

Hampshire WTWRP Consultation Team
Southern Water
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3 August 2022

Dear Sirs

Public Consultation on Proposed Hampshire Water Transfer and Water Recycling Project

Rowlands Castle Parish Council (RCPC) appreciates the opportunity to respond to this Consultation and considered the matter at its Meeting on 18 July 2022.

Your Consultation covers 3 aspects within the overall project:

- to build a new water recycling plant (WRP) in Havant;
- to build a pipeline to transfer the recycled water to the Havant Thicket Reservoir (HTR);
- to build a long pipeline from the HTR to the Otterbourne Water Supply Works (WSW).

As the construction work does not impact on Rowlands Castle Parish in any way, RCPC does not intend to offer comment on locations and routes as that will be done by those affected. RCPC does wish to re-iterate views on the project as a whole that were previously expressed in our comprehensive response to the Ofwat Consultation on this matter. RCPC will also complete some sections of the Consultation Questionnaire

RCPC remains opposed to the Water Recycling and Water Transfer solution as proposed for the following reasons:

Water Recycling (WR)

The scheme to produce recycled water has very high energy and chemical use with resultant high costs. Customers and others are concerned about the huge amount of energy (with high carbon output) and quantity chemicals needed to operate a WR plant and pump the water more than 35km to Otterbourne. This will have a huge environmental impact long term and with energy and chemical prices soaring this will be a burden to customers for many decades to come. This approach is not in line with government or water company policy on achieving net zero carbon at a time steadily worsening climate change. Southern Water (SW) needs to select options that reduce operational energy and carbon use, not increase it, rather than having to look later at reducing emissions through an off-setting strategy, which will never be as effective as removing the problem at source through more appropriate solutions.

SW needs to find solutions that work with climate change, making use of the predicted increase in winter rainfall to collect water in areas where it is needed most, not add to climate change pressures by using even more energy and carbon to treat and pump water (which is very heavy) long distances. Thus SW needs to create more storage facilities for winter river / spring water

near where they are needed and that, in turn, helps to reduce flood risk and create new biodiversity and leisure opportunities to off-set other impacts.

Very importantly, SW also needs to work much harder at reducing leaks from the many pipelines serving its customers because this is a significant failing in SW's business and results in unacceptable loss of water that has been treated for drinking. Prevention of loss means that existing supplies will last longer and not be wasted; it also means that the treatment process is not wasted as a cost and energy expenditure. SW has recently announced that it is committed to reducing water supply leakages by 40% in 20 years, which means that 60% of leakages will not be dealt with for at least 20 years. This is unacceptable and rather than spending millions of pounds on recycling water SW needs to rectify the current omissions that cause so much water to be lost.

The use of reverse osmosis and ultrafine membranes is not a thoroughly proven technique and such membranes will need replacing really regularly if they are to remain effective. This will be another cost. The great concern remains that this treatment process will fail to do what is required and thus good quality water derived from the chalk aquifers will be greatly degraded by the presence of poor-quality recycled water. SW's own reports say that the reverse osmosis treatment only achieves 82% effectiveness so that leaves a very significant 18% of unwanted material in the wastewater to get through and be pumped into the reservoir on a continuing basis. There is a consequence increased risk of algae blooms as the water will contain the impurities that such blooms thrive on with the consequent impact on visitors (smells and unsightly look), wildlife (poor quality water) and reduction in coastal area water quality because of the compensation discharge.

There has been insufficient progress made in the work to carry out key environmental assessments including Strategic Environmental Assessment, Habitats Regulations Assessment and Water Framework Directive assessment

Water Transfer (WT)

The original and only declared purpose of the approved HTR project is to store surplus water emanating from chalk aquifers during the winter months. The storage of this high quality water is not only very sensible but provides the opportunity to develop a unique chalk-water derived wetland environment with supporting visitor infrastructure that has enthused local people to support the reservoir project.

The new proposal to significantly reduce the water quality by mixing it with recycled water will have a number of negative effects, namely:

- Portsmouth Water customers (and many SW customers) currently enjoy drinking high quality water that tastes and smells good, obtained from chalk aquifers. The addition of treated effluent will diminish considerably the purity, taste and smell of the drinking water and may make many customers turn to using bottled water, which goes against the urgent need to reduce such consumption as part of saving plastic waste and damage to the environment. Members of RCPC unanimously declared that they would not wish to drink the poorer quality water and fail to see the point of diluting high quality water that becomes less enjoyable to drink.
- SW has still not undertaken an environmental impact assessment and conducted modelling to be able to understand what the impacts would be of using recycled water in such a way.
- The previously planned annual seasonal variation in water level at the reservoir will be lost under the proposed operating regime to keep the reservoir full. This will have an adverse impact on many breeding species; it will also significantly reduce the value of the reservoir to migrating birds in the autumn. The original proposal provided a unique opportunity to create a very special wetland environment to maximise the biodiversity net gain. A reservoir filled by

clean, chalk-fed spring water, without the normal pollution load and risks associated with other lowland reservoirs fed by rivers, would create a unique wetland in the UK. This opportunity is completely lost if the reservoir is used as a buffer lake for effluent recycling

- There is potential for significant adverse impact on downstream water quality in the coastal SAC, SPA and RAMSAR sites, especially in Langstone Harbour. The benefit that HTR was to have made in reducing nitrates will be lost. The Habitats Regulation Screening Assessment (HRA) completed by SW to date is not robust and does not take into account the adverse impact on Langstone Harbour from the poorer water quality leaving the reservoir via the compensation discharge.
- There will be an adverse impact on water quality in the streams below the reservoir, removing the positive benefit that the HTR proposal would have delivered.

Water transfer in itself can be a useful means of supporting demand in areas where there is less rainfall or storage capacity but by building small storage units in a number of locations adjacent to rivers, water can be held in the location where it is needed rather than having to expend energy transferring it over many miles.

If effluent recycling is, genuinely, the only viable option in an area, **the effluent should only be sourced and recycled from close to where the water is needed**, to minimise the distance over which water must be transported. This is not the case with this scheme for effluent recycling in Havant, when the water is actually needed in the Southampton area, requiring water to be pumped more than 35km for many decades to come. The Otterbourne pipeline from the reservoir (former Option D.2 – development in isolation) is not supported as being too long and it was not selected by SW as a preferred solution in isolation anyway. If SW did not select Option D.2 as a preferred solution then logically former Option B.4, the joint solution, should not be a preferred option either, as the 35km pipeline to Otterbourne can no longer be assumed to be in place for Option B.4. However, Option B.5 (75 Megalitres/day (Ml/d) Recycled water from Budds Farm WwTW and Peel Common WwTW sent to an Environmental Buffer Lake and treated at Otterbourne WSW) is a more sensible option to consider and you specifically flag in your Gate 2 Annex 5, Page 138/139 that there are potential benefits to the sensitive coastal waters of Option B.5 rather than Option B.4

Ofwat concerns

RCPC notes that within the previous consultation document Ofwat was particularly concerned that:

- i) There has been insufficient progress made in the work to carry out key environmental assessments including Strategic Environmental Assessment, Habitats Regulations Assessment and Water Framework Directive assessment;
- ii) There is insufficient environmental monitoring data to understand environmental impacts and risks;
- iii) There is insufficient evidence on the impacts of the WRP on chalk catchments

Summary

In summary, RCPC continues to completely oppose the implementation of the proposed Water Recycling and Water Transfer scheme involving Havant Thicket Reservoir. If recycled water really has to be used, in spite of the high costs, and the process is finally authorised then a better and more suitable Water Transfer Scheme is to pump the treated water from Budds Farm WwTW and Peel Common WwTW to an Environmental Buffer Lake at Otterbourne and treated at WSW there) as a more acceptable option in environmental and long-term costs.

This will allow the Havant reservoir to fulfill its potential as a high-quality water source for customers and provide environmental benefit to wildlife and the coastal areas.

In any event, much more effort should be invested in fixing the leakages that cause so much valuable water to be lost. This should be SW's priority.

Your faithfully

A handwritten signature in black ink, appearing to read 'Lisa Walker', written in a cursive style.

Lisa Walker – Clerk to the Council
Rowlands Castle Parish Council

CC: Flick Drummond, MP for Meon Valley
Marge Harvey, County Councillor for Catherington Division
Malcolm Johnson, District Councillor for Rowlands Castle Ward
Portsmouth Water, Havant Thicket Reservoir Team