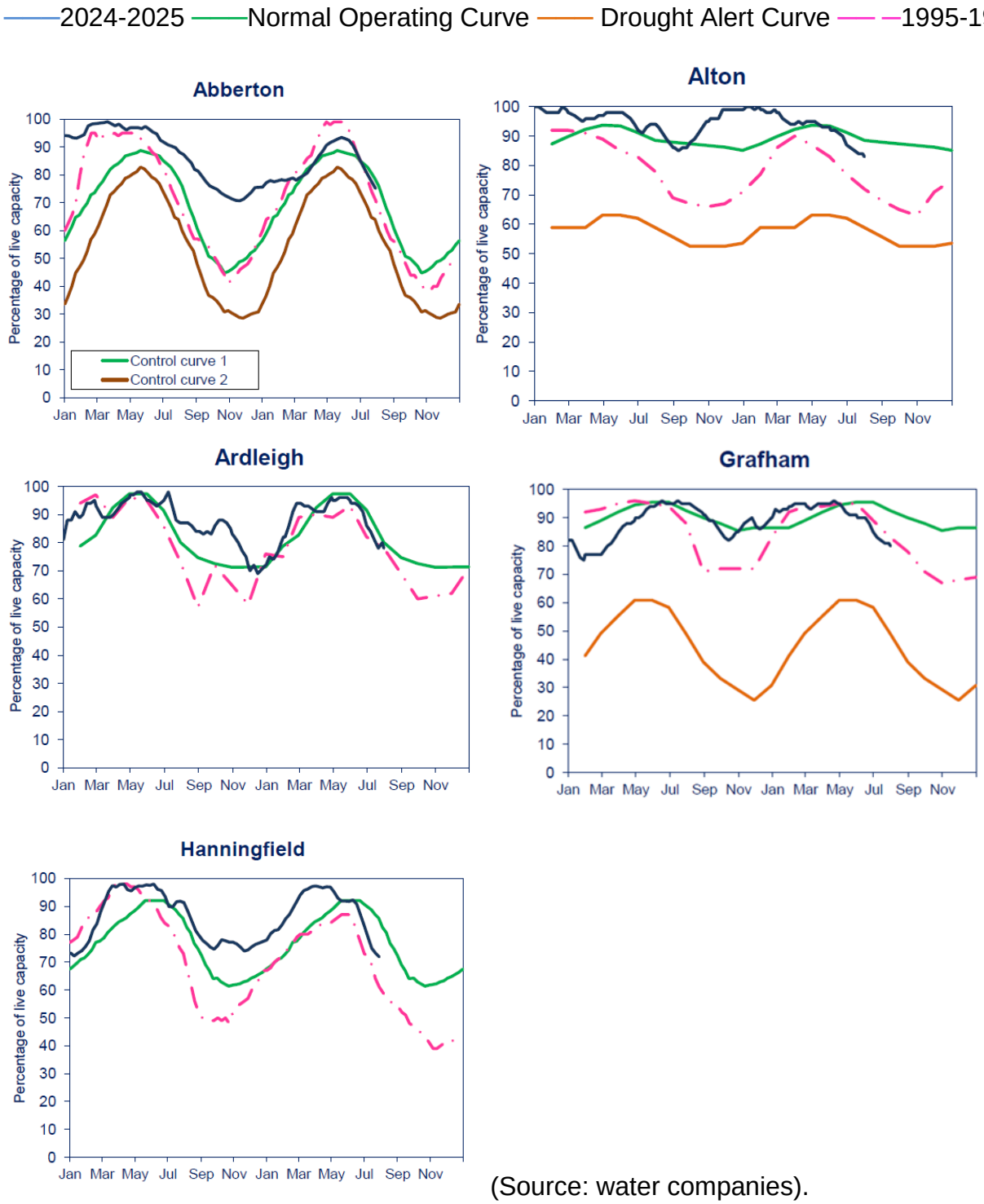




Source: Environment Agency, 2025.

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.

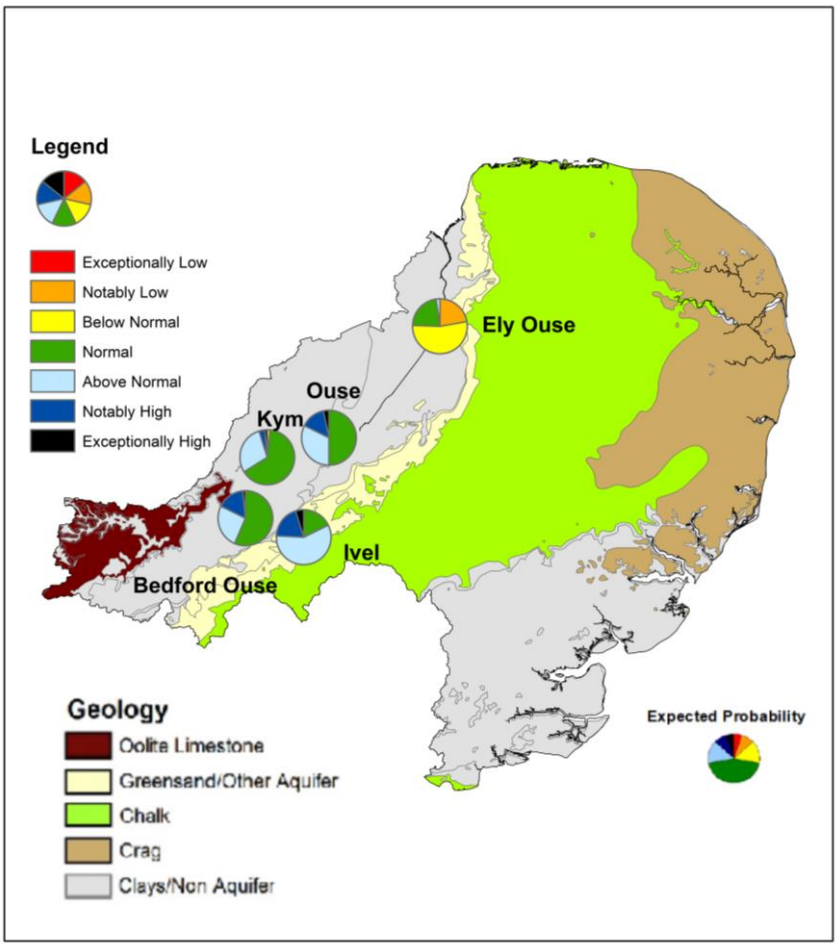


(Source: water companies).

7 Forward look

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

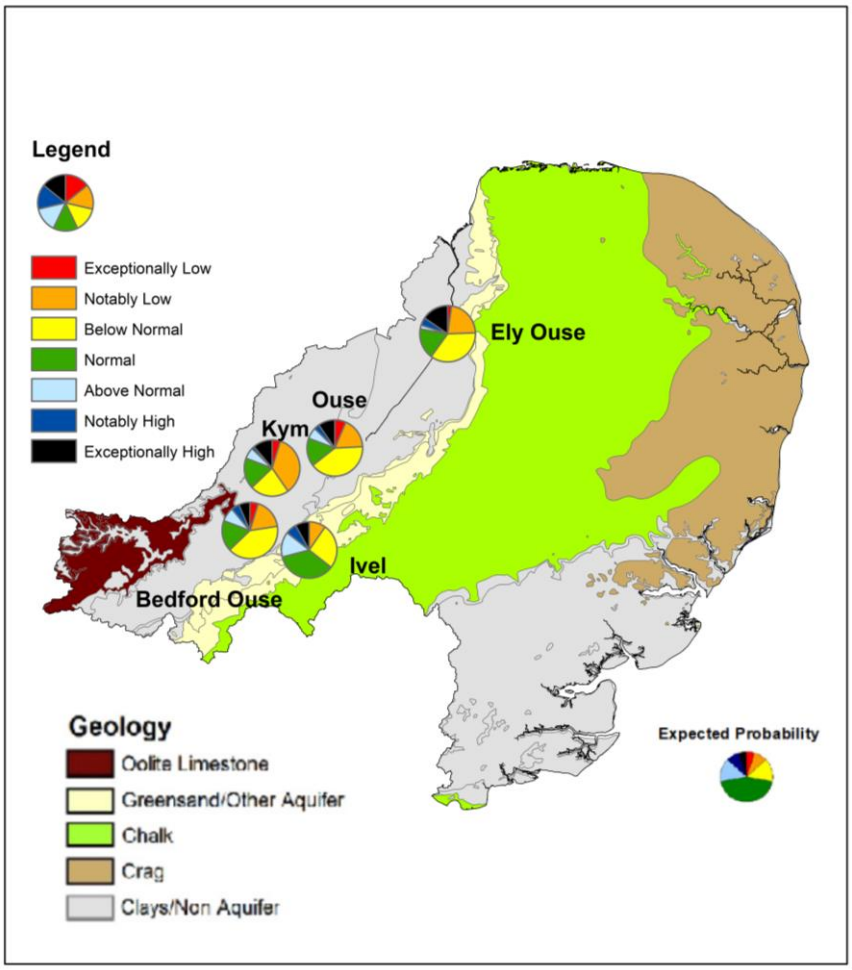
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those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

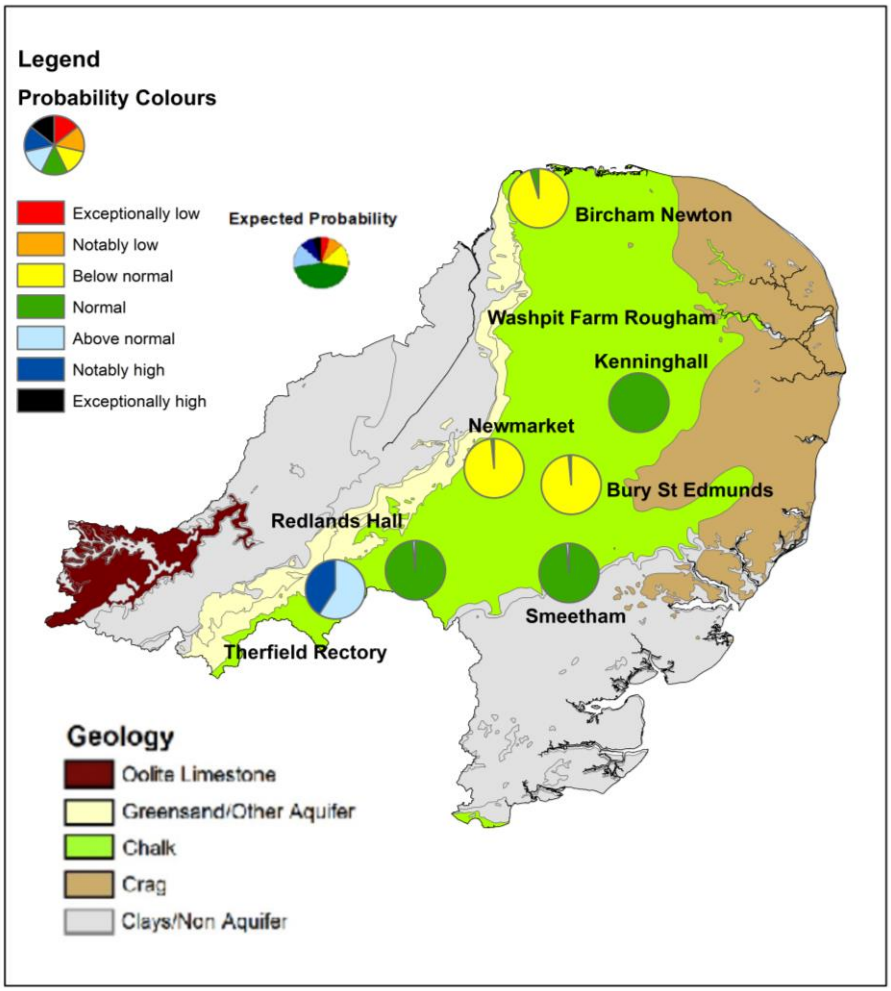
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those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

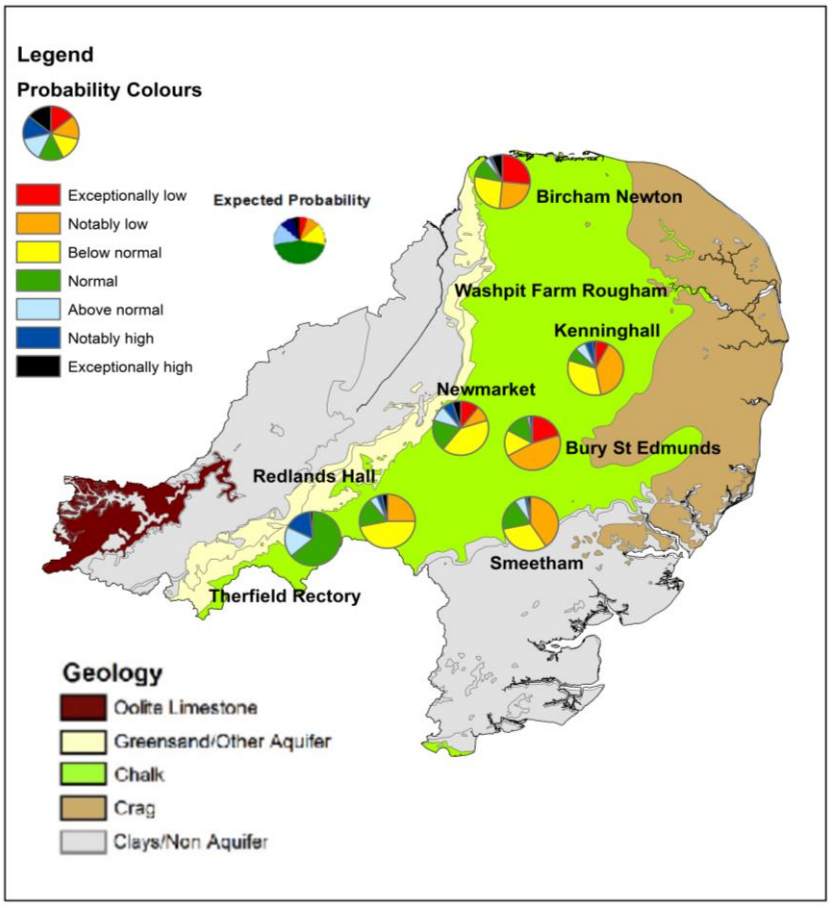
Table available in the appendices with detailed information. Exceptionally high or low levels are those which would typically occur 5% of the time within the historic record. Notably high or low levels are those which would typically occur 8% of the time. Above normal or below normal levels are those 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	Jul 2025 rainfall % of long term average 1991 to 2020	Jul 2025 band	May 2025 to July cumulative band	Feb 2025 to July cumulative band	Aug 2024 to July cumulative band
Broadland Rivers	134	Normal	Normal	Notably low	Notably low
Cam	90	Normal	Notably low	Exceptionally low	Below normal
Central Area Fenland	93	Normal	Notably low	Exceptionally low	Below normal
East Suffolk	136	Above Normal	Normal	Notably low	Below normal
Little Ouse And Lark	100	Normal	Below normal	Exceptionally low	Notably low
Lower Bedford Ouse	104	Normal	Notably low	Exceptionally low	Normal
North Essex	90	Normal	Notably low	Exceptionally low	Notably low
North Norfolk	118	Normal	Normal	Notably low	Notably low
NW Norfolk And Wissey	99	Normal	Below normal	Exceptionally low	Notably low

South Essex	111	Normal	Notably low	Exceptionally low	Notably low
Upper Bedford Ouse	91	Normal	Notably low	Exceptionally low	Normal

9.2 River flows table

Site name	River	Catchment	Jul 2025 band	Jun 2025 band
Abbey Heath	Little Ouse	Little Ouse	Exceptionally low	Exceptionally low
Blunham	Ivel	Ivel	Normal	Normal
Bramford	Gipping	Gipping	Below normal	Notably low
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	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	Notably low	Below normal
Needham Weir Total	Waveney (lower)	Waveney	Below normal	Exceptionally low

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

9.3 Groundwater table

Site name	Aquifer	End of Jul 2025 band	End of Jun 2025 band
Biggleswade	Ivel Woburn Sands	Normal	Normal
Bircham Newton	North West Norfolk Chalk	Below normal	Below normal
Breckland	Wissey Chalk	Below normal	Below normal
Bury St Edmunds	Upper Lark Chalk	Normal	Below 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	Exceptionally Low	Notably low
Kenninghall	Little Ouse Chalk	Below 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	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	Notably Low	Notably low
Washpit Farm, Rougham	North West Norfolk Chalk	Normal	No Data
Therfield Rectory	Upper Lee Chalk	Notably high	Notably high
Fringford P.s.	Upper Bedford Ouse Oolitic Limestone (great)	Normal	Below 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	0
Notably low	0	0	0	0	22
Below normal	0	2	0	0	53
Normal	56	65	18	50	22
Above normal	26	29	58	32	2
Notably high	16	3	19	15	0
Exceptionally high	2	2	5	3	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	5	5	0	6	2
Notably low	18	35	10	18	22
Below normal	40	23	26	40	36
Normal	18	18	35	16	18
Above normal	8	6	15	6	2
Notably high	5	2	6	3	4
Exceptionally high	6	11	8	10	16

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	98.4	95.3	0.0	98.4	0.0
Normal	0.0	98.4	1.6	4.7	100.0	1.6	98.4
Above normal	59.0	1.6	0.0	0.0	0.0	0.0	1.6
Notably high	41.0	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	10.9	26.6	7.8	20.3	0.0
Notably low	0.0	25.0	9.4	25.0	39.1	46.9	40.6
Below normal	0.0	46.9	40.6	26.6	32.8	15.6	31.3
Normal	63.9	17.2	18.8	10.9	7.8	14.1	18.8
Above normal	18.0	4.7	9.4	3.1	6.3	1.6	6.3
Notably high	16.4	3.1	6.3	1.6	4.7	1.6	1.6
Exceptionally high	1.6	3.1	4.7	6.3	1.6	0.0	1.6