

Reservoir Watch May 2024

Reservoir Group	March 2024 Holding	April 2024 Holding	May 2024 Holding	Change in April-May period	Minimum historical* May holding (Year)
Kennet & Avon Canal	91.7%	95.70%	86.50%	-9.2%	48% (2014)
Oxford & GU	99.8%	99.60%	98.50%	-1.1%	74.5% (2011)
GU South	93.4%	87.30%	95.20%	7.9%	78.4% (2006)
GU North	99.9%	99.90%	99.90%	0.0%	70.2% (2011)
Lancaster Canal	100.0%	100.00%	96.00%	-4.0%	71.1% (2017)
Leeds & Liverpool Canal	87.2%	86.80%	67.40%	-19.4%	66.3% (2022)
Peak Forest & Macclesfield Canals	73.3%	73.40%	68.10%	-5.3%	36.8% (2022)
Caldon Canal	95.5%	97.80%	92.50%	-5.3%	75.4% (2020)
Huddersfield Narrow Canal	71.1%	69.10%	62.40%	-6.7%	51.1% (2022)
Chesterfield Canal	31.6%	31.20%	30.50%	-0.7%	30.5% (2024)
Grantham Canal	93.7%	92.40%	93.10%	0.7%	92.3% (2023)
Birmingham Canal Navigations	97.9%	98.10%	94.20%	-3.9%	35.5% (2011)
Staffs & Worcs, Shropshire Union	69.8%	79.40%	81.40%	2.0%	73% (2011)

* for the purposes of this analysis, historical holdings cover 1998-2022 reservoir holding data, inclusive.

General Conditions

According to the UK Centre for Ecology and Hydrology, the first half of April was mild and settled for most of the UK, continuing with the wet conditions established in March. The last two weeks, however, were cooler but with drier weather. Despite this, April still had above average rainfall with 155% of average, resulting it in being the UK's fifth wettest April. More rainfall was experienced in the north of England. Due to the high rainfall, river flows remained high across the UK, with twice the average flows for some catchments in the south-west of England.

Groundwater levels remain very high across the UK, they were above normal at all but one site. Soil moisture deficits increased at many COSMOS-UK sites, and sites were divided into being wet and slightly below field capacity by the end of the month.

The current UK Hydrological outlook for May-July suggests an increased likelihood of above normal flows across southern and eastern areas of the UK. Further rain at the start of May means flood risk remains elevated for the time of year.

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

<https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-temperature-rainfall-and-sunshine-anomaly-graphs>

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomacts/2024/4/2024_4_Rainfall_Anomaly_1991-2020.gif

The Trust's Water Resources

Now we are into the boating season, we have started the drawdown of our reservoirs. Therefore, the decreases across most of the reservoir groups can be attributed to the increased usage of reservoir stocks. Despite the wet conditions observed over the winter period, there are several reasons why all the Trusts reservoir groups are not completely refilled. The primary factor will be for reservoirs within a group having engineering works taking place that require the reservoir level to be maintained at less than full capacity (i.e. held down). Examples of this include Toddbrook Reservoir (Peak Forest & Macclesfield Canal group) which is kept at -12m below Top Water Level following the spillway incident in summer 2019, and it will remain at this level until the £multi-million project to construct a new spillway is completed. Harthill and Pebley Reservoirs (Chesterfield Canal group) are held down whilst a new spillway is constructed for Harthill Reservoir. Several of the reservoirs in the Leeds & Liverpool and Huddersfield Narrow Canal group are being held down for investigation or engineering works. For the Leeds & Liverpool Canal the works at Barrowford Reservoir are nearing completion and a phased period of refill and testing of the works is in progress. Additionally, Lower Foulridge Reservoir, Upper Foulridge and Slipper Hill reservoirs are currently being held down for reservoir safety. The Trusts Reservoir, Project Management and Water Management teams liaise closely to manage the implications of all of these works on water supplies for the canal network, given the potential impacts on boating customers.

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
24 May 2024

Reservoir data presented is from the week ending Monday 20 May unless stated, along with data from the nearest comparable date in February and March.

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