

Reservoir Watch January 2024

Reservoir Group	November 2023 Holding	December 2023 Holding	January 2024 Holding	Change in December-January period	Minimum historical* January holding (Year)
Kennet & Avon Canal	87.9%	87.9%	96.8%	8.9%	57.1% (2013)
Oxford & GU	87.4%	99.2%	99.0%	-0.2%	33.4% (2012)
GU South	74.2%	83.6%	89.0%	5.4%	43.3% (2012)
GU North	99.9%	99.9%	99.9%	0.0%	28.1% (2012)
Lancaster Canal	94.8%	100.0%	100%	0.0%	96.5% (2023)
Leeds & Liverpool Canal	86.8%	86.4%	73.0%	-13.4%	73.0% (2024)
Peak Forest & Macclesfield Canals	68.8%	68.5%	67.9%	-0.6%	42.7% (2021)
Caldon Canal	92.1%	95.3%	95.3%	0.0%	73.0% (2019)
Huddersfield Narrow Canal	62.9%	80.9%	81.4%	0.5%	19.5% (2014)
Chesterfield Canal	42.8%	43.9%	29.8%	-14.1%	24.3% (2023)
Grantham Canal	92.4%	92.4%	92.5%	0.1%	83.2% (2012)
Birmingham Canal Navigations	96.9%	100.0%	97.2%	-2.8%	24.7% (2012)
Staffs & Worcs, Shropshire Union	87.7%	87.8%	49.6%	-38.2%	49.6% (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, December was dominated by mild and unsettled weather. There were four named storms in December, which lead to widespread high flows and flood warnings throughout the month. Rainfall during December was above average for the UK, with 148%. For the July-December period, rainfall was also above average, it was the wettest July-December for the UK since 1890. The above average rainfall resulted in December mean flows being above average across the UK.

Soil moisture deficits were overcome across the UK due to the above average rainfall and therefore, soil moisture was above field capacity for most COSMOS-UK sites. For groundwater, levels continued to rise across the Chalk. For Jurassic Limestones, Magnesian Limestone, Carboniferous Limestones levels rose. This was also the case for Permo-Triassic Sandstones and Devonian sandstones.

The current UK Hydrological Outlook indicates above normal flows are most likely over the coming months and the water resources position is favourable. Additionally, flood risk is elevated due to the saturated ground and increased groundwater levels.

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/2023/12/2023_12_Rainfall_Anomaly_1991-2020.gif

The Trust's Water Resources

Of the thirteen of the Trusts reservoir groups, four showed increases in holding, six showed decrease and the remaining three showed no change in holding.

In the southern reservoir groups, two of the five reservoir groups showed increases in holding, two showed decreases, and the remaining reservoir group showed no change. The reservoir group that showed no change was Grand Union North. The reservoir group that showed the largest increase in holding was the Kennet & Avon with an 8.9% increase, this was followed by Grand Union South with 5.4%. The largest decrease was found in the Birmingham Canal Navigations with -2.8%, this was followed by Oxford & Grand Union with -0.2%.

Of the eight reservoir groups in the north, two showed increases, four showed decreases and the remaining two reservoir groups showed no change. The largest increase in holding was the Huddersfield Narrow Canal with a 0.5% increase, this was closely followed by Grantham Canal with 0.1% increase. The reservoir group with the largest decrease was the Staffs & Worcs, Shropshire Union with a -38.2% decrease, this was followed by the Chesterfield Canal with -14.1%, then the Leeds & Liverpool Canal and Peak Forest & Macclesfield Canal with -13.4% and -0.6% respectively. The remaining two reservoir groups that showed no change were the Caldon Canal and the Lancaster Canal.

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
02 February 2024

Reservoir data presented is from the week ending Monday 22 January unless stated, along with data from the nearest comparable date in November and December.

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