Reservoir Watch May 2020

Reservoir group	March 2020 holding	April 2020 holding	May 2020 holding	Change in April-May period	Minimum historical* May holding (Year)
Kennet & Avon Canal	90.1%	87.9%	97.7%	9.8%	75.7% (2019)
Oxford & GU	96.9%	96.9%	93.5%	-3.4%	71.9% (2011)
GU South	87.3%	88.7%	89.9%	1.2%	78.4% (2006)
GU North	100%	100%	84.0%	-16.0%	74.0% (2011)
Lancaster Canal	100%	96.5%	80.7%	-15.8%	71.1% (2017)
Leeds & Liverpool Canal	89.7%	79.0%	64.4%	-14.6%	64.2% (2009)
Peak Forest & Macclesfield Canal	73.2%	68.7%	61.2%	-7.5%	73.4% (2009)
Caldon Canal	98.3%	85.7%	75.2%	-10.5%	79.1% (2017)
Huddersfield Narrow Canal	100%	71.7%	76.7%	5.0%	74.9% (2011)
Chesterfield Canal	72.0%	55.2%	56.7%	1.5%	64.9% (2009)
Grantham Canal	98.8%	98.0%	97.3%	-0.7%	97.8% (2006)
Birmingham Canal Navigations	99.0%	98.1%	95.8%	-2.3%	35.8% (2011)
Staffs & Worcs, Shropshire Union	99.1%	96.1%	89.3%	-6.8%	73.0% (2011)

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

According to the Centre of Ecology and Hydrology, April was a transformative month with little significant rainfall and widespread recession in river flows. It was the sunniest April in a series from 1929 and the fifth warmest April in a series from 1910. Nationally, rainfall was less than half the average, with a large region of northern Britain recording less than a third of average rainfall. Northumbria was particularly affected as it recorded its driest month since records began in 1910. As a result, in large regions of the north and west of the UK, river flows were considerably below average with April mean flows in several catchments reaching an all-time low. By the end of April, flows approached or exceeded the seasonal minima, with some catchments in north-west England recording flows lower than those registered in previous notable drought events. Soil Moisture Deficits (SMDs) noticeably increased throughout April, with the late-April soils being the second driest (behind 2011) in a series dating back to 1961. Groundwater levels decreased at nearly all the index sites, but with the previous healthy recharge over winter, the levels remain above normal or higher. The current forecast indicates that drier conditions continue into early summer, suggesting an increased probability of environmental impacts due to low flows in the coming months, with the potential for localised water resources pressure later in 2020. Therefore, continued close monitoring of these deficits are important as we move into the summer months.

The Met Office rainfall anomaly graphs and maps can be viewed at:
https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomalygraphs/2020/2020_Rainfall_Anomaly_1981-2010.gif

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/anomacts/2020/4/2020_4_Rainfall_Anomaly_1981-2010.gif

With the main boating season underway, eight of our 13 reservoir groups have a holding above 80%, with four of them being above 90%.

In the South, two of the five reservoir groups have registered small positive changes in storage, with the Kennet & Avon and the GU South holdings increasing by 9.8% and 1.2% respectively. In the north, two reservoir groups also saw an increase in holding, with the Huddersfield Narrow Canal group recording an increase of 5.0% and the Chesterfield group increasing by 1.5%.

The warmer weather and lack of significant rainfall throughout April and into May, is reflected by nine out of the 13 reservoir groups recording a decrease in holding.

In the South, the GU North group (which compromises of a single reservoir, Saddington) recorded the largest decrease of -16.0%.

The drier and warmer weather is more apparent in the North, where several groups have seen double-digit reductions in holding. The decreases in storage from the Peak Forest & Macclesfield and the Caldon groups (-7.5% and -10.5% respectively) were also due the use of their reservoirs feeding their respective canals. Whilst the Lancaster Canal group (which compromises of a single reservoir, Killington) has seen a decrease of -15.8% due the reservoir being used to the refill of the de-watered section of the canal, following the completion of the leakage repairs to the Lune embankment. The continued engineering-related drawdowns, as well as canal demands, in the Leeds & Liverpool group resulted in its holding decreasing by -14.6%.

As always, the Water Management team will continue to monitor all reservoir holdings and work closely with bankside staff to ensure water resources are deployed efficiently in the lead up to summer.

In line with the latest government advice (implemented on 13 May 2020) regarding Covid-19, we can announce the phased reopening of navigation to private boating across our waterways in England.

Private boaters may undertake short boating trips – avoiding use of locks and any staff-operated structures if possible – providing, as per current government guidance, they do not stay away from home overnight and return to their home mooring (where they have one).

On 23 May, mooring exemptions will come to an end and our guidance for continuous cruisers comes back into force. This doesn't mean that every boat without a home mooring needs to move on this day, just that we expect it to move off its current mooring within 14 days (i.e. by 6 June). Boaters in a high-risk group who need to continue to shield or self-isolate can agree special arrangements with their licence support officer if they haven't already done so.

Our specific guidance is available here: https://canalrivertrust.org.uk/enjoy-the-waterways/safety-on-our-waterways/coronavirus
To read more on our response to the Coronavirus crisis, please see our Coronavirus & Boating FAQs.

As always, 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 May 2020

Reservoir data presented is from the week ending Monday 18 May unless stated, along with data from the nearest comparable date in March and April.

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