Reservoir Watch June 2020

Reservoir group	April 2020 holding	May 2020 holding	June 2020 holding	Change in May-June period	Minimum historical* June holding (Year)
Kennet & Avon Canal	87.9%	97.7%	95.3%	-2.4%	70.7% (2005)
Oxford & GU	96.9%	93.5%	85.9%	-7.6%	60.5% (2011)
GU South	88.7%	89.9%	87.8%	-2.1%	80.2% (2006)
GU North	100.0%	84.0%	76.8%	-7.2%	54.4% (2011)
Lancaster Canal	96.5%	80.7%	66.0%	-14.7%	70.6% (2017)
Leeds & Liverpool Canal	79.0%	64.4%	54.6%	-9.8%	46.9% (2010)
Peak Forest & Macclesfield Canal	68.7%	61.2%	53.5%	-7.7%	62.3% (2007)
Caldon Canal	85.7%	75.2%	66.0%	-9.2%	72.3% (2011)
Huddersfield Narrow Canal	71.7%	76.7%	70.7%	-6.0%	19.5% (2013)
Chesterfield Canal	55.2%	56.7%	55.7%	-1.0%	76.3% (2005)
Grantham Canal	98.0%	97.3%	97.3%	0.0%	95.1% (2011)
Birmingham Canal Navigations	98.1%	95.8%	89.6%	-6.2%	32.1% (2011)
Staffs & Worcs, Shropshire Union	96.1%	89.3%	82.7%	-6.6%	73.7% (2011)

** for the purposes of this analysis, historical holdings cover 1998-2020 reservoir holding data, inclusive.*

General Conditions

According to the Centre of Ecology and Hydrology, May was an exceptionally dry and sunny month. It was the sunniest month on record since 1929. In England and Wales, the total rainfall was less than a quarter of the average, resulting in it being the third driest Spring (March-May) in a series dating from 1910. Consequently, the widespread recession in river flows continued, with most river flows across England and Wales recording below average flows: some rivers - particularly in Wales - establishing new minima for May. The exceptionally dry conditions also resulted in soil moisture deficits (SMDs) reaching their driest in the UK for the end of May in a series dating from 1961. Groundwater levels also continued to decrease across the UK, however, due to the wet winter they generally remain within the normal range or above. Across England and Wales, general reservoir stocks were at their lowest recorded holdings for the end of May in a series from 1990. Although early June has seen some unsettled conditions with some heavy rainfall, the current forecast indicates a persistence of below normal flows across most of the UK, potentially causing increased pressure on water resources in some northern and western regions. Therefore, continued close monitoring of these deficits is important as we move through 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/2020/5/2020_5_Rainfall_Anomaly_1981-2010.gif

The Trust's Water Resources
All but one reservoir group recorded a decrease in holding over the reporting period due to May's exceptionally dry conditions. However, despite the dry weather, six out of the 13 reservoir groups still have a holding above 80%, with two of those groups still being above 90%.

In the south, the Kennet & Avon and Grand Union South Groups remain fairly stable, recording modest decreases (-2.4% and -2.1% respectively) in holdings resulting in their holdings being 95.3% and 87.8% respectively. The largest decrease was recorded by the Oxford & GU Group (-7.6%) followed by the GU North Group (-7.2%), which compromises a single reservoir, Saddington. These were due to the dry weather conditions causing an increase in demand for canal water, resulting in additional feeds from reservoirs to maintain navigable levels.

In the north, the drier conditions were more apparent, with several reservoir group holdings decreasing due to the requirement for additional feeds to maintain canal levels. This included the Lancaster Group (made up of single reservoir, Killington) recording a decrease of -14.7% and the Caldon Canal Group decreasing by -9.2%. The continued engineering-related drawdown, as well as canal demands, in the Leeds & Liverpool Group resulted in its holding decreasing by -9.8%.

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 throughout the summer months.

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
22 June 2020

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

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