

Reservoir Watch August 2024

Reservoir Group	June 2024 Holding	July 2024 Holding	August 2024 Holding	Change in July-August period	Minimum historical* August holding (Year)
Kennet & Avon Canal	83.80%	85.5%	85.7%	0.2%	25.8% (2012)
Oxford & GU	95.80%	85.9%	73.5%	-12.4%	40% (2011)
GU South	85.00%	85.1%	73.5%	-11.6%	59.9% (2022)
GU North	98.10%	91.3%	63.1%	-28.2%	23.5% (2011)
Lancaster Canal	96.20%	93.8%	90.4%	-3.4%	30% (2018)
Leeds & Liverpool Canal	80.80%	62.8%	42.8%	-20.0%	19.8% (2022)
Peak Forest & Macclesfield Canals	65.20%	53.2%	42.2%	-11.0%	22.8% (2022)
Caldon Canal	87.30%	79.8%	70.1%	-9.7%	39.2% (2022)
Huddersfield Narrow Canal	70.30%	63.0%	48.2%	-14.8%	36.9% (2018)
Chesterfield Canal	36.20%	37.5%	34.2%	-3.3%	26.9% (2023)
Grantham Canal	92.10%	92.4%	91.8%	-0.6%	82.1% (2006)
Birmingham Canal Navigations	92.50%	89.0%	83.0%	-6.0%	21.8% (2011)
Staffs & Worcs, Shropshire Union	84.20%	82.0%	77.1%	-4.9%	58.2% (2010)

* for the purposes of this analysis, historical holdings cover 1998-2023 reservoir holding data, inclusive.

General Conditions

According to the UK Centre for Ecology and Hydrology, July was cool with average rainfall. However, it was a month of two halves with the first half being characterised as cool (the coldest start to July since 2004) and having heavy rainfall. The second half was characterised by warmer than average, and weather was more settled. Despite this, the month ended with thundery weather. Total rainfall was above average for England (119%) but below average for Wales (<50%). Following the dry June, the summer so far (June-July) has been slightly drier than average for the UK. However, over longer accumulations, July saw a return of wetter-than-average conditions. The 12-month (August 2023-July 2024) period was the wettest on record for England and Wales and the second wettest for the UK (since 1890). Following from the dry end to June, river flows generally declined, however as a whole, river flows for July were normal to above normal across much for the

UK, with the south-east England being significantly high. Due to the previous 12-months being the wettest on record, England outflows remained the highest on record (in a series from 1961).

Soil moisture deficits was within the normal range at the end of July with a sharp decline towards the end of the month. Groundwater levels continued to fall in July but remained above normal to exceptionally high across the Chalk of England. Levels at Jurassic Limestone, Magnesian Limestone, Carboniferous Limestone and Permo-Triassic Sandstones fell.

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/2024/7/2024_7_Rainfall_Anomaly_1991-2020.gif

The Trust's Water Resources

As we are now over halfway through the season, the drawdown of reservoirs is still occurring, which is reflected in the decreases across most of our reservoir groups. Despite rainfall being above average for July and the previous 12 months being wettest on record, there have been some periods of dry weather in both June and July, which have also contributed to the decreases in reservoir holdings. Additionally, there are several other reasons why reservoir groups are not showing greater holdings. The primary reason is that some reservoirs within a group have 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 still 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 Reservoir (Chesterfield Canal group) is being held down whilst a new spillway is constructed. Pebley is now able to be refilled. Several of the reservoirs in the Leeds & Liverpool and Huddersfield Narrow Canal group are being held down for investigation or engineering 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
28 August 2024

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

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