

Reservoir Watch February 2024

Reservoir Group	December 2023 Holding	January 2024 Holding	February 2024 Holding	Change in January- February period	Minimum historical* February holding (Year)
Kennet & Avon Canal	87.9%	96.8%	96.4%	-0.4%	61.0% (2006)
Oxford & GU	99.2%	99.0%	99.9%	0.9%	39.7% (2012)
GU South	83.6%	89.0%	88.6%	-0.4%	51.8% (2012)
GU North	99.9%	99.9%	99.9%	0.0%	29.7% (2012)
Lancaster Canal	100.0%	100.0%	100.0%	0.0%	94.8% (2017)
Leeds & Liverpool Canal	86.4%	73.0%	79.2%	6.2%	78.9% (2006)
Peak Forest & Macclesfield Canals	68.5%	67.9%	73.7%	5.8%	43.3% (2022)
Caldon Canal	95.3%	95.3%	89.6%	-5.7%	79.9% (2006)
Huddersfield Narrow Canal	80.9%	81.4%	74.7%	-6.7%	23.6% (2014)
Chesterfield Canal	43.9%	29.8%	39.0%	9.2%	23.8% (2023)
Grantham Canal	92.4%	92.5%	92.4%	-0.1%	84.9% (2012)
Birmingham Canal Navigations	100.%	97.2%	97.3%	0.1%	28.0% (2012)
Staffs 8 Worcs, Shropshire Union	87.8%	49.6%	53.2%	3.6%	53.2% (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, rainfall for January was close to average (97%) despite being bookended by cyclonic weather patterns that included four named storms, this was due to a dry period in the middle of month. Temperatures were close to average, even though there was a cold spell that brought snow to the north. Rainfall was above average in northern England and north Wales, and average or below average elsewhere. The winter thus far (December January) has had 150% of average rainfall for northern England. River flows were above average across most of England, but normal in western parts of the UK.

Soil moisture at the end of January was high or above field capacity for much of the COSMOS-UK network. Groundwater levels rose across slow responding aquifers and were stable or receded in more responsive aquifers, but at the majority of sites they remained above normal to exceptionally high.

The current UK Hydrological Outlook indicates further rain after a dry start to February. This has kept the high soil moisture and groundwater levels, maintaining an elevated risk of flooding.

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

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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 Startopsend 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 22 February 2024

Reservoir data presented is from the week ending Monday 12 February unless stated, along with data from the nearest comparable date in December and January.

Annex 1 – Canal & River Trust reservoir groups

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Group name	Reservoirs within group	
Kennet & Avon	Crofton [principally a spring-fed reservoir, and its yield is therefore greater	
Canal	than the storage volume indicates	
Oxford & GU	Boddington, Wormleighton, Clattercote, Naseby, Sulby, Welford, Drayton &	
	Daventry	
GU South	Startopsend, Wilstone, Marsworth & Tringford	
GU North	Saddington	
Lancaster Canal	Killington	
Leeds & Liverpool	Rishton, Barrowford, Upper & Lower Foulridge, Slipper Hill, Whitemoor &	
Canal	Winterburn	
Peak Forest &	Sutton, Bosley, Toddbrook & Combs	
Macclesfield Canal		
Caldon Canal	Rudyard, Stanley & Knypersley	
Huddersfield	Sparth, Slaithwaite & Diggle	
Narrow Canal		
Chesterfield Canal	Harthill & Pebley	
Grantham Canal	Knipton & Denton	
Birmingham Canal	Windmill Pool, Terry's Pool, Engine Pool, Cofton, Upper Bittell, Rotton Park &	
Navigations	Chasewater	
Staffs & Worcs,	Belvide, Gailey Upper, Gailey Lower & Calf Heath	
Shropshire Union		