

Reservoir Watch February 2023

Reservoir Group	December 2022 Holding	January 2023 Holding	February 2023 Holding	Change in January - February period	Minimum historical* February holding (Year)
Kennet & Avon Canal	77.2%	91.3%	87.9%	-3.4%	79.1% (2022)
Oxford & GU	77.7%	95.3%	95.8%	0.5%	40.0% (2012)
GU South	47.7%	69.7%	78.3%	8.6%	51.8% (2012)
GU North	64.4%	99.9%	99.9%	0.0%	31.3% (2012)
Lancaster Canal	96.0%	98.1%	96.5%	-1.6%	94.8% (2017)
Leeds & Liverpool Canal	61.1%	90.4%	90.7%	0.3%	77.0% (2006)
Peak Forest & Macclesfield Canals	50.5%	65.1%	63.3%	-1.8%	44.5% (2022)
Caldon Canal	74.6%	86.3%	86.2%	-0.1%	80.4% (2006)
Huddersfield Narrow Canal	65.3%	71.0%	81.2%	10.2%	23.3% (2014)
Chesterfield Canal	31.5%	24.4%	23.8%	-0.6%	52.7% (2021)
Grantham Canal	92.6%	92.4%	91.8%	-0.6%	84.9% (2012)
Birmingham Canal Navigations	87.1%	95.2%	95.5%	0.3%	28.2% (2012)
Staffs & Worcs, Shropshire Union	87.9%	88.0%	87.9%	-0.3%	63.9% (2002)

* 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 January was characterised by mild, unsettled conditions in the first half of the month followed by cold and dry conditions in the second half of the month. As a result of these conditions river flows receded but remained above average for January, particularly in south-west England and South Wales. January rainfall was recorded as being just above average, with Wales, the north-west and south-west of England receiving 120% of the average for January, conversely areas of north-east received as little as 50% of the monthly average.

Soils moisture levels were above average for January, this has supported the continuation of groundwater recharge at many sites. However, some responsive catchments have experienced reductions in groundwater levels. This has been evidenced in the south where reductions were recorded in the latter part of the month whilst northern sites continued to recharge, reflective of January's rainfall distribution.

The settled conditions which characterised the second half of January have continued into early February and are forecast to continue, particularly in southern and eastern areas. The continuation of these settled conditions presents a growing risk to water resources for later in 2023 which highlights the importance of rainfall in the remainder of the recharge season to tackle these concerns.

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

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomalygraphs/2022/2022_Rainfall_Anomaly_1981-2010.gif

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomacts/2023/1/2023_1_Rainfall_Actual.gif

The Trust's Water Resources

Of the thirteen of the Trusts reservoir groups seven recorded decreases in holding, whilst five recorded increases and one remained the same. The largest change in the Trusts water resources came in the north with the Huddersfield Narrow canal, which rose by 10.2%.

In the south, three of the four reservoir groups recorded an increase, the greatest of which being the Grand Union South with 8.6%, followed by the Oxford & Grand Union with 0.5% and the BCN with 0.3%. The Grand Union North remained the same with a holding of 99.9%, whilst the Kennet & Avon recorded a 3.4% decrease in percentage holding.

Of the eight reservoir groups in the north six recorded reductions in their percentage holding. The largest of these reductions was recorded in the Peak Forest and Macclesfield, which recorded -1.8%. This reduction can be attributed to a temporary lowering of Combs reservoir due to short-term engineering works. Following this, the greatest reduction in holding was recorded in the Lancaster canal which fell by 1.6%, both the Chesterfield and Grantham recorded a 0.6% reduction in holding whilst the Staffs, Worcs and Shropshire Union, and Caldon recorded a 0.3% and 0.1% decrease respectively. As previously discussed, the Huddersfield Narrow Canal recorded the largest increase with 10.2%, this can be attributed to the wetter conditions experienced in the north-east of England which has supported the refilling of Slaithwaite reservoir. The only other reservoir group to record an increase in the north was the Leeds & Liverpool with 0.3%.

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
27 February 2023

Reservoir data presented is from the week ending Monday 13th February unless stated, along with data from the nearest comparable date in December and January.

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