

Reservoir Watch March 2024

Reservoir Group	January 2024 Holding	February 2024 Holding	March 2024 Holding	Change in February-March period	Minimum historical* March holding (Year)
Kennet & Avon Canal	96.8%	96.4%	91.7%	-4.7%	66.1% (2014)
Oxford & GU	99.0%	99.9%	99.8%	-0.1%	49.6% (2012)
GU South	89.0%	88.6%	93.4%	4.8%	63.8% (2012)
GU North	99.9%	99.9%	99.9%	0.0%	39.1% (2012)
Lancaster Canal	100.0%	100.0%	100.0%	0.0%	98.6% (2021)
Leeds & Liverpool Canal	73.0%	79.2%	87.2%	8.0%	86.2% (2009)
Peak Forest & Macclesfield Canals	67.9%	73.7%	73.3%	-0.4%	42.7% (2022)
Caldon Canal	95.3%	89.6%	95.5%	5.9%	85.1% (2014)
Huddersfield Narrow Canal	81.4%	74.7%	71.1%	-3.6%	23.0% (2014)
Chesterfield Canal	29.8%	39.0%	31.6%	-7.4%	26.2% (2023)
Grantham Canal	92.5%	92.4%	93.7%	1.3%	90.5% (2012)
Birmingham Canal Navigations	97.2%	97.3%	97.9%	0.6%	35.7% (2012)
Staffs & Worcs, Shropshire Union	49.6%	53.2%	69.8%	16.6%	69.8% (2024)

* 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, February was mild and wet, for the south these conditions were consistent throughout, but for the north it was interrupted by a cold spell halfway through the month. It was the warmest February on record for England and Wales and the fourth wettest February on record (in a series from 1890). Rainfall was at least twice the February average (140%) across central and southern England. For England, the five months October-February were the wettest on record. As a result of these rainfall patterns, river flows were average in the north, and above average in the south.

Soil moisture at the end of February was high or above field capacity. Groundwater levels were exceptionally high at the majority of sites (20 of 32 reported) with record levels at seven sites. This resulted in groundwater flood alerts across large areas of southern England.

The current UK Hydrological Outlook indicates that for the spring months (March-May) there will be normal to above normal river flows and in some places, exceptionally high groundwater levels. While the water resource position shows little concern, the continued rainfall at the start of March has kept soils saturated and groundwater levels high, therefore the elevated risk of flooding continues.

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/2024/2/2024_2_Rainfall_Anomaly_1991-2020.gif

The Trust's Water Resources

Despite the wet conditions observed, 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. Belvide Reservoir (Staffs & Worcs, Shropshire Union group) was lowered for engineering works but has begun to partially refill in recent weeks. Wilstone, Marsworth and Startopend Reservoirs (Grand Union South group) were lowered to undertake reservoir works. 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
08 April 2024

Reservoir data presented is from the week ending Monday 18 March unless stated, along with data from the nearest comparable date in January and February.

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