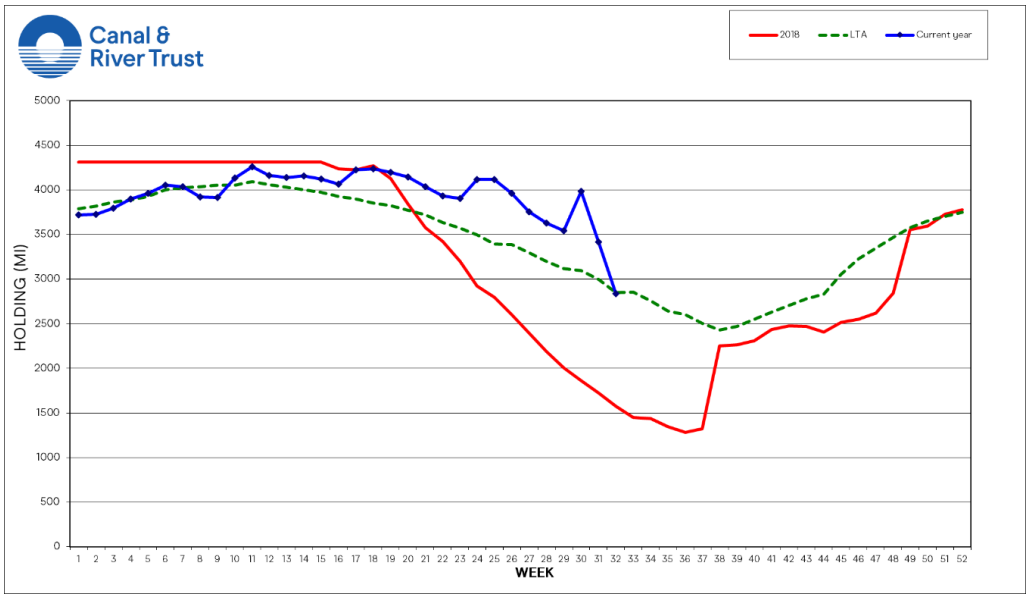
Peak Forest & Macclesfield Canals
Water Resource Position Statement: 16 August 2019

Introduction

The Peak Forest & Macclesfield canals are supplied with water by four reservoirs; Bosley, Combs, Sutton and Toddbrook. From April-July 2019 their holdings remained consistently above the long term average (LTA). Due to the incident at Toddbrook on 1 August this reservoir has been drawn down to a level where it can no longer be used to supply the canals with water. This document provides an update on the current water resource position, and the prospects for the rest of the 2019 boating season. Further analysis is being undertaken to determine the prospects for the 2020 boating season and beyond.

Current resource position

The graph below shows the group holding for the reservoirs as of Monday 12 August in comparison to the LTA (which covers the period 1998 - 2018) as well as the resource position in 2018, which was the last significant dry year to affect this region. An assumption has been made that Toddbrook is effectively empty, as the water remaining in the reservoir at present cannot be used to supply the canal, as some fish stocks remain in the reservoir and their removal at this time would endanger their health.



The total group holding for the Peak Forest & Macclesfield reservoir group, based on readings taken on Monday 12 August (week 32) is 65.8%. This is only very slightly below the long term average (green dotted line), even without the resource from Toddbrook. It is also well above the resource position for the reservoir group during week 32 in 2018 (red line).
A summary of the current holdings for Bosley, Combs and Sutton reservoirs compared to their LTAs at week 32 are outlined in the table below:

Reservoir	Current holding (Week 32)	Long term average holding (Week 32)
Bosley	95%	58%
Combs	88%	74%
Sutton	100%	58%

2019 Boating season prospects

The water resource prospects for the Peak Forest and Macclesfield canals to the end of the 2019 boating season (mid-October) have been assessed. There is currently a high level of uncertainty in the Centre for Ecology and Hydrology (CEH)'s hydrological outlook for the next three months, which suggests that "the chances of above and below average precipitation in August-September-October are similar". Met Office forecasts suggest that more unsettled weather in the region is anticipated over the coming week, but there is a possibility that high pressure could dominate in September.

Although there is much uncertainty associated with this forecast it is possible that a drier more settled period will increase demands to support the canals later this season. Modelling has been undertaken to cover a range of scenarios, including a dry September/October. Thanks to the current resources available in Bosley, Combs and Sutton the model output suggests that even if canal demands do increase later in the season the Trust is confident that the available resource will be sufficient to maintain normal, unrestricted navigation. Forthcoming winter stoppage works in the region are currently being assessed and reviewed to ensure that they are still feasible and can be supported. It is anticipated that they will go ahead, due to the positive impact they will have on water resources in the long term eg. reducing leakage.

Longer term prospects – 2020 boating season

It is too soon to say what the impact will be on the Peak Forest & Macclesfield canals for the 2020 boating season and beyond. The prospects are dependent on several factors, including how well the reservoirs recharge during the autumn and winter period later this year, and the impact of winter works and initiatives that are being undertaken to improve the existing infrastructure and reduce leakage. Clearly losing the supply from Toddbrook (which provides 28% of the total reservoir resource to the Peak Forest & Macclesfield canals) will have a significant impact, however the Trust is working on plans to mitigate this as soon as possible. Further communications regarding the long term prospects will be communicated in due course.