

Reservoir Watch August 2019

Reservoir group	June 2019 holding	July 2019 holding	August 2019 holding	Change in July-Aug period	Minimum historical* Aug holding (Year)
Kennet & Avon Canal	79.1%	82.5%	82%	-0.5%	25.5% (2004)
Oxford & GU	80.7%	73%	75.5%	2.5%	34.7% (2011)
GU South	88.9%	83.3%	72.9%	-10.4%	57% (2011)
GU North	73.7%	64.4%	88.1%	23.7%	24.5% (2011)
Lancaster Canal	89.8%	80.4%	98.6%	18.2%	35.4% (2018)
Leeds & Liverpool Canal	79.1%	68.0%	83.6%	15.6%	23.7% (2010)
Peak Forest & Macclesfield Canal	95.5%	84.2%	73.4%	-10.8%	33.4% (2018)
Caldon Canal	87.2%	77.5%	94.1%	16.6%	45.6% (2018)
Huddersfield Narrow Canal	100%	90.1%	100%	9.9%	33.6% (2011)
Chesterfield Canal	98.6%	96.8%	94.7%	-2.1%	60.9% (2005)
Grantham Canal	100%	99.9%	99.8%	-0.1%	76.9% (2006)
Birmingham Canal Navigations	79.6%	77%	80.9%	3.9%	20.1% (2011)
Staffs & Worcs, Shropshire Union	97%	93.7%	92.8%	-0.9%	56% (2010)

* for the purposes of this analysis, historical holdings cover 1998-2019 reservoir holding data, inclusive.

According to the Centre for Ecology & Hydrology, July recorded a typical British summer: sunny and sporadically very hot weather accompanied by unsettled thunderstorm activity. A short exceptionally hot spell in late July culminated in a new record UK temperature of 38.7°C at Cambridge Botanic Gardens. However, this was bookended by intense thunderstorms and heavy rainfall which triggered disruptive surface water and fluvial flooding. July rainfall totals were notably above average across most of the northern and central regions but were generally below average further south and west. Soil moisture deficits were near-zero across the north-west but drier than average in the south-east. River flows were above average in the Midlands but generally below normal in the south. Groundwater levels receded as normal for the month, and levels in the chalk remained notably to exceptionally low. Excessive summer rainfall and generally healthy reservoir stocks have alleviated water resource pressure in 2019.

The Met Office rainfall anomaly graphs and maps can be viewed at:

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomalygraphs/2019/2019_Rainfall_Anomaly_1981-2010.gif

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomacts/2019/7/2019_7_Rainfall_Anomaly_1981-2010.gif

Despite the very hot weather recorded at the beginning of the month and the high water demands characteristic of the main boating season, 7 out of the 13 group reservoirs have registered an increase in their combined holdings due to the heavy rainfall. Only two out of the five southern groups have recorded a negative change in storage: Kennet & Avon, with a marginal decrease in holding of -0.5% and the GU South, with a -10.4% reduction. The three remaining have registered positive changes, with the greatest refill in the GU North, with an increase of 23.7%.

Four northern groups have registered positive changes in storage, ranging from +9.9% increase in the HNC to the +18.2% in the Lancaster Canal. The other four have seen a decrease in their holding. With the recent incident at Toddbrook Reservoir requiring levels to be drawn down urgently, the group holding of the Peak Forest & Macclesfield Canals now reflects this, with a change over the past month of -10.4%, and now a combined holding of 73.4%. The significant reduction in water level in Toddbrook has actually been offset by the other three reservoirs in the group seeing increases in holding (at the time of writing, all three are full and spilling), due to the rainfall in the vicinity.

At the time of preparing this report, 10 out of our 13 reservoir group holdings are at least 80% full, except for the Oxford & GU, GU South and PF&Macc. With the main boating season well underway, the prospects for water supply across the network will be affected by the typical weather and demand factors. The Water Management team will work closely with bankside staff to ensure that water resources are deployed efficiently through the rest of the summer. Restrictions on the Oxford & Grand Union Canals and the Leeds & Liverpool Canal have been lifted following a significantly improvement of the water situation and recovery of the reservoirs.

As always, boaters are advised to subscribe to email notifications of any waterway restrictions or closures at: <http://canalrivertrust.org.uk/notices> further information can be found at: <https://canalrivertrust.org.uk/specialist-teams/managing-our-water/drought> plus there are answers to Frequently Asked Questions here: <https://canalrivertrust.org.uk/specialist-teams/managing-our-water/drought/water-management-faqs>

Issued by:

Water Management Team, Canal & River Trust
22 August 2019

Reservoir data presented is from the week ending **Monday 19 August** 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	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

