Monthly water situation report: Lincolnshire and Northamptonshire Area

1 Summary - October 2026

Lincolnshire and Northamptonshire recorded an average of 75mm of rain during October 2026, 117% of the long-term average and normal for the time of year. Rainfall totals were above 100% of the long-term average for only the second time since February, and meant the soil moisture deficit reduced by 39.6mm. Despite this river flows and groundwater levels remain low. Eight of the eleven key river flow sites recorded below normal flows for the month and four of the eight groundwater sites also have levels below normal. Reservoir stocks reduced by an average of 4% and all five sites remain significantly below their normal operating curve.

1.1 Rainfall

October 2026 was just the second month since February 2026 to record over 100% of the long-term average (LTA) rainfall across Lincolnshire and Northamptonshire (LNA). 75mm of rain was recorded across the area during October, 117% of the LTA and normal for the time of year. Five of the six hydrological areas recorded above normal rainfall totals, ranging from 118% to 126% of the LTA, while the Upper Welland and Nene recorded 103% LTA rainfall.

A normal August and October meant that LNA received 91% of the LTA rainfall over the last three months, at 163mm. All six hydrological areas recorded normal rainfall totals over this period, from 81% in the Upper Welland and Nene to 96% in Steeping Great Eau and Long Eau.

A more normal three months has helped to improve rainfall totals across the previous six months, though it was still the eighteenth driest May to October since records began in 1871. LNA averaged 70% of the LTA rainfall from May to October, notably low for this period of the year. There was an east-west split in rainfall categorisations over the six-month period, with below normal rainfall in the three hydrological areas to the east and notably low rainfall in the three to the west, though all six areas ranged from 67% to 72% of their respective LTA.

Over the last twelve months, rainfall across LNA has been normal at 103% of the LTA. Four of the six hydrological areas have recorded normal rainfall while Louth, Grimsby and Ancholme and Witham to Chapel Hill recorded above normal rainfall, 107% of their respective LTAs. The comparison between the last six months and the last twelve highlights the two extremes experienced over the last year across LNA. An exceptionally wet winter was followed by one of the driest spring and summers on record.

1.2 Soil moisture deficit and recharge

The soil moisture deficit (SMD) reduced significantly over the course of the month, helped by strong rainfall. The average SMD across LNA reduced from 127mm on 30 September to 87mm by 03 November, however it remains above normal for the time of year. All six hydrological areas ended October with an SMD above normal for the time of year. The SMD across the area ranges from 80mm in Louth Grimsby and Ancholme up to 108mm in South Forty Foot and Hobhole. Despite an average reduction of 40mm, five of the six hydrological areas have an SMD 26mm to 50mm greater than the LTA while Witham to Chapel Hill has an SMD 6mm to 25mm above the LTA.

1.3 River flows

October 2026 saw river flows improving during the middle of the month in response to high rainfall. However, flows quickly began to reduce once more as the month ended dry, with no significant rain recorded across LNA after 26 October. Eight of the eleven key indicator sites had a monthly mean flow below normal for the time of year. This ranged from 7% of the LTA flow at Kate's Bridge and King Street (Glen), to 55% of the LTA at both Louth Weir (Lud) and Partney (Lymn). Three sites recorded normal monthly mean flows for October, two on the Nene at Geldhart's Mill and Upton Mill, as well as Claypole on the Witham. Due to data quality issues there was no flow data available for the Rase at Rase Bishopbridge during October 2026.

1.4 Groundwater levels

Groundwater levels across LNA continue to decline, but there are signs that this is starting to plateau out at some sites. There is a clear north-south split in groundwater levels at the end of October, as all four sites with normal groundwater levels for the time of year are to the north of the area, in the chalk and northern-most limestone. The remaining four sites are below normal for the time of year and located in the limestone towards the centre of the area. There was no data available for October at Castlethorpe Bridge or Dunholme Road.

1.5 Reservoir stocks

Reservoir stocks across LNA were down 3.8% on average from the beginning of October as recharge remains low. Stock levels vary from Covenham at 77% full to Hollowell at 48% full, with an average across the five reservoirs of 62.6% full. All reservoirs remain significantly below their target curves for the time of year.

Author: Pan Hydrology Team, Hydrology-EAN-and-LNA@environment-agency.gov.uk

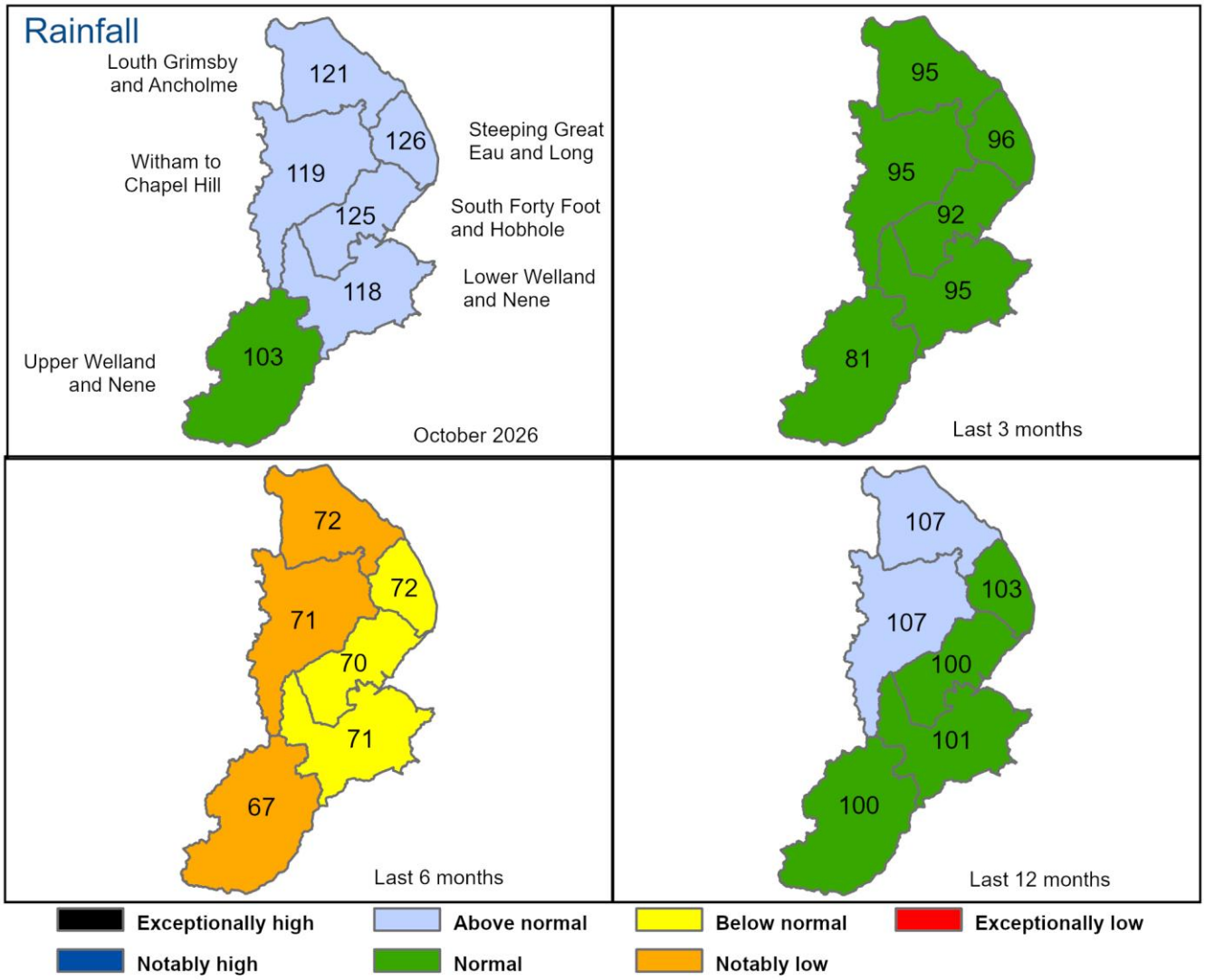
Contact Details: 03708 506 506

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2 Rainfall

2.1 Rainfall map

Figure 2.1: Total rainfall for hydrological areas across Lincolnshire and Northamptonshire, expressed as a percentage of long term average rainfall for the current month (up to 31 October 2026), 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.

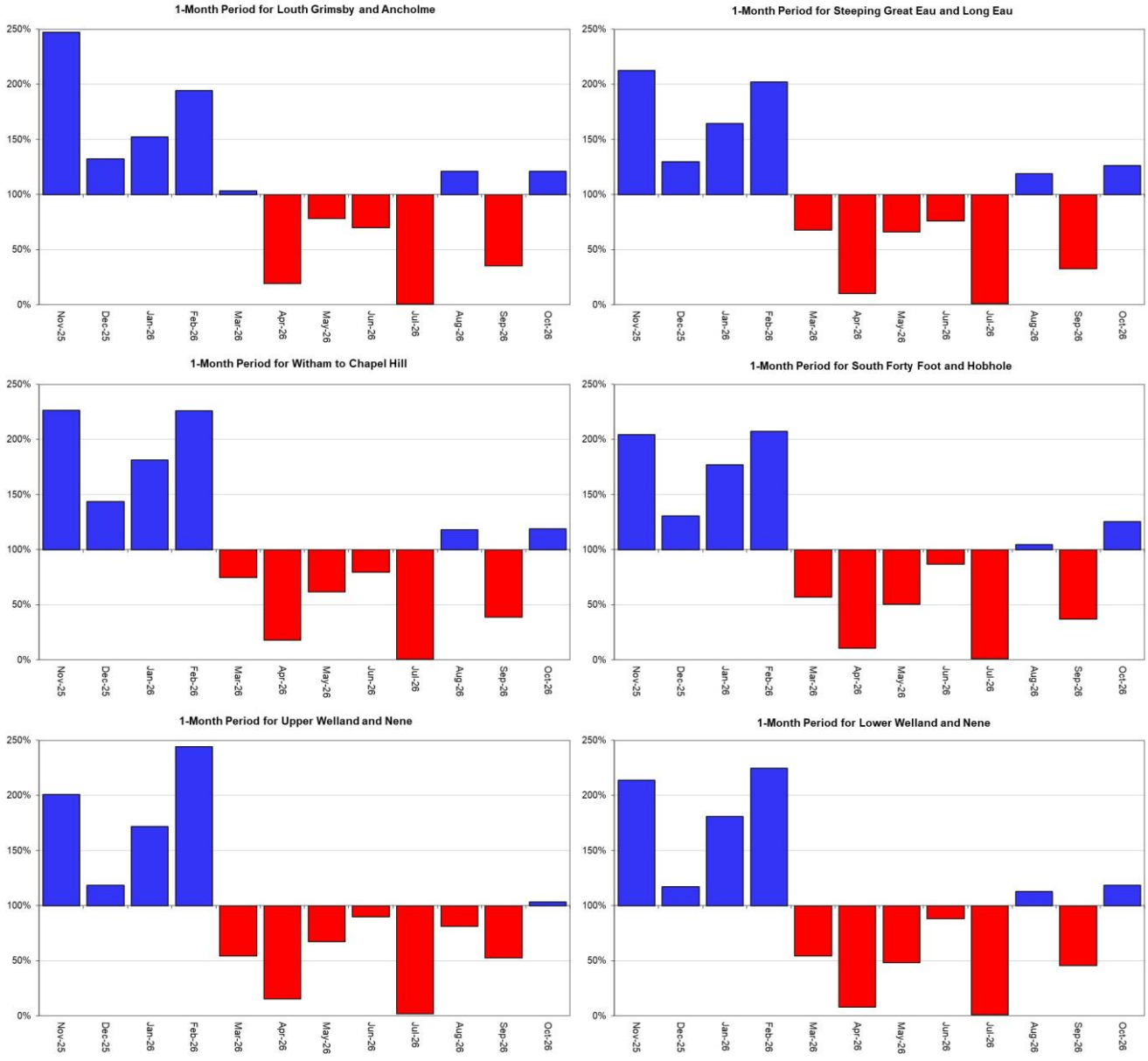


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2.2 Rainfall charts

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

Greater than 100% LTA rainfall Less than 100% LTA rainfall

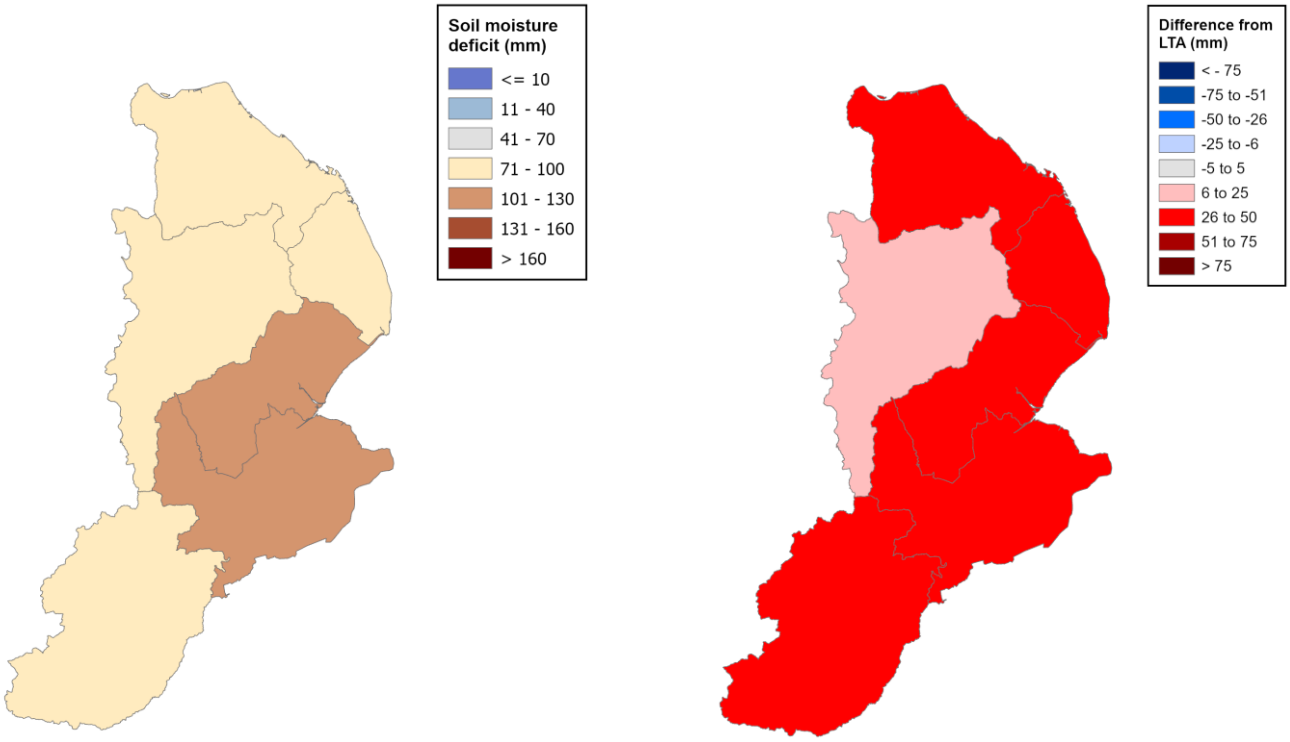


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3 Soil moisture deficit

3.1 Soil moisture deficit map

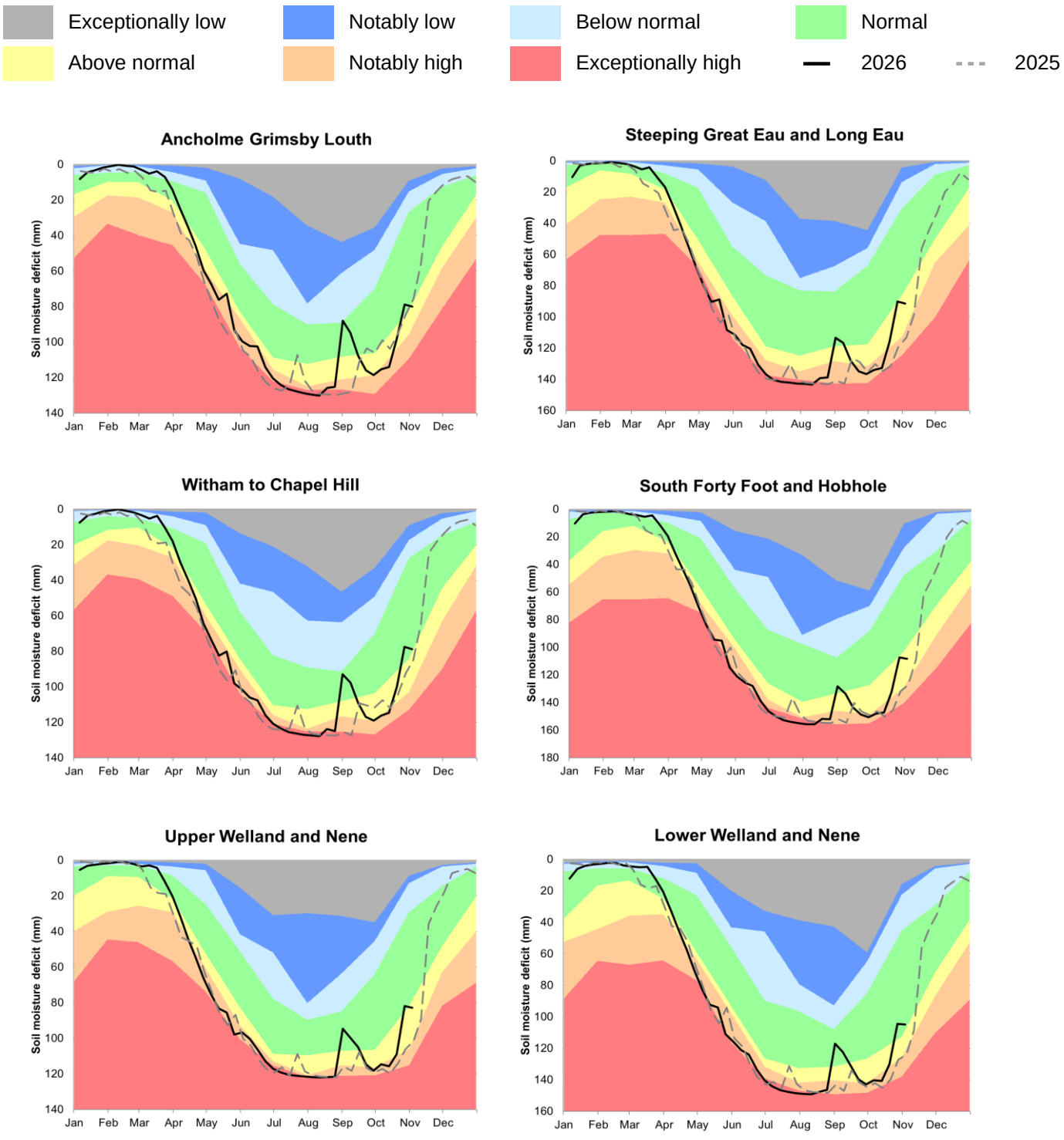
Figure 3.1: Left map shows soil moisture deficits (mm) for week ending 31 October 2026. Right map shows the difference (mm) of the actual soil moisture deficit from the 1991 to 2020 long term average soil moisture deficits. MORECS data for real land use.



Source: Met Office. Crown copyright, 2026. © Ordnance Survey Crown Copyright and Database Rights (2026) AC0000807064.

3.2 Soil moisture deficit charts

Figure 3.2: Soil moisture deficit for this year and last year compared to an analysis of historic weekly MORECS data for real land use for the period 1991 to 2020.

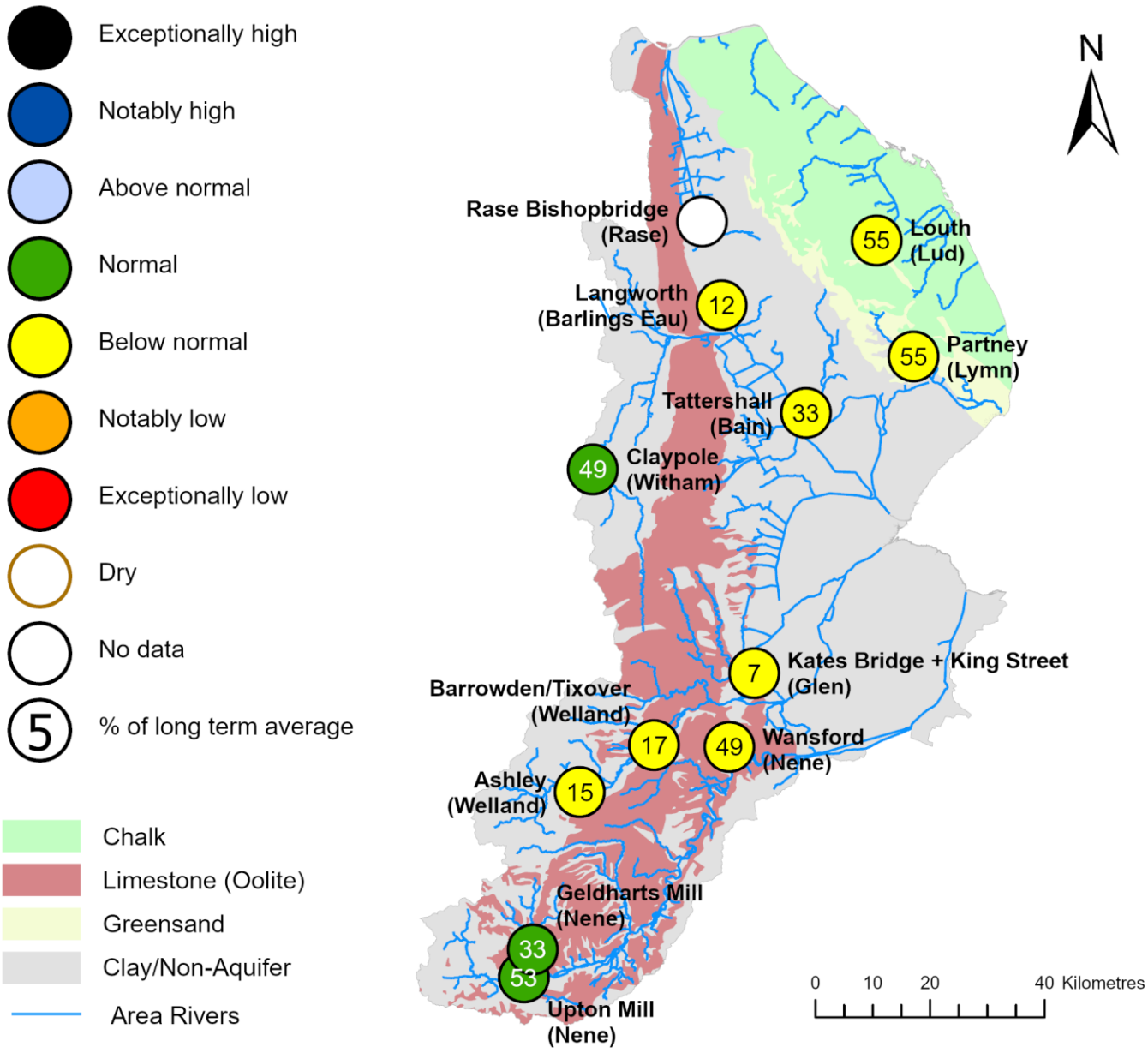


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4 River flows

4.1 River flows map

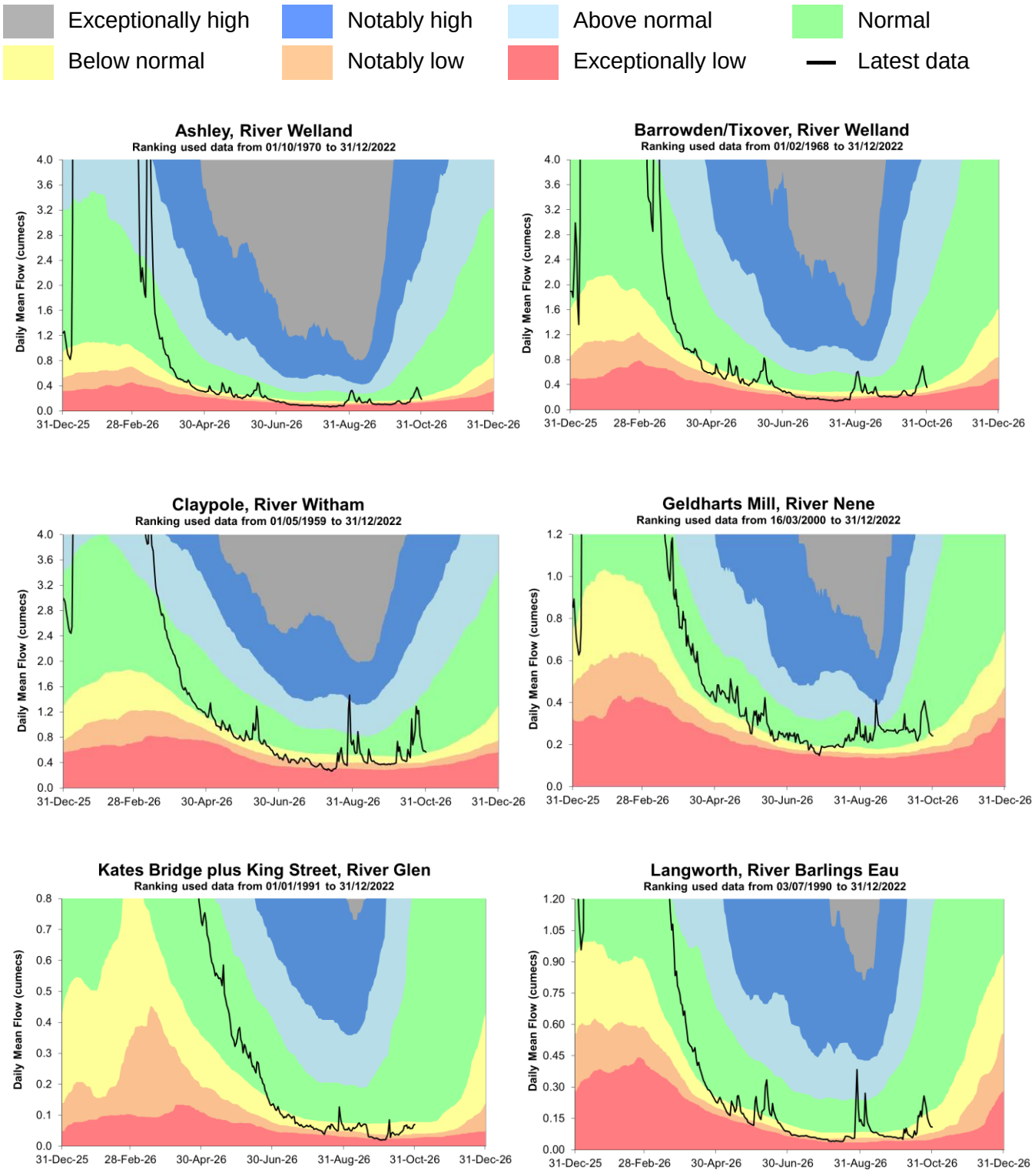
Figure 4.1: Monthly mean river flow for indicator sites for October 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic October monthly means. Table available in the appendices with detailed information.

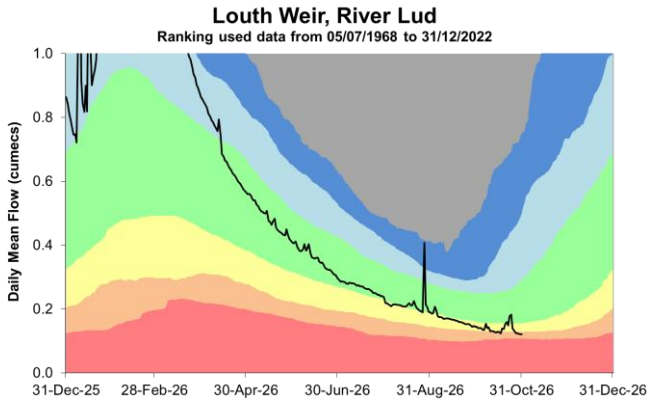


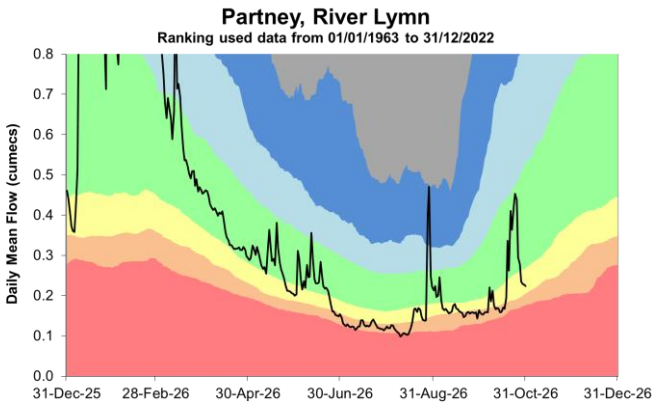
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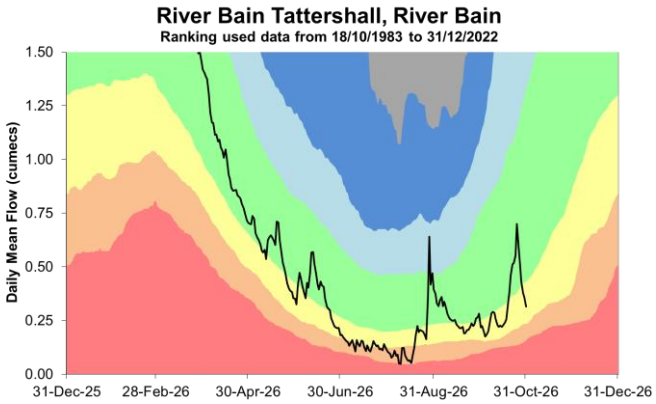
4.2 River flow charts

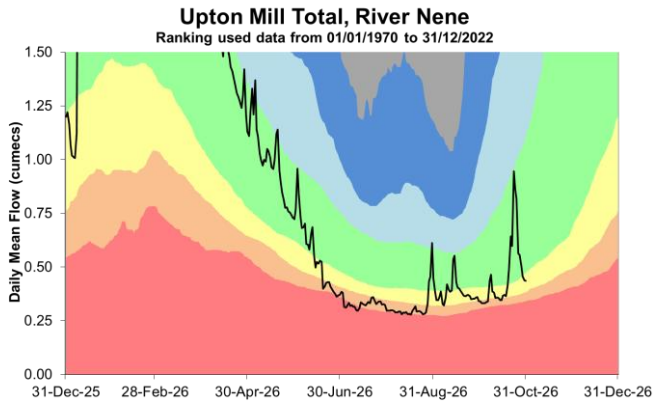
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows.

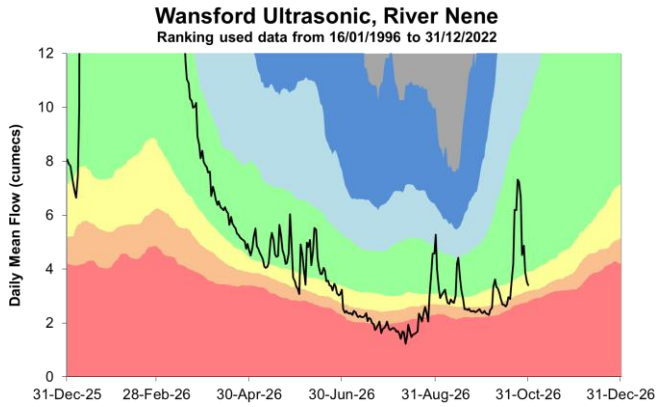












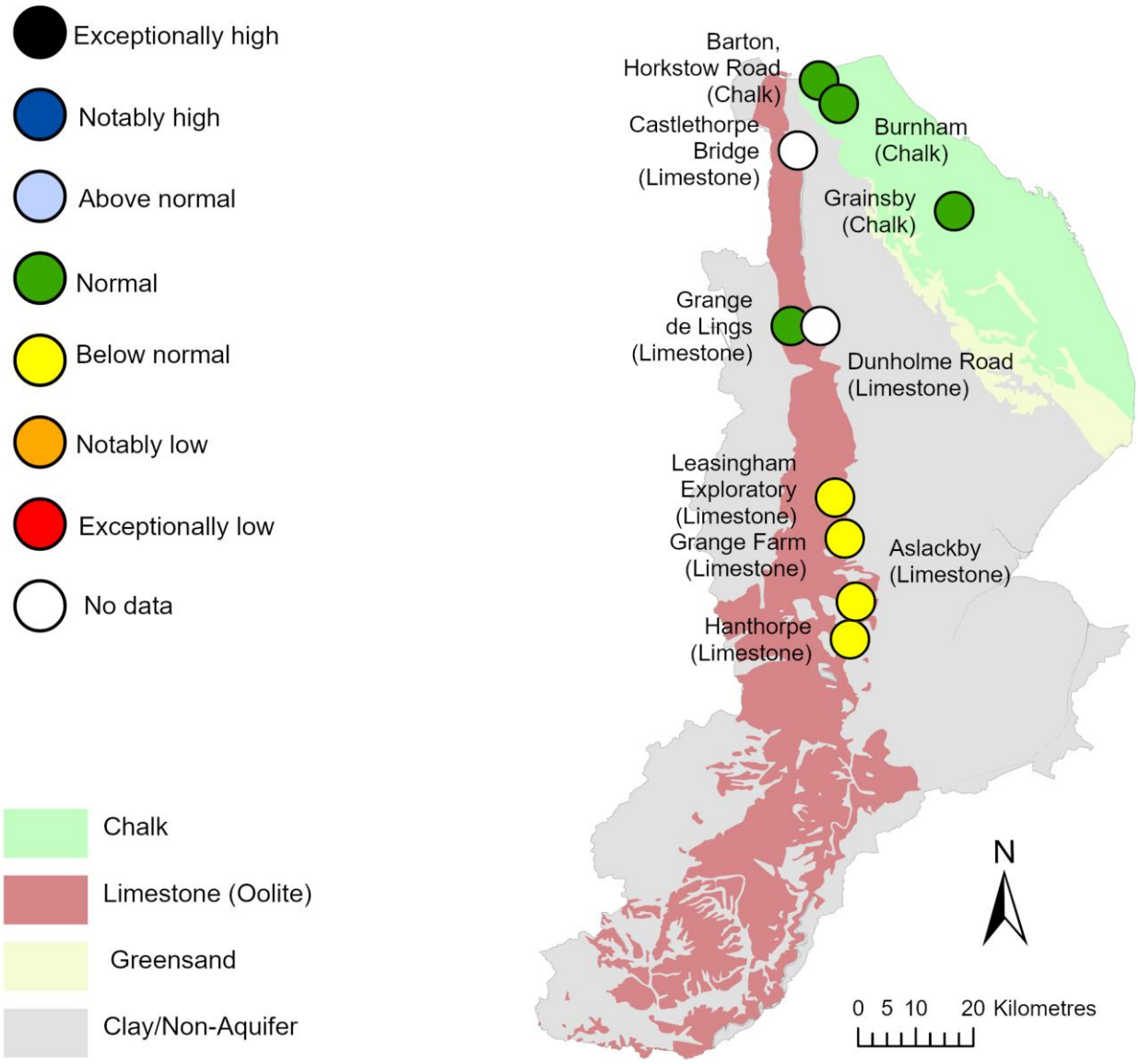
Note: No data for Rase Bishopbridge during October 2026 due to data quality issues.
Note: Ashley (Welland) data modelled due to data quality issues at the gauge.

Source: Environment Agency, 2026.

5 Groundwater levels

5.1 Groundwater levels map

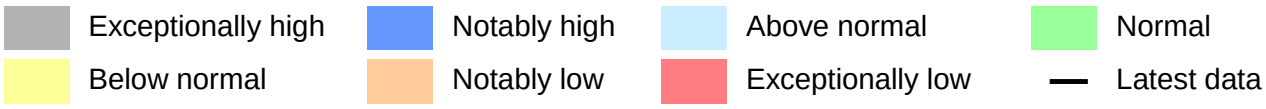
Figure 5.1: Groundwater levels for indicator sites at the end of October 2026, classed relative to an analysis of respective historic end of October levels. Table available in the appendices with detailed information.

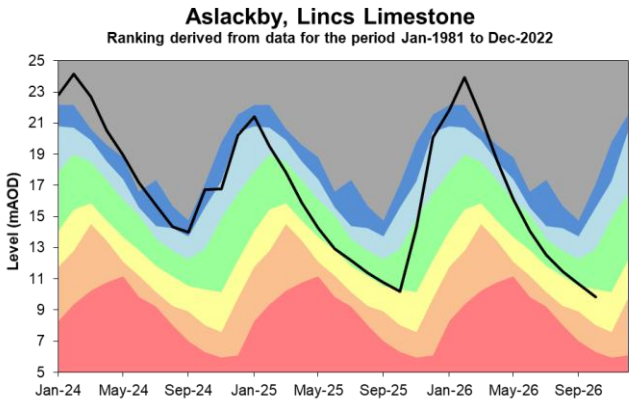


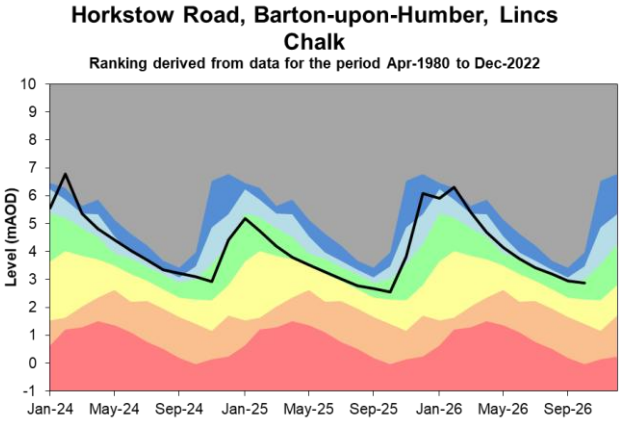
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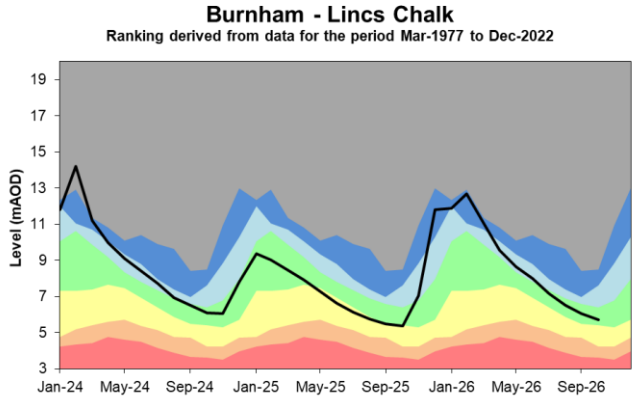
5.2 Groundwater level charts

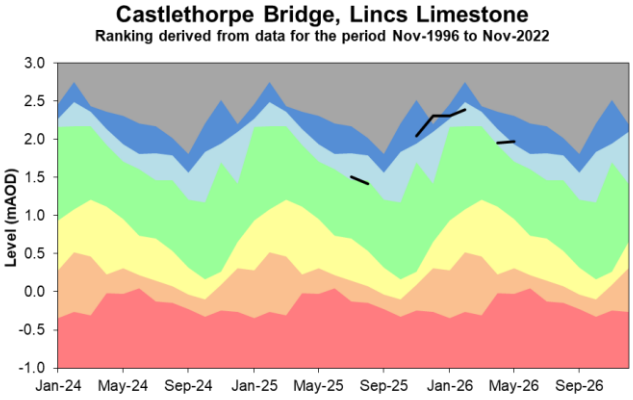
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels.

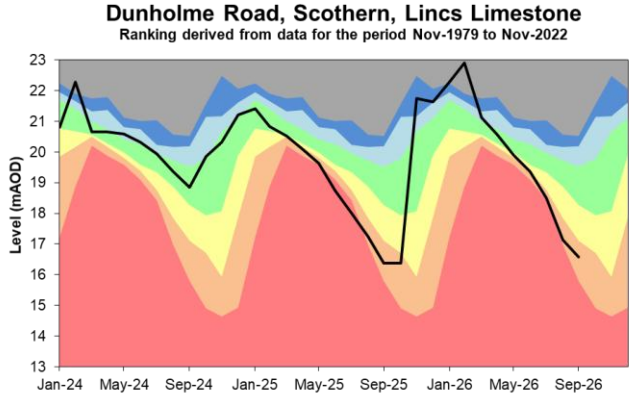


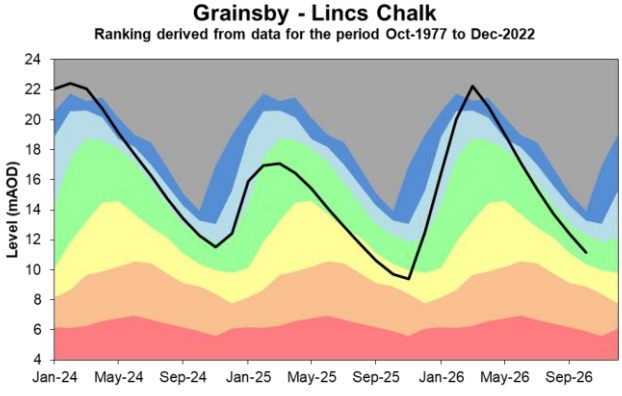


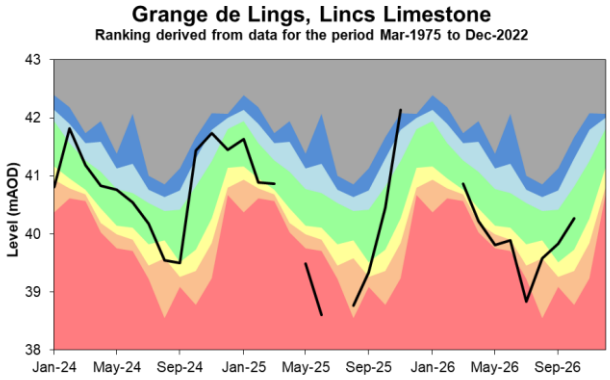


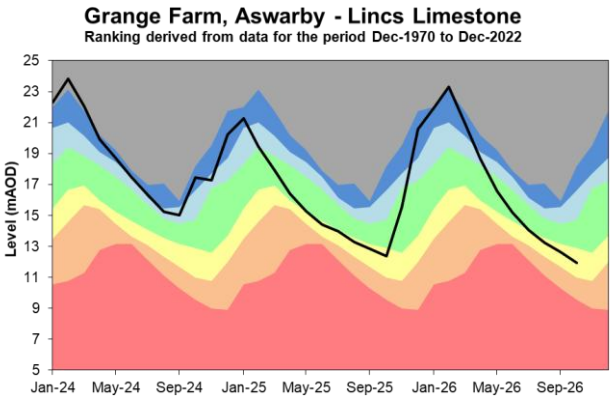


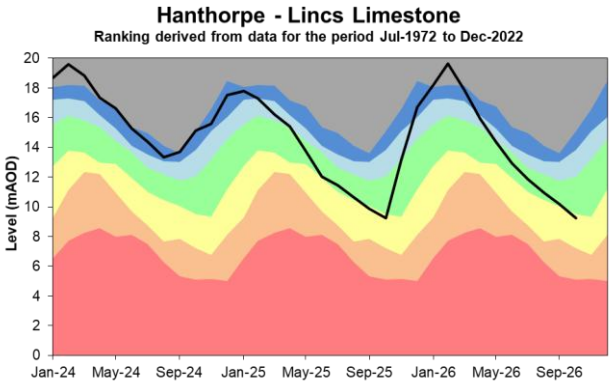


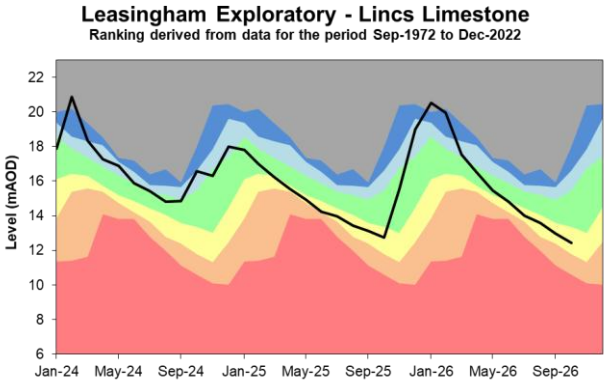








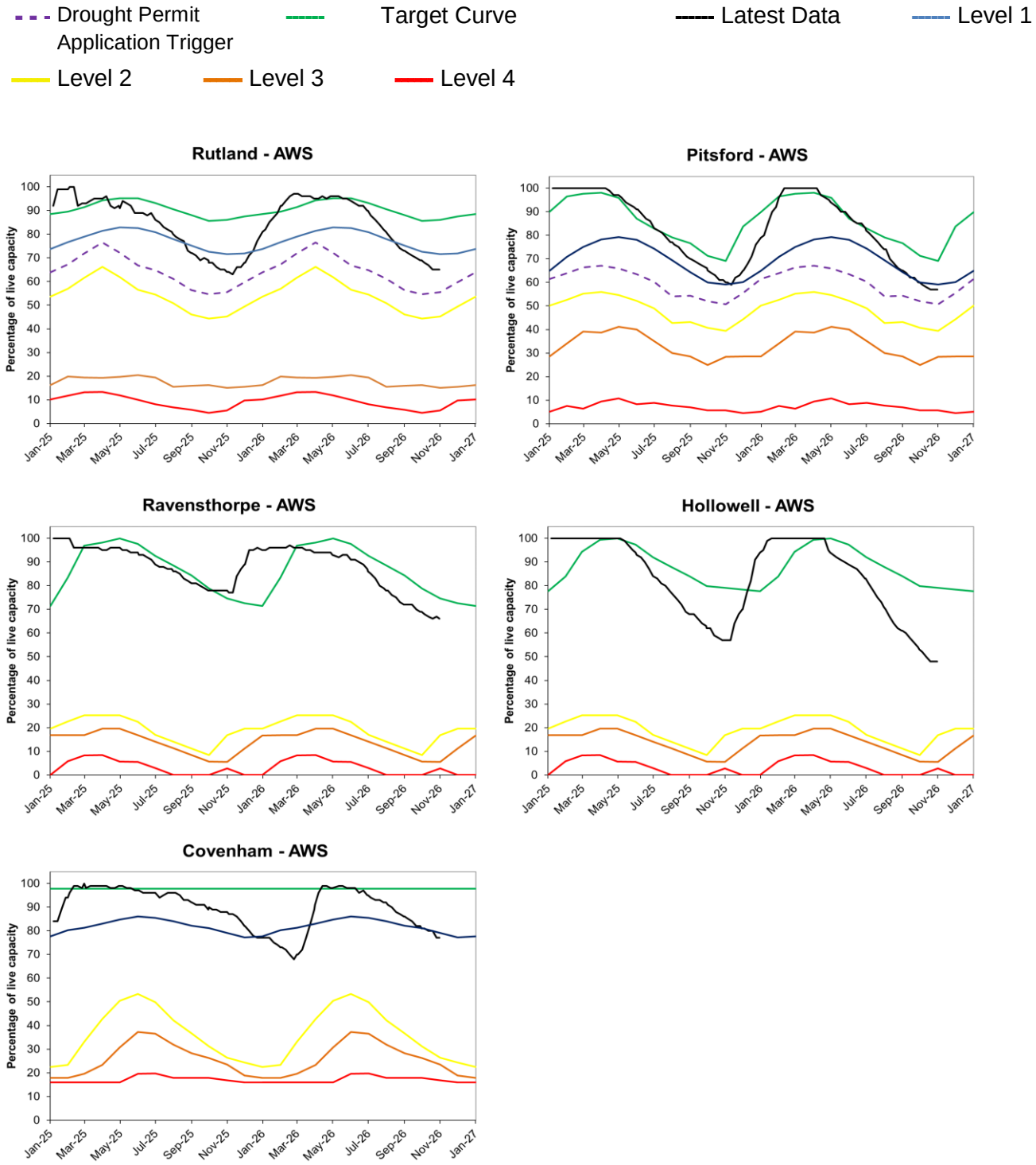




Source: Environment Agency, 2026.

6 Reservoir stocks

Figure 6.1: End of month regional reservoir stocks compared to the normal operating curve and drought curves.



Source: Anglian Water. For more information on Anglian Water's reservoir levels, please view their Drought Plan

7 Glossary

7.1 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^3/s).

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 1 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).

7.2 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.

8 Appendices

8.1 Rainfall table

Hydrological area	Oct 2026 rainfall % of long term average 1991 to 2020	Oct 2026 band	Aug 2026 to October cumulative band	May 2026 to October cumulative band	Nov 2025 to October cumulative band
Louth Grimsby And Ancholme	121	Above Normal	Normal	Notably low	Above normal
Lower Welland And Nene	118	Above Normal	Normal	Below normal	Normal
South Forty Foot And Hobhole	125	Above Normal	Normal	Below normal	Normal
Steeping Great Eau And Long Eau	127	Above Normal	Normal	Below normal	Normal
Upper Welland And Nene	103	Normal	Normal	Notably low	Normal
Witham To Chapel Hill	119	Above Normal	Normal	Notably low	Above normal

8.2 River flows table

Site name	River	Catchment	Oct 2026 band	Sep 2026 band
Ashley	Welland Mkt.harb-rockinghm	Welland Rockingham	Below normal	Notably low
Barrowden/tixover	Welland (rockingham To Stamford)	Welland Stamford	Below normal	Below normal
Claypole	Upper Witham	Witham Bargate Upper	Normal	Below normal
Geldharts Mill	Nene (brampton Branch)	Nene Brampton Bridge	Normal	Normal
Kates Bridge Plus King Street	Glen (an)	Welland and Glen	Below normal	Below normal
Langworth	Barlings Eau	Barlings Eau	Below normal	Below normal
Louth Weir	Lud	Louth Canal	Below normal	Below normal
Partney	Lymn & Steeping	Lymn Steeping	Below normal	Notably low
Rase Bishopbridge	Ancholme	Ancholme W Mid		
River Bain Tattershall	Bain	Bain	Below normal	Normal
Upton Mill Total	Nene (kislingbury Branch)	Nene Kislingbry Bridge	Normal	Normal
Wansford Combined	Nene (wollaston To Wansford)	Nene Wansford	Below normal	Notably low

8.3 Groundwater table

Site name	Aquifer	End of Oct 2026 band	End of Sep 2026 band
Aslackby	Limestone (cornbrash Formation)	Below normal	Normal
Barton-upon-humber	Grimsby Ancholme Louth Chalk	Normal	Above normal
Burnham	Grimsby Ancholme Louth Chalk	Normal	Normal
Castlethorpe Bridge	Grimsby Ancholme Louth Limestone		
Dunholme Road, Scothern	Grimsby Ancholme Louth Limestone		Notably low
Grainsby	Grimsby Ancholme Louth Chalk	Normal	Normal
Grange De Lings	Grimsby Ancholme Louth Limestone	Normal	Normal
Grange Farm, Aswarby	Limestone (mudstone - Peterborough Member)	Below normal	Below normal
Hanthorpe	Limestone (cornbrash Formation)	Below normal	Normal
Leasingham Exploratory	Limestone (rutland Formation)	Below normal	Below normal