

River Trust Reservoir Watch September 2024

| Reservoir Group | July 2024 Holding | August 2024 Holding | September 2024 Holding | Change in August- September period | Minimum historical* September holding (Year) |
|--------------------------------------------|-------------------------|---------------------------|------------------------------|---------------------------------------------|----------------------------------------------------------|
| Kennet & Avon Canal | 85.5% | 85.7% | 80.20% | -5.5% | 40% (2006) |
| Oxford & GU | 85.9% | 73.5% | 54.50% | -19.0% | 31.5% (2011) |
| GU South | 85.1% | 73.5% | 63.60% | -9.9% | 45.9% (2011) |
| GU North | 91.3% | 63.1% | 40.80% | -22.3% | 23.2% (2011) |
| Lancaster Canal | 93.8% | 90.4% | 100.00% | 9.6% | 51.9% (2010) |
| Leeds & Liverpool Canal | 62.8% | 42.8% | 28.10% | -14.7% | 17.2% (2022) |
| Peak Forest & Macclesfield Canals | 53.2% | 42.2% | 31.10% | -11.1% | 18.9% (2022) |
| Caldon Canal | 79.8% | 70.1% | 57.70% | -12.4% | 29.7% (2022) |
| Huddersfield Narrow Canal | 63.0% | 48.2% | 48.90% | 0.7% | 17.6% (2013) |
| Chesterfield Canal | 37.5% | 34.2% | 27.40% | -6.8% | 23.9% (2023) |
| Grantham Canal | 92.4% | 91.8% | 91.20% | -0.6% | 74.2% (2014) |
| Birmingham Canal Navigations | 89.0% | 83.0% | 79.50% | -3.5% | 17.1% (2011) |
| Staffs 8 Worcs, Shropshire Union | 82.0% | 77.1% | 72.70% | -4.4% | 50.2% (2001) |

^{*} 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, August had unsettled conditions throughout the month, with warmer than average temperatures at the beginning of the month and cooler conditions in the second half of the month. Rainfall was above average for the UK (110%), this was aided by the above normal rainfall in northern-western Britain as there was below normal rainfall elsewhere including the Severn-Trent and Yorkshire regions receiving less than half the average. For the summer (June-August), rainfall was slightly below average (95%) for the UK. River flows were in the normal range or below in southern and eastern England and north-western UK, and in the normal range or below normal in central and south-west England.

Soil moisture was within the normal range at the end of August in central and southern England, for northern England and Wales it was above normal and exceptionally high. Groundwater levels continued to fall across the UK and were in the normal range to high at the majority of sites. Groundwater levels mostly declined in August but remained normal to exceptionally high. In the Chalk regions, levels were falling, though some sites returned to normal. Jurassic limestone and Magnesian limestone levels also fell but stayed high. Groundwater in the Carboniferous limestone remained low in some areas but returned to normal in others. In Permo-Triassic Sandstones levels fell. Devonian sandstones levels fell but remained in the normal range.

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/2024/8/2024_8_Rainfall_Anomal v 1991-2020.gif

The Trust's Water Resources

We are now approaching the end of the main boating season; this means we will expect to transition from the drawdown period of our reservoirs to the refill stage in the coming weeks. As of right now however, we are still seeing decreases in percentage holdings across most of our reservoirs. This is partially due to the rainfall for the June-August being below average and the rainfall average for most areas across the UK being below average for August. Additionally, there are several other reasons why reservoir groups are not showing larger 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 23 September 2024

Reservoir data presented is from the week ending Monday 16 September unless stated, along with data from the nearest comparable date in August and September.

Annex 1 – Canal & River Trust reservoir groups

| | Reservoirs within group | |
|--------------------|---------------------------------------------------------------------------------|--|
| Group name | <u> </u> | |
| 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 | | |