Monthly water situation report: Lincolnshire and Northamptonshire Area

1 Summary - April 2026

April 2026 was a significantly dry month and across Lincolnshire and Northamptonshire just 6mm of rainfall was recorded, the sixth driest on record. The lack of any significant rainfall had a large impact on the soil moisture deficit across the area, increasing to 66.5mm, river flows, which continued to drop and all indicator sites recorded normal or below normal flows, and groundwater levels which reduced at all ten indicator sites compared to March 2026 levels. Reservoir stocks remain close to their respective normal operating curve at all sites, although we are beginning to see drawdown in some of those stocks.

1.1 Rainfall

Across Lincolnshire and Northamptonshire [LNA], April 2026 recorded an average rainfall of just 6mm, equivalent to 14% of the long-term average [LTA]. Through the six hydrological areas, rainfall totals were the second lowest on record for an April in Steeping Great Eau and Long, the fourth lowest in South Forty Foot and Hobhole and fifth lowest in the Upper Welland and Nene. Four of the six hydrological areas experienced exceptionally low rainfall totals, 8% to 15% LTA, while the Louth Grimsby and Ancholme, 19%, and Witham to Chapel Hill. 18%, experienced notably low rainfall totals.

Despite the lack of rain in April, a wet February meant that rainfall levels have been normal over the last three months, ranging from 90% to 105% of the LTA across the area, while stretching the data back to the previous six months LNA still experienced the sixth wettest November to April on record. The Louth Grimsby and Ancholme area experienced the second wettest November to April on record, 148% of the LTA, and the five other hydrological areas all recorded top ten rainfall totals for a November to April, in their respective areas.

Over the previous twelve months, rainfall across LNA has been 104% of the LTA and four of the six hydrological areas experienced normal rainfall levels, 98% to 102% of the LTA, while the Louth Grimsby and Ancholme and Witham to Chapel Hill had above normal rainfall totals, 112% and 110% of the LTA, respectively.

1.2 Soil moisture deficit and recharge

The lack of rainfall through April 2026 had a significant impact on the soil moisture deficit [SMD]. The SMD across LNA on 1 April was 29.4mm, however this had increased by 37.1mm to 66.5mm by the last week of April, with the largest deficits of the six hydrological areas of LNA coming in South Forty Foot and Hobhole and the Lower Welland and Nene. Since the middle of March (3.9mm on 17 March 2026), the SMD across LNA has increased by 62.6mm, highlighting the drop in rainfall volume over the past two months. The increase in the SMD means five of the six hydrological areas have an SMD 26mm to 50mm greater than expected for this time of year, while Louth Grimsby and Ancholme has an SMD 6mm to 25mm greater than expected.

1.3 River flows

Of the eleven indicator sites for monthly mean river flows, ten recorded normal flows between 34% and 117% of their LTAs, while Barrowden and Tixover was below normal at 32% LTA. With no significant rainfall events through April, flows steadily dropped through the month and this resulted in almost all sites dropping at least one flow category. March 2026 had ended with four sites categorised as notably high, six above normal and just two normal, highlighting the impact that the lack of rainfall across LNA has had on river flows across the area through April 2026. Gauging issues at Rase Bishopbridge on the River Rase has meant there is no available data at this site for April 2026.

1.4 Groundwater levels

Groundwater levels continued to drop through April 2026, however the extremely wet winter has meant levels remain healthy for the time of year. Five of the ten indicator sites had groundwater levels categorised as above normal, and two, Aslackby and Grainsby, were notably high, for April. Only one site, Grange de Lings, recorded a groundwater level below normal by the end of April 2026.

1.5 Reservoir stocks

All five reservoirs had healthy stocks by the end of April 2026, close to their normal operating curves. Reservoir levels ranged from 93% to 98% full, however drawdown of stocks was beginning towards the end of the month at some sites.

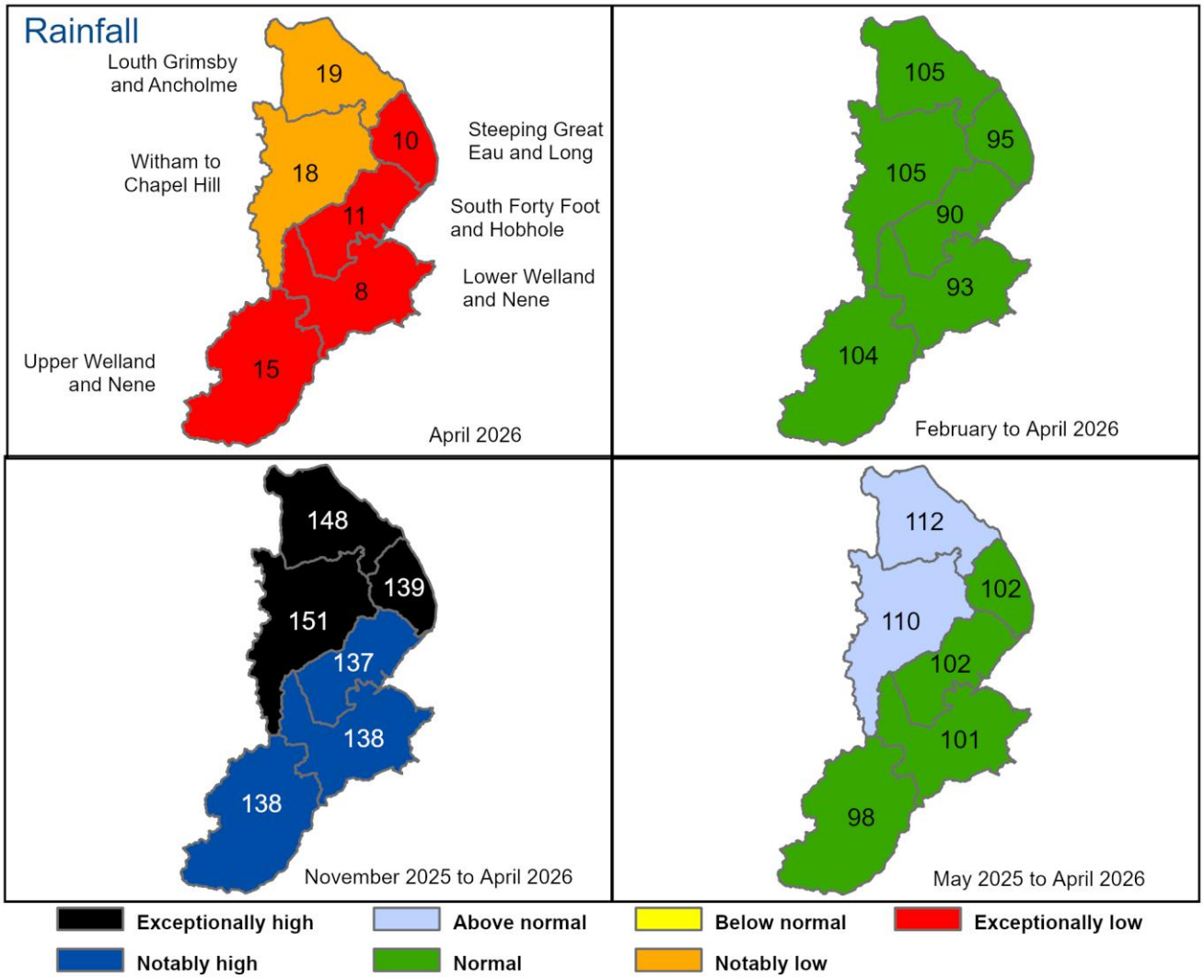
Author: Pan Hydrology Team, Hydrology-EAN-and-LNA@environment-agency.gov.uk

Contact Details: 03708 506 506

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 30 April 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.

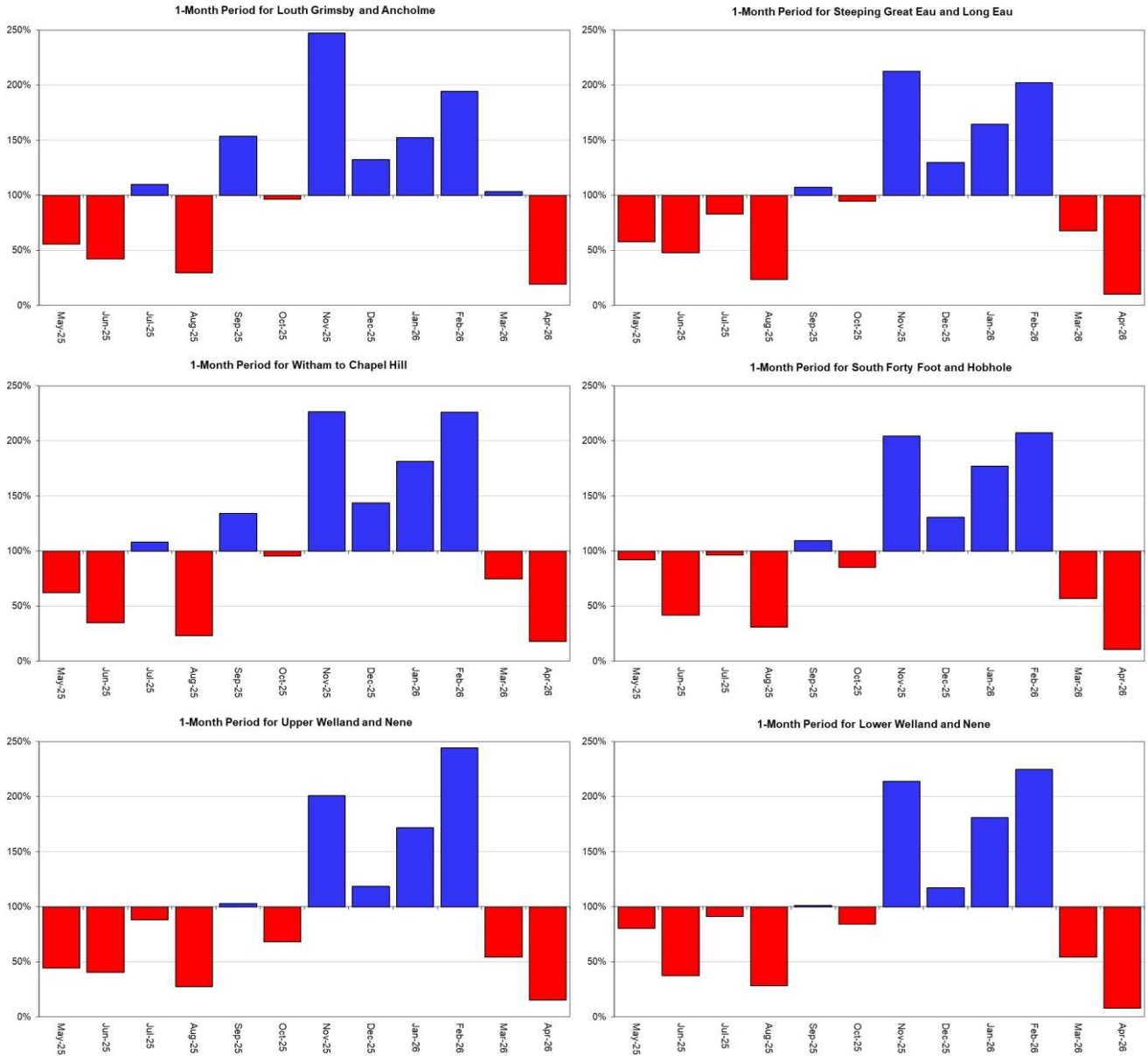


HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges Source: Met Office. Crown copyright, 2026. Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. © Ordnance Survey Crown Copyright and Database Rights (2026) AC0000807064.

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.

Total Rainfall in Millimetres Long Term Average Rainfall in Millimetres

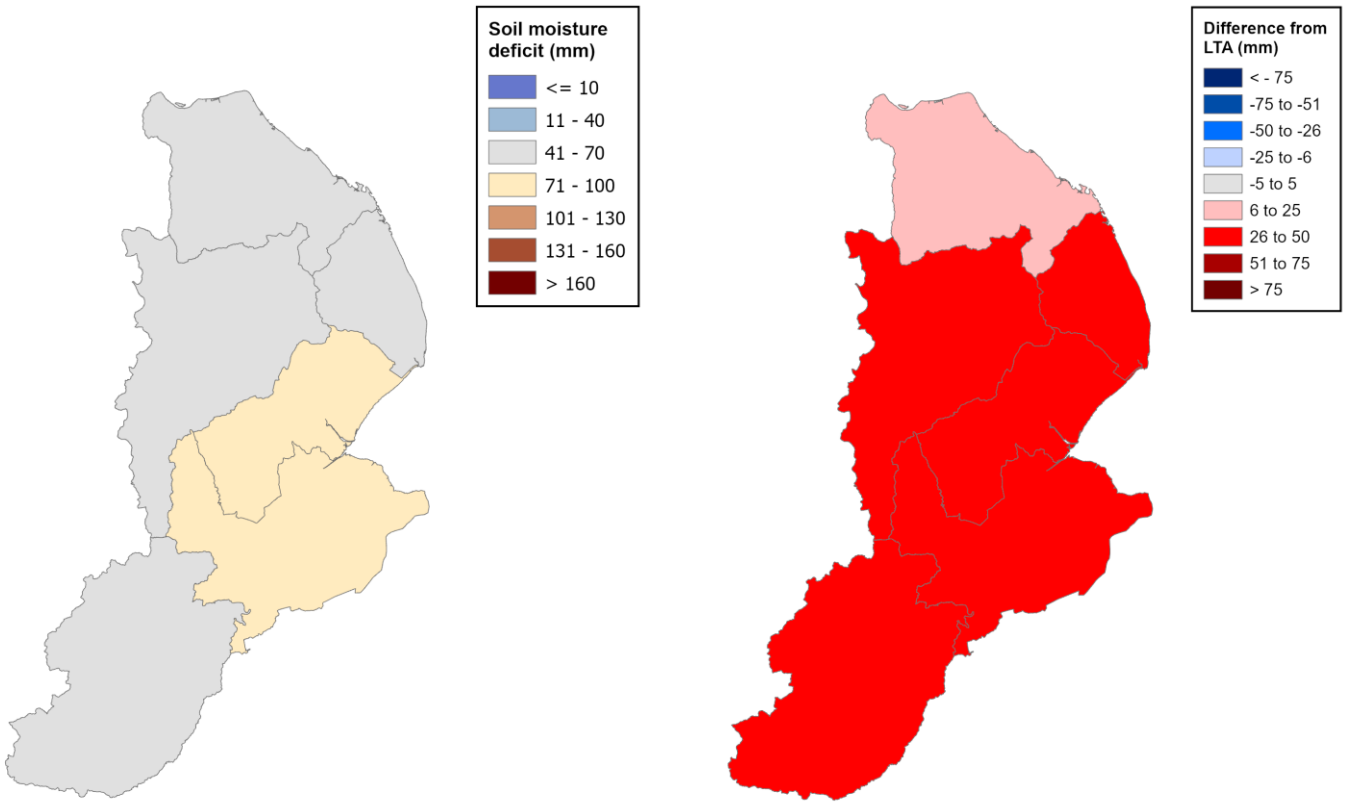


HadUK rainfall data. Source: Met Office. Crown copyright, 2026.

3 Soil moisture deficit

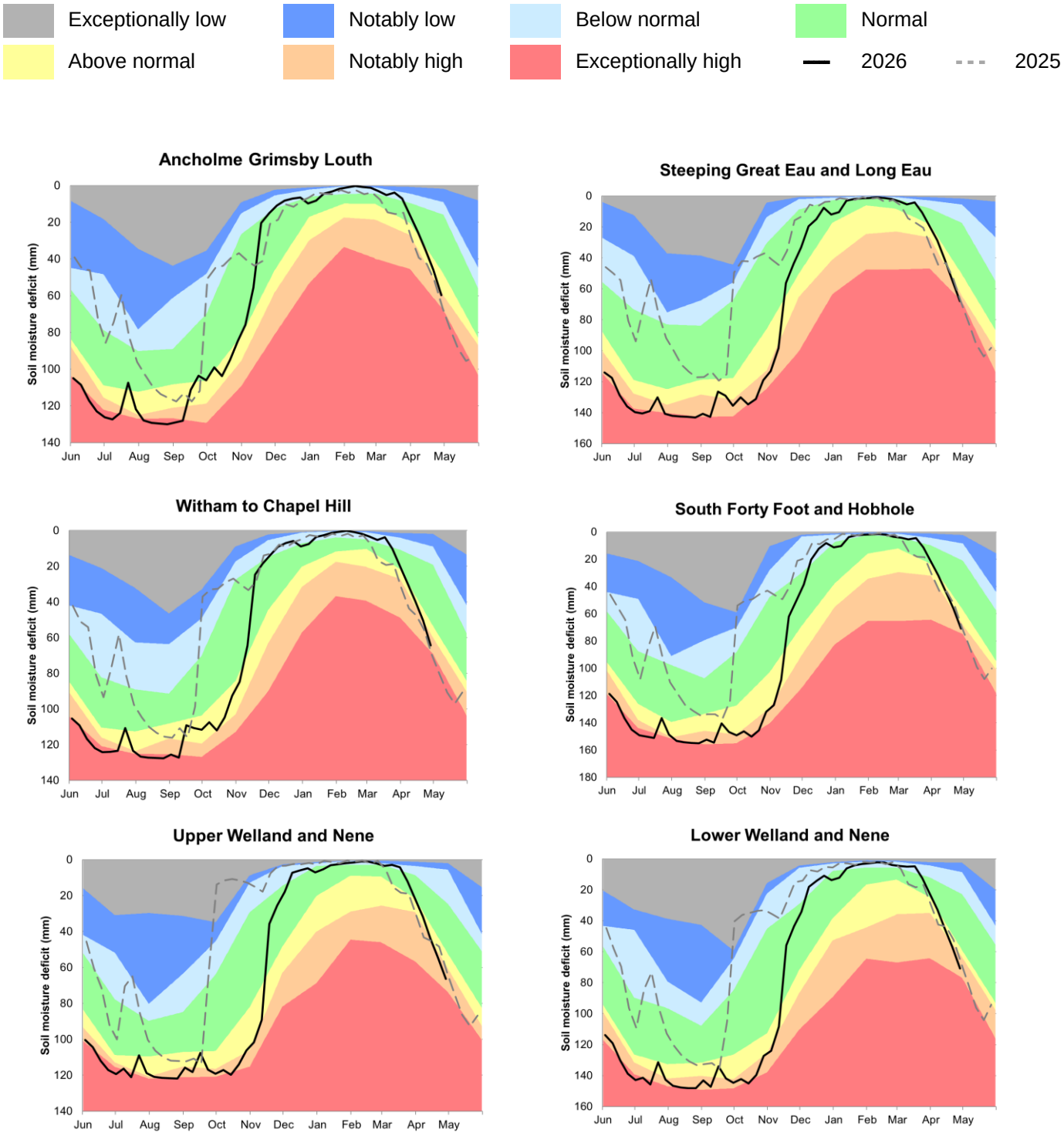
3.1 Soil moisture deficit map

Figure 3.1:Left map shows Soil moisture deficits for weeks ending 30 April 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.



3.2 Soil moisture deficit charts

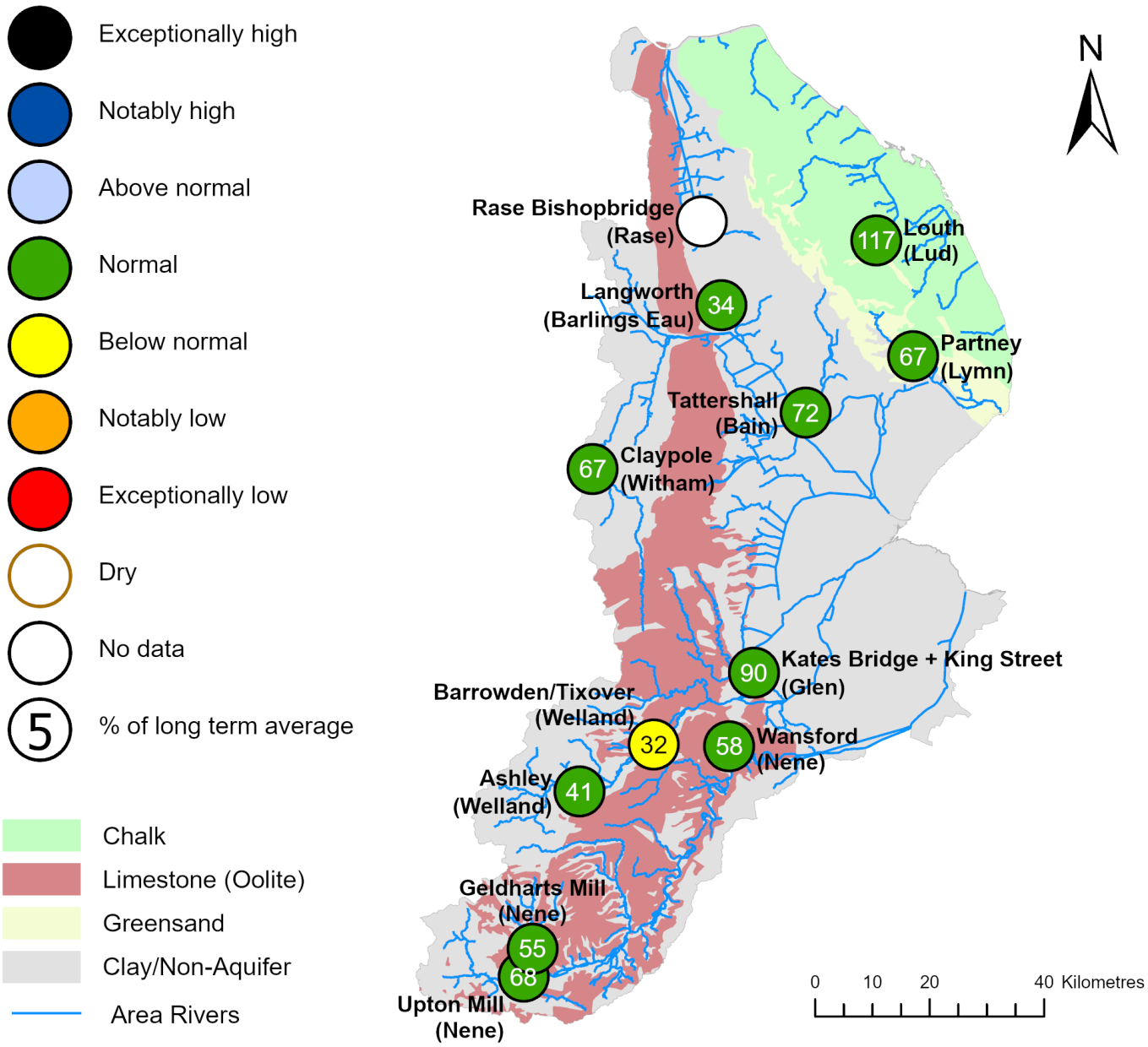
Figure 3.2: Latest soil moisture deficit compared to previous year, maximum, minimum, and 1991 to 2020 long term average. Weekly MORECS data for real land use.



4 River flows

4.1 River flows map

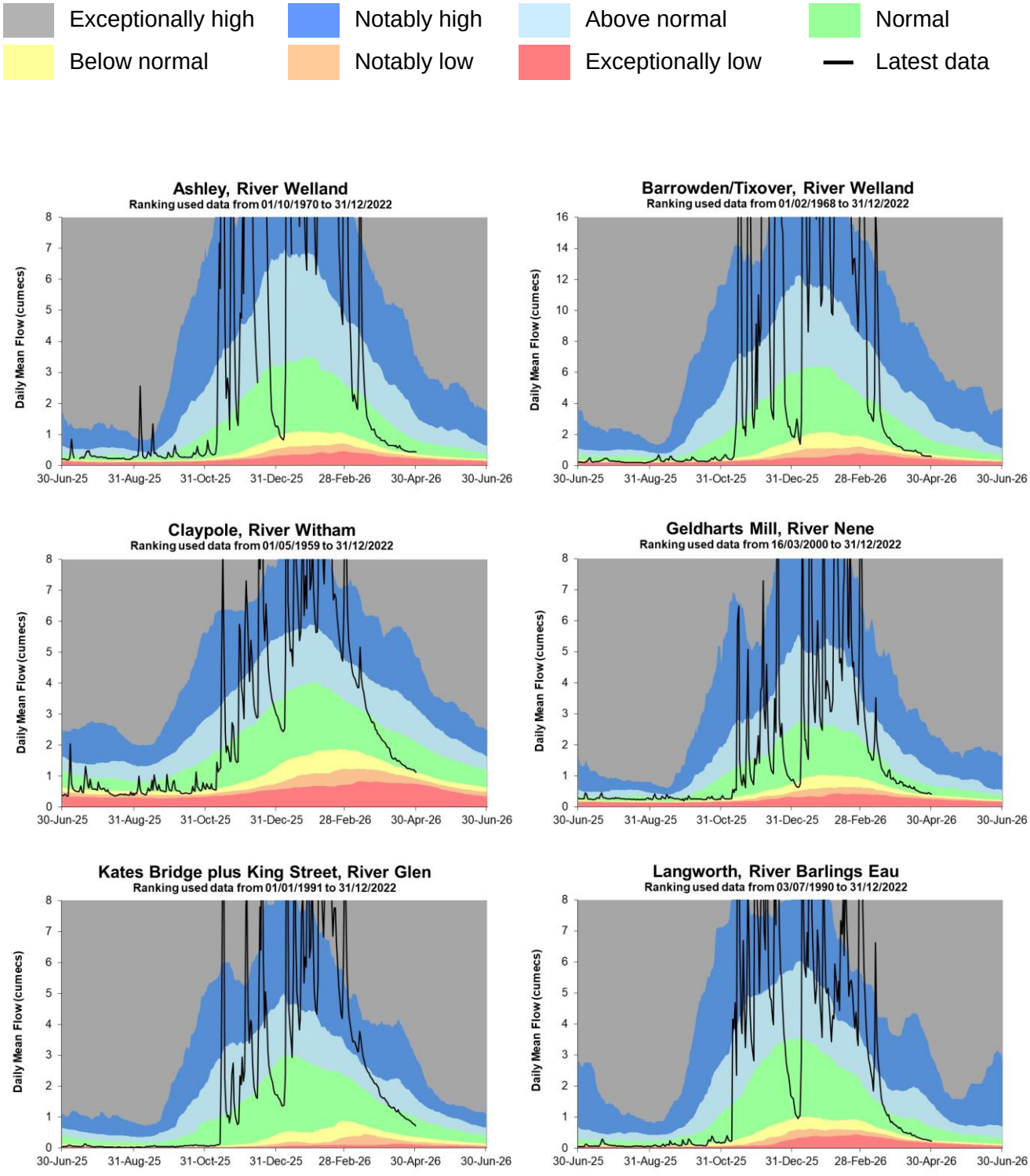
Figure 4.1: Monthly mean river flow for indicator sites for April 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic April monthly means Table available in the appendices with detailed information.

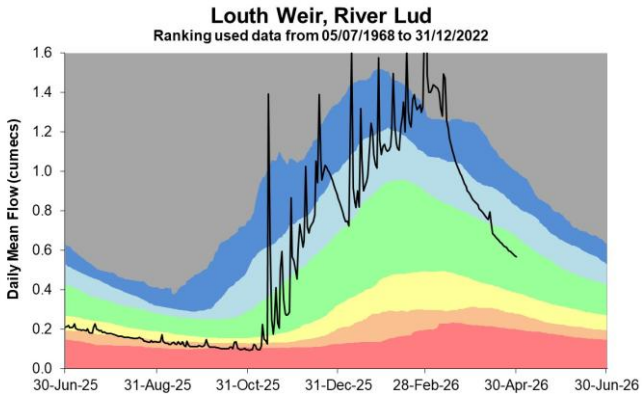


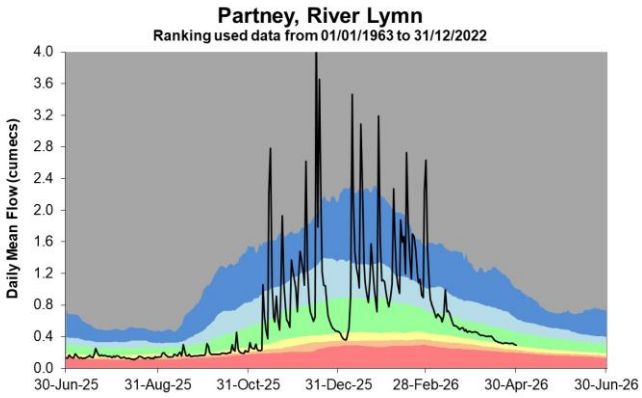
Source: Environment Agency, 2026. Crown copyright. © Ordnance Survey Crown Copyright and Database Rights (2026) AC0000807064.

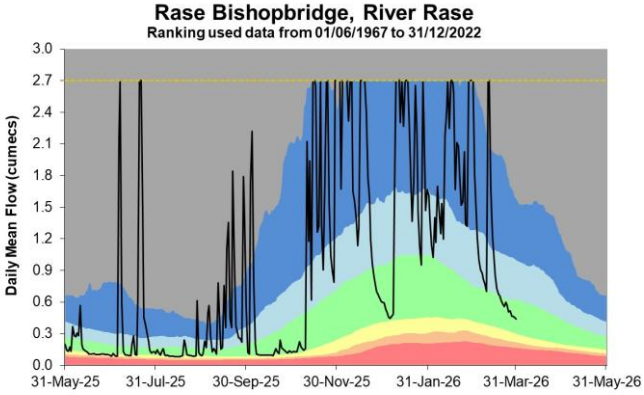
4.2 River flow charts

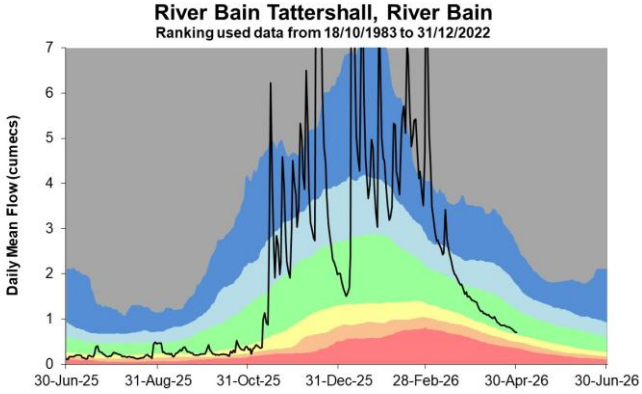
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

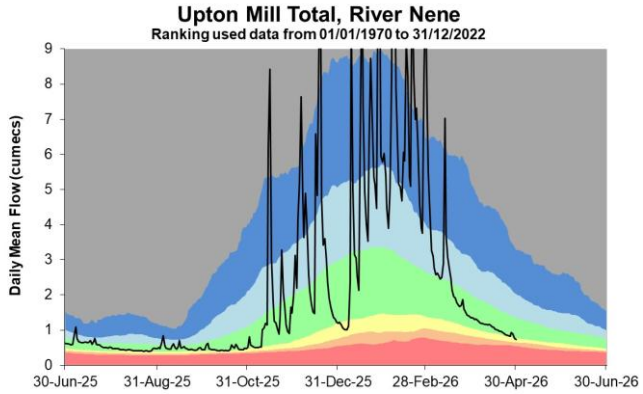


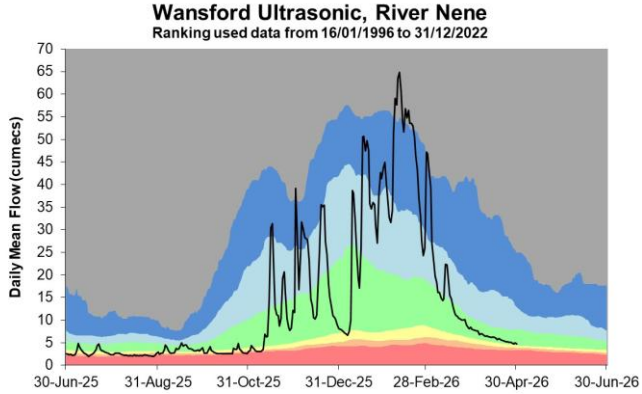










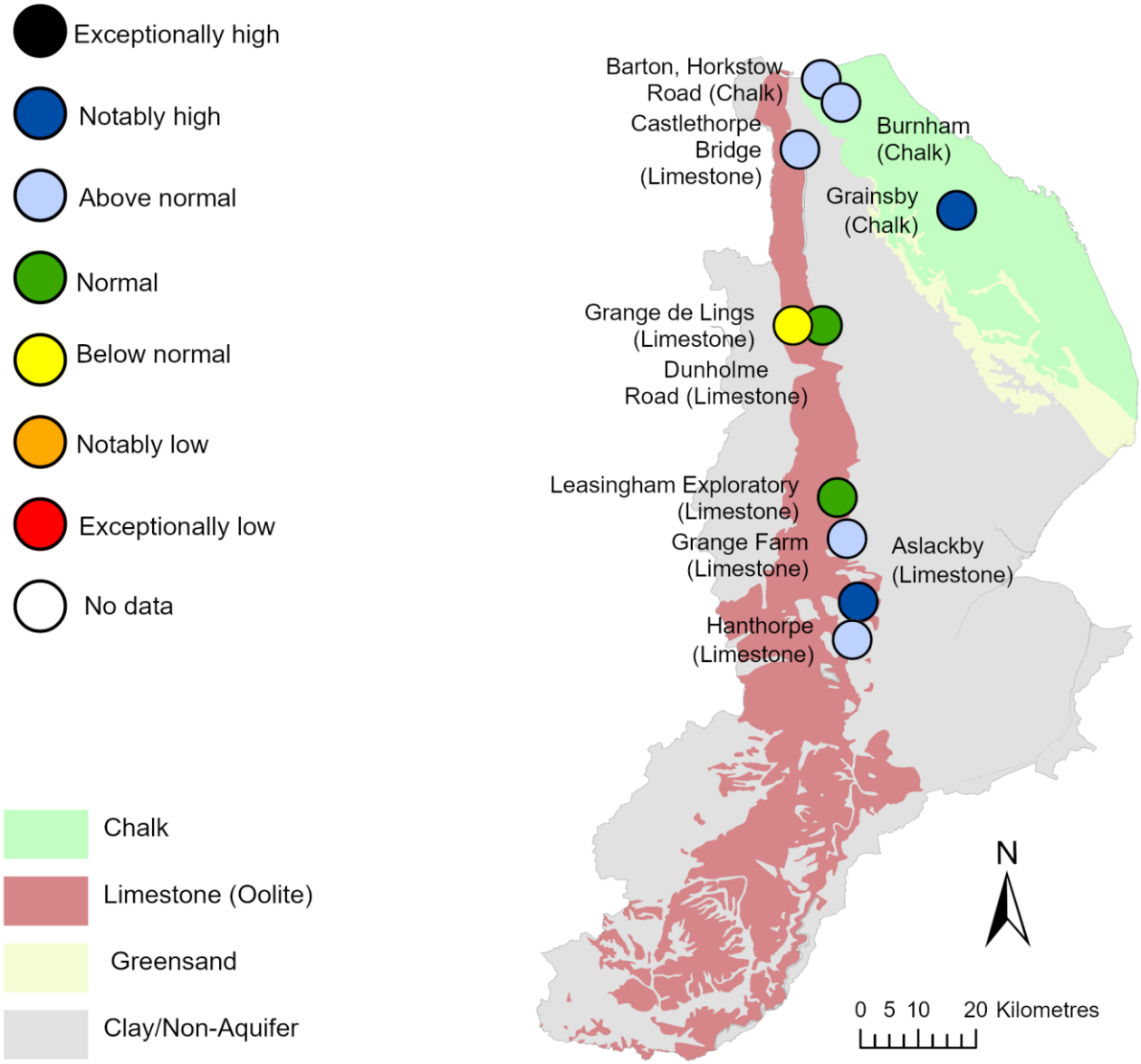


Source: Environment Agency, 2026.

5 Groundwater levels

5.1 Groundwater levels map

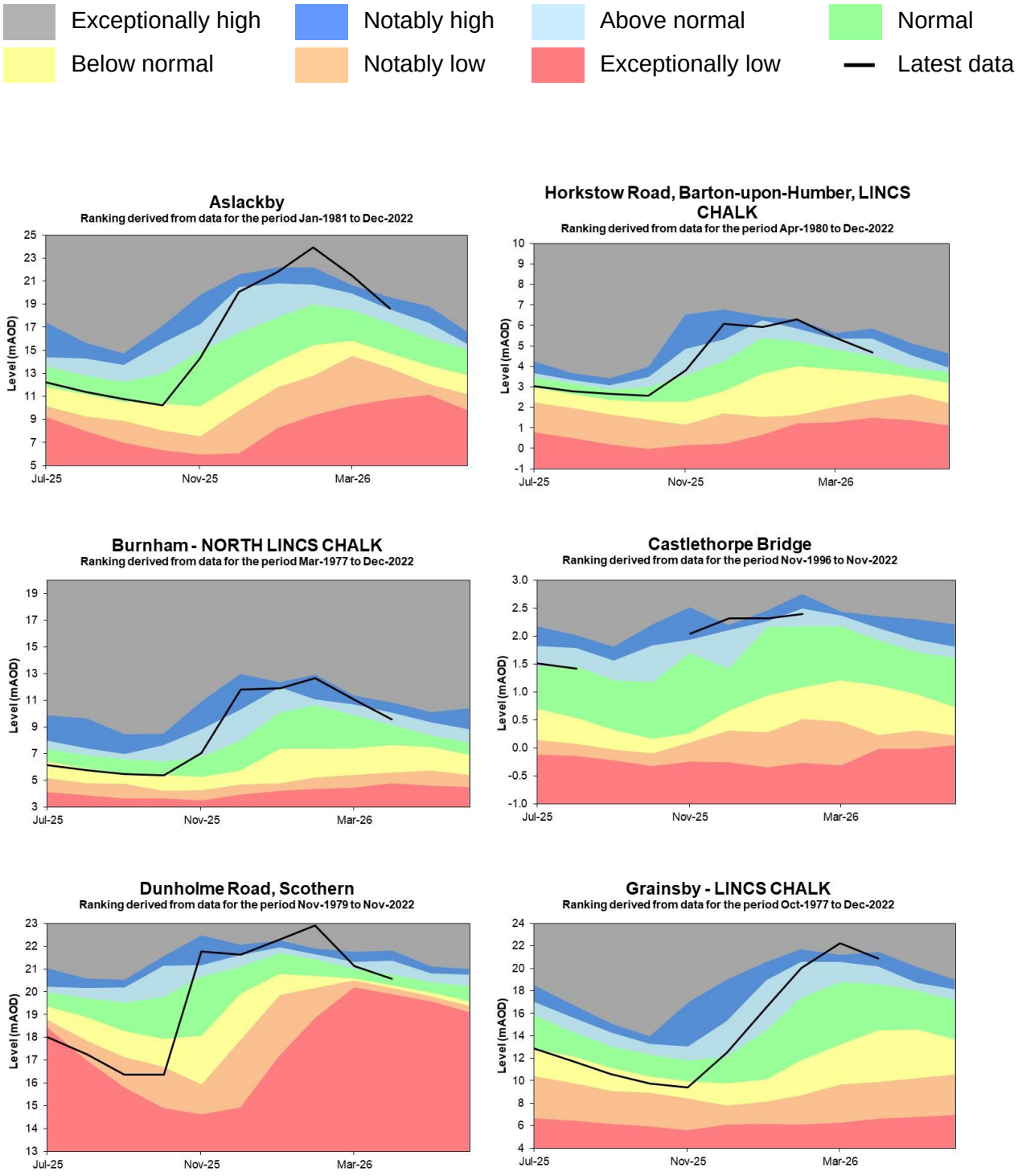
Figure 5.1: Groundwater levels for indicator sites at the end of April 2026, classed relative to an analysis of respective historic April levels. Table available in the appendices with detailed information.

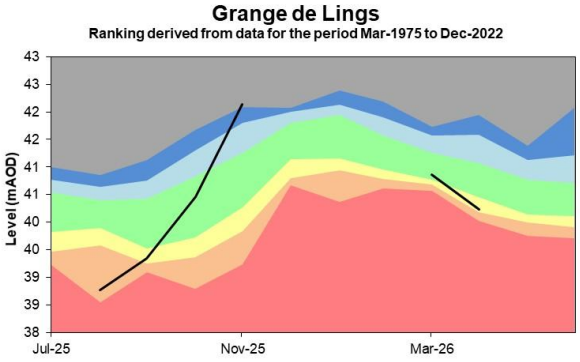


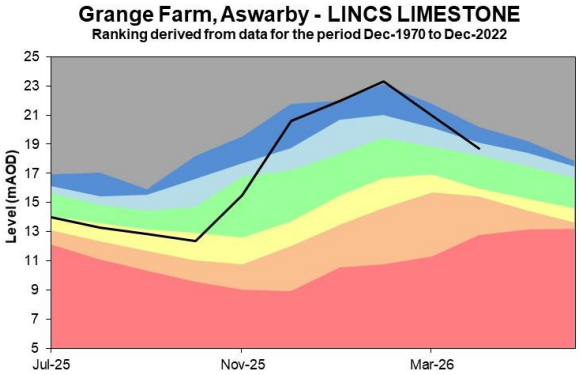
Source: Environment Agency, 2026. Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. © Ordnance Survey Crown Copyright and Database Rights (2026) AC0000807064.

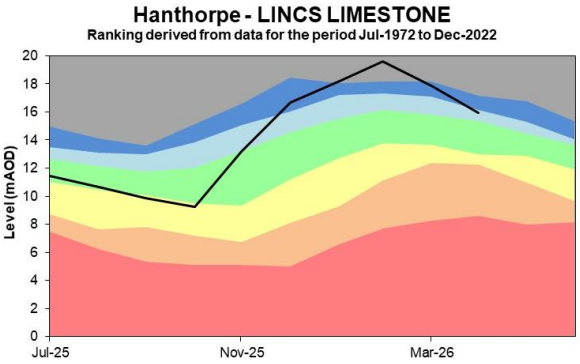
5.2 Groundwater level charts

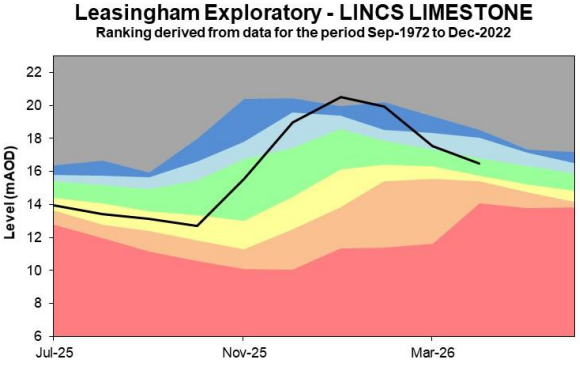
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.







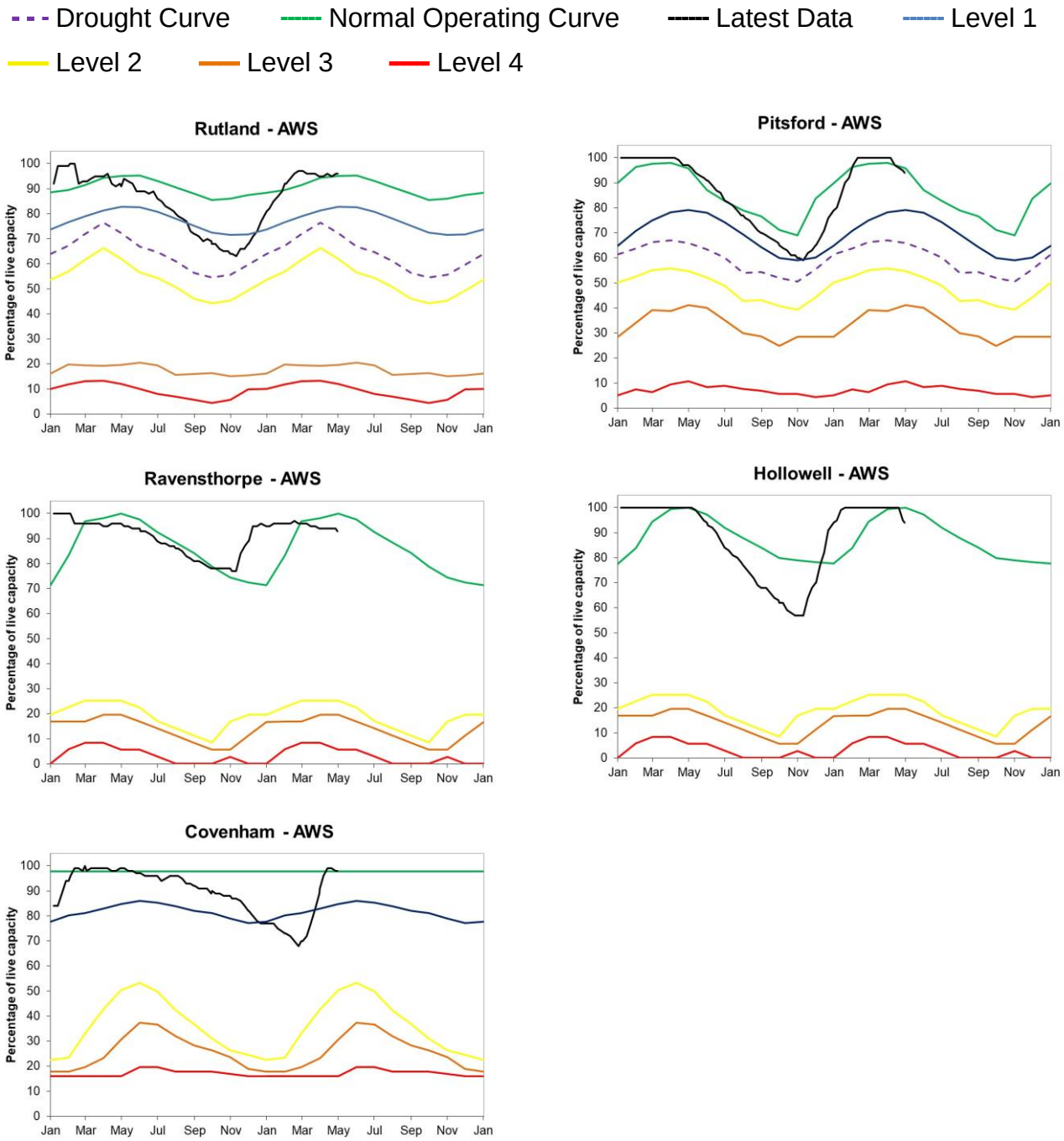




Source: Environment Agency, 2026.

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 level curves, please see Appendix 4 in 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^{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).

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	Apr 2026 rainfall % of long term average 1991 to 2020	Apr 2026 band	Feb 2026 to April cumulative band	Nov 2025 to April cumulative band	May 2025 to April cumulative band
Louth Grimsby And Ancholme	19	Notably Low	Normal	Exceptionally high	Above normal
Lower Welland And Nene	8	Exceptionally Low	Normal	Notably high	Normal
South Forty Foot And Hobhole	11	Exceptionally Low	Normal	Notably high	Normal
Steeping Great Eau And Long Eau	10	Exceptionally Low	Normal	Exceptionally high	Normal
Upper Welland And Nene	15	Exceptionally Low	Normal	Notably high	Normal
Witham To Chapel Hill	18	Notably Low	Normal	Exceptionally high	Above normal

8.2 River flows table

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

Upton Mill Total	Nene (kislingbury Branch)	Nene Kislingbry Bridge	Normal	Above normal
Wansford Combined	Nene (wollaston To Wansford)	Nene Wansford	Normal	Above normal

8.3 Groundwater table

Site name	Aquifer	End of Apr 2026 band	End of Mar 2026 band
Aslackby	Limestone (cornbrash Formation)	Notably high	Exceptionally high
Barton-upon-humber	Grimsby Ancholme Louth Chalk	Above normal	Notably high
Burnham	Grimsby Ancholme Louth Chalk	Above normal	Notably high
Castlethorpe Bridge	Grimsby Ancholme Louth Limestone	Above normal	
Dunholme Road, Scothern	Grimsby Ancholme Louth Limestone	Normal	Above normal
Grainsby	Grimsby Ancholme Louth Chalk	Notably high	Exceptionally high
Grange De Lings	Grimsby Ancholme Louth Limestone	Below normal	Normal
Grange Farm, Aswarby	Limestone (mudstone - Peterborough Member)	Above normal	Notably high

Hanthorpe	Limestone (cornbrash Formation)	Above normal	Notably high
Leasingham Exploratory	Limestone (rutland Formation)	Normal	Above normal