

Reservoir Watch July 2024

Reservoir Group	May 2024 Holding	June 2024 Holding	July 2024 Holding	Change in June-July period	Minimum historical* July holding (Year)
Kennet & Avon Canal	86.50%	83.80%	85.5%	1.7%	46.2% (2010)
Oxford & GU	98.50%	95.80%	85.9%	-9.9%	55.5% (2011)
GU South	95.20%	85.00%	85.1%	0.1%	72% (2023)
GU North	99.90%	98.10%	91.3%	-6.8%	32.5% (2011)
Lancaster Canal	96.00%	96.20%	93.8%	-2.4%	50.6% (2018)
Leeds & Liverpool Canal	67.40%	80.80%	62.8%	-18.0%	27.9% (2022)
Peak Forest & Macclesfield Canals	68.10%	65.20%	53.2%	-12.0%	25.6% (2022)
Caldon Canal	92.50%	87.30%	79.8%	-7.5%	49.4% (2022)
Huddersfield Narrow Canal	62.40%	70.30%	63.0%	-7.3%	13.9% (2013)
Chesterfield Canal	30.50%	36.20%	37.5%	1.3%	26% (2023)
Grantham Canal	93.10%	92.10%	92.4%	0.3%	88.5% (2006)
Birmingham Canal Navigations	94.20%	92.50%	89.0%	-3.5%	26.8% (2011)
Staffs & Worcs, Shropshire Union	81.40%	84.20%	82.0%	-2.2%	67.6% (2010)

* 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, June was cool but relatively dry. There were intervals of showery rain due to frontal systems, interspersed with moments of high pressure that brought warmer spells throughout the month. As a result of this, rainfall was 71 % of average for England and Wales, with areas in southern regions receiving less than half of their average. River flows were generally normal or above normal, except for some rivers in south Wales and southwest England. Although June was relatively dry, long-term accumulations remained high, marking the wettest February-June period for England since 1890, and the wettest July-June 12 month period for the UK since 1890.

Soil moisture deficits were present across most of the UK. Groundwater levels remained above normal to exceptionally high across the Chalk of England, although it had moved into a lower category compared to May. Levels fell in both the Jurassic Limestones and the Magnesian Limestone aquifers. Groundwater levels fell and remained above normal in the Carboniferous Limestone. High levels for June were recorded in the Permo-Triassic Sandstones.

The UK Hydrological Outlook suggests that due to return to wet conditions at the start of July, July to September will have normal river flows, and normal or above normal groundwater levels. There are no immediate concerns for water resources during the summer months.

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/2024/6/2024_6_Rainfall_Anomaly_1991-2020.gif

The Trust's Water Resources

Now we are approaching the busiest part of the year for boating, we have started the drawdown of our reservoirs. Therefore, the decreases across most of the reservoir groups can be attributed to the increased usage of reservoir stocks for lockage. Despite the wet conditions observed over the winter period, there are several reasons why all the Trusts reservoir groups are not showing greater storage volumes. 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 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. For the Leeds & Liverpool Canal, despite several of the reservoirs being held down (Lower Foulridge Reservoir, Upper Foulridge and Slipper Hill reservoirs), the recent rainfall has boosted reservoir stocks. Additionally, the works at Barrowford reservoir are complete, and is still in its phased refill stage. 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
25 July 2024

Reservoir data presented is from the week ending Monday 15 July unless stated, along with data from the nearest comparable date in June and July.

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	Startopend, 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