15 August 2023
By email to: alan.mak.mp@parliament.uk

Mr Alan Mak MP
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Please ask for Bob Taylor
Our Ref CRT/BT/150823

Dear Alan

River Ems, Emsworth, Hampshire

Thank you for your letter of 10th August regarding the River Ems in Emsworth.

As I am sure you are aware, we abstract water from boreholes located in the area at the top end of the Ems catchment, under license from the Environment Agency. This water forms a vital component of the public water supply predominantly for our customers in Emsworth, Southbourne, Westbourne and parts of Havant, but also serving customers as far away as Chichester if necessary. To be clear, we do not abstract water from the River Ems itself but from the same underground aquifer that feeds the river. At the moment the water levels in the aquifer are significantly above long-term average levels following rainfall over recent months – but as a chalk stream the flows in the Ems have been and will continue to be very closely linked with weather patterns and specifically groundwater levels in the underground aquifer.

We share your constituents' concerns about the future sustainability of flows in the Ems, especially in the face of changing weather patterns. Historically we have had two active abstraction points within the Ems catchment, but in 2016 we agreed to some major changes with the Environment Agency where we retained the use of our site at Walderton for public water supply but changed the use of our site at Woodmancote solely for supplementing river flows during periods of dry weather. This augmentation activity is designed to directly protect sensitive environments in the lower stretches of the river. In addition, at around this time a programme of environmental works was undertaken to help protect the local habitats and fauna during periods of lower rainfall.

More recently, given the impacts of climate change, increased water demand and the concerns of local residents we have recognised that more needs to be done, and are currently working closely with the Environment Agency, through the statutory five yearly water resources planning process, to understand if there are sustainable alternative supplies of water that would allow us to take less from the Ems catchment, without placing public water supplies at risk.

In the short-term, we are continuing to augment the river in dry conditions, and, with the help of the Friends of the Ems and local residents, we are undertaking significant monitoring to understand the best location to introduce the augmentation water into the river to give the most benefit. We changed the augmentation point last summer and this has shown some improvement in the river flows but there is more to be done to understand the local hydrogeology, hence the need to collect more data.

In this vein, we have funded the Arun and Rother Rivers Trust, who are the catchment partnership lead organisation for the River Ems, to survey the river and devise a 10 year Catchment Improvement Plan. Elements of this plan are on our website already with the full report due to be published soon, but the work to date has already been used as evidence for several successful bids for third party funding for habitat improvement work and further studies.

In the medium-term, we are proposing in our current draft water resource management plan to tackle the issue of high water demand. We will continue to reduce leaks and wastage from our pipes and treatment works, but we are also planning a universal smart metering programme from 2025. Currently, on average, our domestic customers use more water than any other English water company – around 153 litres per person per day relative to an average of around 140. Water metering is known to be an effective means of reducing water demand and our neighbouring water companies have already metered more than 90% of domestic customers. In our case, around two thirds of our domestic customers are not metered, and wider industry experience has shown that using smart meters to connect customers almost daily with the volume of water they use (whilst supporting them with practical advice and free devices to help them use less water) will reduce demand, and therefore allow us to take less water from the natural environment.

Our Havant Thicket reservoir is due to be commissioned around 2030. The current basis of the reservoir is for it to provide drought resilience to Southern Water's customers who live in their South Hampshire supply zone, protecting the ecology of the rivers Test and Itchen in dry weather conditions. As such the reservoir will be paid for by Southern's water customers. It will not in itself allow us to reduce abstraction from the Ems catchment in the medium term. However, whilst building the reservoir and delivering the smart metering programme, we will also be undertaking a full environmental assessment of all of our c. 20 abstraction sites (not just those in the Ems valley) to quantify the long term sustainable levels of abstraction from the environment in the context of population growth and our changing climate and weather patterns. This work is all part of a wider national programme known as the Water Industry National Environment Programme (WINEP).

In the long term, and as a result of these WINEP studies, we expect we will need to deliver new sustainable sources of water. This could involve constructing new infrastructure to take water from boreholes in different locations lower down in our catchments or might include the construction of new water recycling or desalination facilities, possibly linked to the reservoir. Currently we export up to 15% of what we produce to Southern Water, and this is set to increase in the short to medium term to around 30%. It is probable that this situation will reverse, and we will start to import water from Southern Water, especially if they themselves are able to accept transfers of water from new infrastructure constructed by their neighbouring water companies. Strange though it may seem, by 2050 some Portsmouth Water customers could be receiving water that originates in mid Wales, provided the large national programme of reservoirs and intercompany transfers is completed as currently planned.

We have laid out our plans to ensure we can supply all of our customers with water into the future, including for the Ems catchment, in our draft water resource management plan which you can find on our website here: Interactive-Document_FINAL.pdf (portsmouthwater.co.uk)

I know we are soon to meet to discuss the River Ems, and other relevant water sector topics and I would be happy to answer any further questions you may have.

Yours sincerely

C R Taylor
CEO – Portsmouth Water

Cc Environment Agency SE Region.