

Reservoir Watch May 2022

Reservoir Group	March 2022 holding	April 2022 holding	May 2022 Holding	Change in April - May period	Minimum historical* May holding (Year)
Kennet & Avon Canal	90.0%	91.6%	78.4%	-13.2%	77.6% (2013)
Oxford & GU	99.6%	95.5%	92.3%	-3.2%	76.4% (2011)
GU South	84.6%	90.2%	90.3%	0.1%	73.6% (2012)
GU North	100.0%	100.0%	96.9%	-3.1%	75.4% (2011)
Lancaster Canal	96.0%	93.8%	93.3%	-0.5%	73.6% (2017)
Leeds & Liverpool Canal	81.7%	72.6%	64.8%	-7.8%	64.8% (2022)
Peak Forest & Macclesfield Canals	44.1%	45.1%	39.6%	-5.5%	39.6% (2022)
Caldon Canal	90.6%	88.3%	79.9%	-8.4%	77.2% (2013)
Huddersfield Narrow Canal	72.7%	77.1%	53.1%	-24%	53.1% (2022)
Chesterfield Canal	62.8%	61.5%	60.5%	-1.0%	54.5% (2020)
Grantham Canal	92.7%	93.1%	93.1%	0.0%	93.1% (2022)
Birmingham Canal Navigations	100.0%	98.7%	96.0%	-2.7%	36.0% (2011)
Staffs & Worcs, Shropshire Union	87.8%	86.9%	85.9%	-1.0%	72.3% (2011)

* for the purposes of this analysis, historical holdings cover 1998-2021 reservoir holding data, inclusive.

General Conditions

According to the UK Centre for Ecology and Hydrology, weather this April was dry and warm for the time of year. Despite a long spell of rainfall during the first week of April, subsequent high-pressure systems resulted the driest March-April on record since 1974. Substantial areas in southern and eastern England received less than 30% of average rainfall. As a result, river flows decreased and by month end, river flows were recorded as below average, particularly in western and southern areas of the UK. Due to dry conditions, soil moisture deficits increased in all areas and reservoir stocks for water companies depleted at a national scale to below average. In addition, groundwater levels receded in all aquifers other than chalk boreholes which is due to their slow response rate. The three-month outlook suggests increased evaporation and near average rainfall rates. Therefore, below normal groundwater levels are likely to persist through the summer.

The Met Office rainfall anomaly graphs and maps can be viewed at:

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomalygraphs/2021/2021_Rainfall_Anomaly_1981-2010.gif

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomacts/2022/4/2022_4_Rainfall_Anomaly_1981-2010.gif

The Trust's Water Resources

With the main boating season underway, seven out of the 13 reservoir groups have a holding above 80%, with six above 90%.

The effect of dry weather through April seems to already be apparent in the south, with four out of the five reservoir groups recording a decrease in holding. This is especially evident in the Kennet and Avon which recorded the largest decrease of -13.2%. This is owing to Crofton reservoir which has been impacted by falling groundwater levels and a leakage issue. Only the GU South increased in holding by a marginal 0.1%.

Similarly, in the north, seven out of eight reservoir groups recorded a decrease in holding. The Huddersfield Narrow Canal had the largest decrease in holding of -24.0%. This resulted in a minimum May historical holding (51.3%); however, this is partially due to the drawdown of Diggle and Slaithwaite for engineering works. The Caldon canal also recorded a substantial decrease of -8.4% followed by Leeds & Liverpool (-7.8%), Peak Forest and Macclesfield (-5.5%), Staffs & Worcs, Shropshire Union (-1.0%), Chesterfield Canal (-1.0%) and Lancaster canal (-0.5%). Leeds & Liverpool is now at the minimum May historical holding which is partly due Barrowford being held down to -7m for engineering works. The Grantham canal registered no change in reservoir holdings. Despite maintaining a steady holding, the Grantham canal is now at the minimum May historical holding (93.1%), this is partly due to Denton being held down to -0.5m and earlier canal supply use.

The Peak Forest & Macclesfield Canals group has remained at its lowest historical holding as Toddbrook reservoir remains held down for engineering works. In addition, while engineering works are now complete at Bosley reservoir there has been little recharge and the reservoir remains at 24% holding.

As always, the Water Management Team will continue to monitor all reservoir holdings during the coming months and work closely with operational staff to ensure water resources are deployed efficiently.

Boaters are advised to subscribe to email notifications of any waterway restrictions or closures at: <http://canalrivertrust.org.uk/notices>.

Issued by:

Water Management Team, Canal & River Trust
23 May 2022

Reservoir data presented is from the week ending Monday 16 May unless stated, along with data from the nearest comparable date in March and April.

Please note, the Jan-April data for the L&L reservoir group was slightly inaccurate due to a technical issue with updating the reporting.

Annex 1 – Canal & River Trust reservoir groups

Group name	Reservoirs within group
Kennet & Avon Canal	Crofton [<i>principally a spring-fed reservoir, and its yield is therefore greater than the storage volume indicates</i>]
Oxford & GU	Boddington, Wormleighton, Clattercote, Naseby, Sulby, Welford, Drayton & Daventry
GU South	Startopsend, Wilstone, Marsworth & Tringford
GU North	Saddington
Lancaster Canal	Killington

Leeds & Liverpool Canal	Rishton, Barrowford, Upper & Lower Foulridge, Slipper Hill, Whitemoor & Winterburn
Peak Forest & Macclesfield Canal	Sutton, Bosley, Toddbrook & Combs
Caldon Canal	Rudyard, Stanley & Knypersley
Huddersfield Narrow Canal	Sparth, Slaithwaite & Diggle
Chesterfield Canal	Harthill & Pebley
Grantham Canal	Knipton & Denton
Birmingham Canal Navigations	Windmill Pool, Terry's Pool, Engine Pool, Cofton, Upper Bittell, Rotton Park & Chasewater
Staffs & Worcs, Shropshire Union	Belvide, Gailey Upper, Gailey Lower & Calf Heath