



Canal &
River Trust

Making life better by water

Putting the water into waterways

Water Resources Strategy 2015–2020

2019 Annual Update

The waterways we care for have the power to make a real difference to people's lives and we want more people to enjoy these benefits by making our canals and rivers part of their daily life. Delivering a secure long-term water supply will help us to achieve this. In October 2015 we published our Water Resources Strategy, '*Putting the water into waterways*'. It set out our aspirations for the period 2015–2020 as well as looking as far ahead as 2050 to understand the longer-term pressures and challenges on water supply and use. This document provides an update on our progress over the past year against the strategic actions outlined within the strategy.

Navigational drought

In our 2018 annual update, we reported on the exceptionally dry weather conditions which affected parts of our network. Drought conditions continued into 2019. In our North West Region, this led to restrictions being re-imposed on sections of the Leeds & Liverpool Canal from mid-May until late summer 2019. In our London & South East Region restrictions were imposed on both the Leicester Summit and Braunston Summit of the Oxford & Grand Union Canals Hydrological Unit (HU) during the start of the boating season. Resources were also depleted on the South Oxford Summit of this HU, however, restrictions were not needed to be imposed.

During the past year, our technical and operational colleagues have been working collaboratively to closely monitor developing drought conditions by reviewing reservoir levels and the operational demands of each canal, whilst balancing the needs of the environment. We have been carefully liaising with boating organisations to minimise disruption to our customers and visitors to our network.

In the past year, we have also refined our methodology for assessing the risk of navigational drought and the actions needed to mitigate the impacts in the Leeds & Liverpool and Oxford & Grand Union Canals HUs. We plan to refine our methodology applied to other HUs over the next year.

We continue to work with professional partners, reporting to the Environment Agency (EA) on the risk of Navigational Drought as part of the EA's National Drought Group. This group brings together government departments, water companies, environmental groups and other major abstractors to prepare for and mitigate the impacts of dry weather by coordinating action to maintain water supplies and protect the environment.

All of these experiences will help inform our future Water Resources Strategies and improve our understanding of: navigational drought (**strategic action 1**); water resource shortfalls and loss rate estimates (**strategic action 5**); and the viability of water resource scheme options identified in our 2011 Water Resource Plans (**strategic action 10**).



Consent to new marinas

In the Water Resources Strategy, **strategic action 3** stated that we would only give our consent to new marinas if their impact on water resources does not reduce the level of service below 1 in 20 years. Since November 2018 we have assessed five new marina proposals and 12 Business Boating proposals (such as hire boats or trip boats) to ensure that the additional water demands can be met without reducing the level of service below 1 in 20 years.

Restorations and new canals

We have continued to produce and contribute to water resource assessments for proposed restorations and new canal developments to ensure there is no net impact on the level of service of our network, as stated in **strategic action 4**.

In the past year we have continued to provide technical support to the restoration of the Grantham Canal, following completion of a water resource study in 2018. We have also continued to provide support and advice to third-party led restorations on the Cromford and Montgomery Canals (Freestone Lock to Newtown) and have recently begun work to support the restoration of the Hatherton Canal.



Modelling our canal network

In our Water Resources Strategy, we stated that we were aiming to complete model development of 18 of the 53 Hydrological Units on our network within the first three years, under **strategic action 5**. Although we have continued work on developing new hydrological models using the Aquator software to replace our current water resources model during the past year, we have deferred work on finalising any further models than those reported in our 2018 update, to allow us to focus our efforts on a number of arising issues of importance to the Trust.

Over the past year, our priorities have been focused mainly on: managing the impacts of drought conditions on parts of our network (see previous section on Navigational Drought); on progressing 154 applications for Abstraction Licences under the Water Act 2003 (see section on Future Pressures on our Water Resources below); and on providing technical support to the spillway incident at Toddbrook Reservoir.

Water company planning

As a Trust, we continue to work closely with water companies, for example, feeding into their Water Resource Management Plans (WRMP) where we interact with their water supply network, contributing to **strategic action 6**. We strive to ensure the Trust's interests are safeguarded whilst also looking to develop and implement water transfer schemes for public water supply.

In our 2018 Annual Update, we reported that of the 21 canal transfer schemes that we had proposed to six different water companies, five had been put forward in their draft WRMPs. In the past year, four of these five schemes have been identified in the final WRMPs for Affinity Water and Thames Water.

As a Trust, we have also been actively involved in the Regional Water Resources Planning Groups as part of the Water Resources National Framework set up by Defra.

Future pressures on our water resources

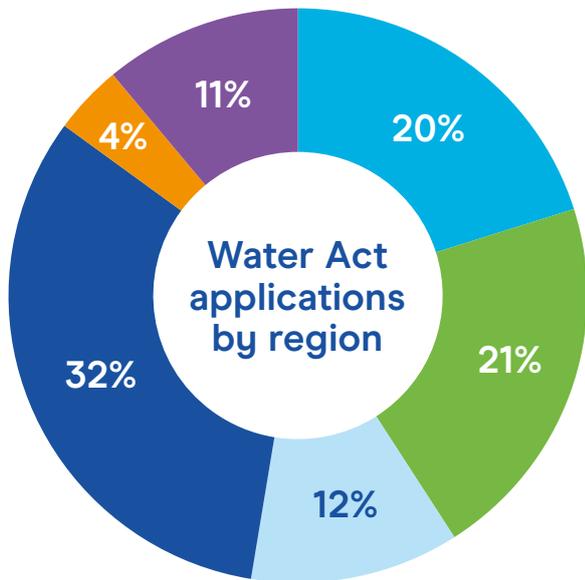
We continue to use the most up to date information available to assess the following pressures on our water resources (as stated in **strategic action 7**): climate change; changes in funding; environmental legislation (likely reduction in abstraction volumes); and increased network usage.

In the Water Resources Strategy, we identified the Water Act 2003 as a significant pressure, with the potential to reduce our water availability in the future. Our exemption for surface water transfers into canals has now been removed and the two-year abstraction licence application window to regulate this change began on 1 January 2018. During the past year, we have completed and submitted 154 abstraction licence applications for all the Trust's surface water transfers now deemed by the EA and Natural Resources Wales (NRW) as licensable. See chart below showing the number of Water Act 2003 applications submitted in each

Canal & River Trust Region. From 1 January 2020, the EA and NRW have three years to determine the abstraction licences.

In doing so, there is a risk that some or perhaps many of our existing abstractions will have conditions placed upon them that will restrict the quantities of water we can abstract. This could have a major impact on our future water availability. Over the next three years, our technical and operational staff will need to work collaboratively to mitigate this potential impact.

We have continued to contribute to an EA-led research project looking at the sustainability of abstraction within the Bulbourne Brook catchment, in which two of our groundwater supply abstractions are located (Northchurch and Cowroast, which supply the Grand Union Canal).



- North West
- Yorkshire & North East
- East Midlands
- West Midlands
- London & South East
- Wales & South West



Water resource schemes

We have continued to support project teams progressing water resource schemes on the Leeds & Liverpool and Rochdale Canals, as part of **strategic action 10**. These schemes include: a new river abstraction and back pumping to the summit pound/Barrowford Reservoir on the Leeds & Liverpool Canal; and schemes on the Rochdale Canal to backpump the Hollingworth Lake entitlement of water from United Utilities to the canal summit, and backpump lockage water around Tuel Lane Lock.

The feasibility study to assess a water resource scheme on the Grand Union Canal to improve the transfer of water from the Milton Keynes trough pound up to the Braunston Summit of the Oxford & Grand Union Canals Hydrological Unit has now been completed.

We have begun working on feasibility studies to assess temporary water resource schemes to help to support demands on the Peak Forest and Macclesfield Canals following the spillway incident at Toddbrook Reservoir.

Dredging

In the past year we have contributed to the Trust's new Dredging Strategy, currently under development, contributing to **strategic action 11**. We have highlighted the importance of dredging summit pounds and other storage pounds e.g. 'reservoir pounds' – constructed with deeper cills to create additional storage – and the potential impacts of climate change, flooding and silt inundation, on available resources.

We have also recommended a rolling programme of spot dredging at pump intakes, having successfully instigated this at pump locations on the Radford to Calcutt flight of locks on the Grand Union Canal, during March 2019, significantly increasing the yield of the pumps. This recommendation is to be included in the Planned Preventative Maintenance section of the Trust's Asset Management Strategy for Pumping Stations, currently under development.

What are we planning to do in the next year of the Strategy?

We will refocus on modelling our hydrological units. In parallel we will continue to identify potential schemes to help address the deficits in water resources against the agreed level of service. We will begin working on plans to ensure compliance with the 154 new abstraction licences, as the applications are determined over the next three years, alongside any mitigation needed if licence conditions reduce our water availability. We will also begin the process of the refresh of the Strategy itself, given that 2020 will be the fifth anniversary of publishing the Strategy.



Links

For more information about the water management of our canals please visit our website [Managing our Water](#) and read our [Water resources strategy: putting the water into waterways](#)

Or, email your comments to water.information@canalrivertrust.org.uk