Reservoir Watch October 2024

Reservoir Group	August 2024 Holding	September 2024 Holding	October 2024 Holding	Change in September-October period	Minimum historical* October holding (Year)
Kennet & Avon Canal	85.7%	80.20%	92.50%	12.3%	30.3% (2009)
Oxford & GU	73.5%	54.50%	87.50%	33.0%	24.8% (2011)
GU South	73.5%	63.60%	69.80%	6.2%	37.3% (2011)
GU North	63.1%	40.80%	99.90%	59.1%	13.8% (2011)
Lancaster Canal	90.4%	100.00%	92.60%	-7.4%	67.4% (2014)
Leeds & Liverpool Canal	42.8%	28.10%	34.40%	6.3%	25.2% (2003)
Peak Forest & Macclesfield Canals	42.2%	31.10%	34.40%	3.3%	16.7% (2003)
Caldon Canal	70.1%	57.70%	60.00%	2.3%	29.7% (2022)
Huddersfield Narrow Canal	48.2%	48.90%	56.70%	7.8%	21.5% (2013)
Chesterfield Canal	34.2%	27.40%	38.10%	10.7%	28.2% (2023)
Grantham Canal	91.8%	91.20%	93.50%	2.3%	71.8% (2014)
Birmingham Canal Navigations	83.0%	79.50%	85.90%	6.4%	14.5% (2011)
Staffs & Worcs, Shropshire Union	77.1%	72.70%	82.20%	9.5%	51.9% (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, September was mild and unsettled. Total rainfall was twice the average across most of central and southern England, and more than three times the average in some areas. The total September rainfall for the UK was 125% of average, with some areas of England being 195% of average and some being 300% of average especially areas in central and southern England. It was the wettest September on record for Thames region and among the top three wettest for Severn Trent and Wessex regions (all in a series from 1890). Overall, the past hydrological year (Oct 2023-Sept 2024) was the wettest on record for the UK (all in a series from 1890). As expected, September average river flows were found to be above normal to exceptionally high across central and southern England. Average flows over the hydrological year (Oct 2023-Sept 2024) were substantial with widespread new maxima recorded. Additionally,

mean outflows for the same 12-month period were the highest on record for the UK (in a series from 1980)

Soil moisture generally increased throughout the month, with most soils saturated across most of the UK, particularly in the south. However, some soil moisture deficits remained in the east. Groundwater levels were in the normal range to exceptionally high, and recharge was observed in a number of sites.

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/2024/9/2024_9_Rainfall_Anomaly_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 (usage) period of our reservoirs to the refill (only) stage in the coming weeks. We have seen a substantial increase in percentage holding across most reservoir groups mainly due to the above average rainfall that we have experienced in the past month. We expect this to continue as we transition into the refill only stage of our reservoirs. Some of our reservoir groups are still not showing larger holdings, this is due to a few reasons 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. For the Chesterfield Reservoir group, Harthill Reservoir continues to be held down whilst a new spillway is constructed and 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 October 2024

Reservoir data presented is from the week ending Monday 14 October unless stated, along with data from the nearest comparable date in September and October.

Annex 1 – Canal & River Trust reservoir groups

Group name	Reservoirs within group
Kennet & Avon Canal	Crofton [*principally a spring-fed reservoir, and its yield is therefore greater 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 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