

Department for Environment, Food & Rural Affairs (DEFRA)  
2 Marsham Street  
LONDON  
**By Email**

2 February 2023

Dear Sir/Madam

## **Portsmouth Water (PW) draft Water Resource Management Plan (WRMP)**

Rowlands Castle Parish Council ('RCPC' or, 'the Council') has carefully reviewed the draft PW WRMP and the letter below lays out the Council's detailed response and concerns with respect to the draft plan in 3 parts; 1) Key points and comments with regard to PW WRMP, 2) generic comments on future water management and 3) in Annex A the answers to the 7 questions posed by PW on page 18 of its WRMP.

### **Key Points**

- The Plan needs a more challenging target for reducing leakage, a 50% reduction by 2050 still leaves far too much water that has been treated to achieve drinking standards being lost into the ground. RCPC considers that a more challenging target of 75% or even 90% reduction by 2050 should be pursued.
- Supporting homeowners and businesses to save water must be a key component of achieving future water savings for all companies. Customers should be actively supported through the provision of advice and leadership by PW so that they become more aware of how they can conserve this key resource and save money.
- Full water metering for all households and business is fully supported. People and organisation should pay for what they use but be helped to make reductions in consumption through the guidance mentioned above.
- The use of smart meters will add value for users to understand just what they use so as to pinpoint where savings can be achieved. The smart meters may also in time support the introduction of variable tariffs allowing for a base rate usage (calculated by evaluation of general consumption) and then one or more higher charges for additional consumption (subject to social safe guards for those who have special needs for high water use).
- RCPC does not support the proposal by Southern Water (SW) to pump recycled effluent into PW's Havant Thicket Reservoir (HTR) as an Environmental Buffer Lake. This will go against the considerable environmental benefits put forward at the time the original HTR planning application was put forward and will also mean that PW customers will have to drink this water as it is mixed with the excellent chalk-aquifer-derived water we now enjoy. This goes against the PW stated plans to continue supplying high-quality, reliable drinking water for the next 50 years; their customers do not need to drink the recycled water.
- The Council considers that PW should look seriously at storing water in confined aquifers as a contribution to holding back the water that otherwise runs out to sea in the winter. HTR alone cannot catch all the surplus water but confined aquifers by rivers can be filled in the winter months.

## **Further comments re PW WRMP**

It is recognised that there will be increasing pressure on our water supplies as a result of a steadily increasing population, both for household and business/industry use and also because climate change will make an impact on how much rain will fall in the UK each year and when. However, on the basis used in medicine that 'prevention is better than cure' so the adage 'achieving a good reduction in water excessive use and unnecessary loss is better than spending millions of pounds unnecessarily in infrastructure additions' should apply to the water industry and its users.

The PW Plan offers many positive approaches to tackling possible future water shortages but needs to place priorities on very significant leak reduction and a major programme of education of its customers in the more efficient and reduced use of water, giving them guidance as to how best to achieve this. Caring for our water resources is everyone's responsibility. PW should also look for more storage opportunities (small reservoirs and confined aquifers) to hold onto the water that the South-East receives over the winter period beyond the new reservoir now under construction. Achieving these priorities should reduce very considerably the demands in future years.

RCPC also supports the reduction of non-household water use through thorough assessments and leak detection for hundreds of high-demand water users, such as schools, colleges and businesses. Too often in large organisations, waste of all kinds occurs because individuals don't have the same feeling of responsibility as householders might to hold down on the cost of bills and use of utilities. This initiative could save very many thousands of litres per day for high-demand users and should be pursued.

RCPC does not support the PW plan (WRMP page 17) to put recycled effluent into HTR at times of need. Southern Water has stated that they would need to pump millions of litres of recycled water into HTR every day of the year, which would significantly downgrade the environmental benefits put forward as part of the original planning application and which swung many local people behind the plan. Water recycling is expensive in terms of infrastructure development and long term operation, it is also expensive in terms of energy use and carbon consumption. PW customers will have to drink the mixed water which will taste different from the high quality water currently derived from the chalk aquifers. PW should formally withdraw from such a proposal and not take this water from SW. If that company wishes to use recycled water they should plan to send it straight to an Environmental Buffer Lake to the west where it will be close to the consumers requiring it.

Page 16 of the PW Plan indicates that there will, in time, be a reducing need to supply water to SW in Hampshire and in West Sussex because of new SW sources coming on line. This further obviates the need to take recycled water into HTR if in future years SW is not going to need it. The cost of the infrastructure set up to transfer the water into and then out of the reservoir will have been a huge waste of customers' money.

## **Future water management**

### **Customer education**

It is important to stress to all water customers that climate change may bring long periods when there is no rain and groundwater supplies run low and rivers also see greatly reduced flows, with summer 2022 as an excellent example. Customers should be encouraged not to waste water and treat it as a precious commodity. The extended drought in California is an example of how all the technology in the world cannot stop areas running out of water if users are profligate with it. It should be made clear to customers that the use of temporary restrictions (Temporary Use Bans and Non-Essential Use Bans) in times of drought must form part of the plan to deal with increased demand. There is still a strong belief by many that water is a freely available resource that they don't need to protect and respect. The water companies must never indicate that

drought restrictions on customers will be reduced because other measures have been brought in. Water companies changing their level of service so that restrictions like hose pipe bans occur less often for customers sends out completely the wrong message on the need for customers to save water.

### **Leakage reduction**

The plan proposes that water leakage be reduced by at least 50% by 2050. It is considered that this is not stretching enough. There is no point in spending money on additional large infrastructure projects to hold or transfer more water if a significant amount of what is then pushed out to consumers is lost into the ground. That is just a waste of valuable funds and customer payments. RCPC considers that the plan should require that water leakage be reduced by at least 75% in the period to 2050 and that a stretching objective of 90% should be firmly stated and pursued by all water companies to ensure that this precious commodity is not wasted. Additional comments are in the Council's answer to PW's Question 2 at Annex A.

### **Increasing the number of reservoirs**

Building more reservoirs makes eminent sense. Reservoirs are not in themselves energy demanding over the long term and make for a sensible capital investment that can last for many decades and enhance their environment. They ensure that water that may otherwise be lost to sea can be held back. The current Havant Thicket Reservoir (HTR) project is fully supported, albeit not the follow-on idea of pumping Southern Water's recycled effluent into it as an Environmental Buffer Lake. PW could look to add one or more, smaller reservoirs to capture the winter excess as all water resource management plans should have investment in reservoirs of varying sizes as a high priority after leakage reduction and customer education.

### **Water transfer using pipelines/canals/rivers**

It is not clear how much energy will be required to move large quantities of water along pipelines and canals particularly if the latter involves pushing the water uphill at any stage and therefore there must be concern about any long term costs involved. The other concern is that water shortages might occur widely if there are long dry periods across a large swathe of the country and so there may not be surplus water available to move about, thus the cost of developing this option may need careful consideration. Water transfer using various methods must be tied into increased storage capacity across the South-East in particular although it should also be looked at across the country as a whole. If storage using reservoirs or confined aquifers is increased then the building of interconnecting pipe work and use of canals and rivers makes sense. Hence building one or more pipelines to receive water from the planned Thames Water reservoir in Oxfordshire seems appropriate, should that scheme be approved.

### **Storing water underground and improving retention in water catchment areas**

Both these approaches are very suitable in terms of retaining water that is beneficial to the environment as well as helping to address potential shortfall for customers. In particular retaining more water in catchment areas helps the rivers that run through them as well as providing more water for customers if required. Just as beavers can successfully retain considerable volumes of water in the upper reaches of a river so careful engineering could see considerable volumes retained to help in drought situations but also to support the general health of the river.

More consideration should be given to capturing winter rain water and storing it in confined aquifers to ensure they are topped up at the start of each summer. This solution works with climate change taking advantage of wetter winters to provide for drier summers. The stored water will not evaporate and treatment works may often already be present, avoiding the need for new infrastructure and pipelines.

## **Water recycling**

Towards the end of PW's draft plan it shows that the company is considering taking recycled water into HTR. Whilst the Council understands why the re-use of water that has gone through the first stage of treatment from being effluent to something that can be discharged into the environment (river or sea) seems attractive at first glance it has some major drawbacks. It is very energy and chemical intensive and that implies increased costs for consumers at a time when energy is no longer cheap and in fact will continue to be much more expensive than in the past. The investment in the structures and technology associated with these schemes will need to be paid for and the operating costs will remain high throughout the life of the schemes. Furthermore the water will not be as pleasant to drink as that which is drawn from chalk aquifers and other ground sources and may put some people off drinking tap water and using bottled water instead, which would be a retrograde step in terms of the use of plastic. The Council believes that more work needs to be done to drive down costs for this approach before it should be considered further. Importantly, if recycled water is produced it should not be mixed with better quality ground water such as from chalk aquifers in reservoirs but be fed separately to consumers via other holding arrangements. Thus RCPC does not agree with using HTR as an Environmental Buffer Lake to mix recycled water with high quality chalk-aquifer-derived water, this will degrade the water that PW consumers will drink and that is not acceptable.

## **Over-investment in infrastructure and technology**

The spectre of climate change and issues such as the potential for water shortages can influence thinking too much towards investing in new ways to gain new water supplies beyond the obvious one of holding onto more of what falls from the skies/comes out of the ground and also reducing excessive and unnecessary use/loss. These new solutions, recycling and desalination, will always demand energy expenditure, sometimes to a high level over long periods with the resulting high costs to consumers. It is essential that the low-cost wins of reducing consumption and stopping unnecessary loss are prioritised so that the pursuit of high cost solutions to water management is tempered to that which is essential. The headlong pursuit of high-cost options needs to be very carefully controlled, for all we know in future years with increased temperatures we may get far more 'tropical' rain than we ever bargained for as the atmosphere will hold much more water and then the high cost infrastructure improvements will be seen as white elephants on a grand scale.

## **Final comment**

PW has proved to be a conscientious local water company and shown that it is willing to engage with, and deliver improvements to, its customers in a way that other companies do not. The HTR project as approved was welcomed by many people as a good thing for the wider environment as well as improving water resilience. The proposal by Southern Water to continuously feed millions of litres of recycled water a day into the HTR will greatly diminish the value of this project in terms of environmental improvement in the eyes of local residents, plus diminish the water quality that PW customers will receive and is considered a betrayal of the original concept that was welcomed by so many. RCPC speaks on behalf of very many residents in stating that the pumping of recycled water into HTR should not be allowed to proceed and requests that PW respect the views of its customers in this matter.

Yours faithfully

Lisa Walker – Clerk to the Council  
For and on behalf of Rowlands Castle Parish Council

Encs: Annex A - Responses to 7 questions posed in PW WRMP (Page 18)  
CC: Portsmouth Water and WRSE

**Annex A**  
**to RCPC's Letter to DEFRA of 2 February 2023**

**RCPC's Answers to the 7 Questions posed in Portsmouth Water's (PW) draft Water Resource Management Plan (WRMP)**

1. *Do you support the balance between saving water from leaks, metering and water efficiency, and water being supplied from new sources?*

It is difficult to determine from the PW plan the way in which the company is balancing the various actions in the question. There are no definite statements that enable the Council to assess the percentage of effort (manpower and investment) being apportioned within the company to each action. Therefore the Council cannot answer the question with a yes or no but rather must state that the obvious priority must be to aim to eliminate leaks and reduce consumer wastefulness as a priority. That way it may not be necessary to expend too much money and effort on building new infrastructure. Whilst it is inevitable that some new sources of water will be needed, especially from increased storage in reservoirs and confined aquifers, the reduction of leaks, increase in the use of water meters and general help for customers to achieve water efficiency must be given priority of effort.

2. *Do you support our plans to reduce leaks by half by 2050?*

The plan proposes that water leakage be reduced by at least 50% by 2050. It is considered that this is not stretching enough. There is no point in spending money on additional large infrastructure projects to hold or transfer more water if a significant amount of what is then pushed out to consumers is lost into the ground. That is just a waste of valuable funds and customer payments. RCPC considers that the plan should require that water leakage be reduced by at least 75% in the period to 2050 and that a stretching objective of 90% should be firmly stated and pursued by all water companies to ensure that this precious commodity is not wasted. It is recognised that it will be impossible to reduce leakage to zero but companies should aim to reduce the losses to a real minimum compared with losses in 2022. This leakage reduction should be the highest priority for all concerned. A "like for like" plan that unites, and matches, user and provider savings would incentivise customers. Comparative data on shared savings and efficiencies would be helpful. 50% is too low a target

3. *Do you support our plans to support homeowners and businesses to save water?*

Absolutely. If PW as a company shows itself willing to really tackle the leak problem there should be no real difficulty in encouraging most customers to use meters and to take advice on how to reduce their use of water without depriving themselves of necessary use. The plan proposes to lower water use by 40 litres per person per day (on average) by 2050. The lowering of water use is supported but, as for leakage reduction, this is not a demanding enough target in terms of years to achieve. PW should set itself the challenge of achieving that reduction by 2035 because it just needs 2 things, education and metering to help achieve the aim. By helping customers to understand the need to conserve water and how they can achieve real reductions in use through careful management of their day-to-day consumption most customers will be able to achieve the reductions over the next 10 years by changing their habits. A well-written advice note that lays out all the ways that reduced water use can be achieved without being prescriptive and demanding will enable many customers to implement savings successfully. Households and businesses will respond positively to messages that show that PW leads by example.

4. *Do you agree water bills based on the amount of water a household uses would be fairer than bills based on rateable value (the estimated rent of a property)?*

Yes, RCPC does agree with this. Quite often single people live in a 3-4 bedroom property and use far less water than a family of four in the same property. It is only fair that households pay for what they use and no more. Most households who shift to using meters will see a saving on their bills unless they are profligate with water in which case they deserve to pay more. Education will help those households to reduce usage over time.

5. *Do you support our plans to install meters at most homes we supply to encourage water saving and find more leaks?*

Yes, RCPC absolutely supports this plan. Quite often single people live in a 3-4 bedroom property and use far less water than a family of four in the same property. It is only fair that households pay for what they use and no more. In addition water meters are an essential tool in helping customers to reduce usage and costs, while ensuring that those who are perhaps wasteful of this precious resource are penalised initially through their bills but can improve matters by not wasting water in the future. There is no reason why all properties should not be fitted with them by 2035. All new properties are fitted with water meters and so it is essential that older properties are also fitted with them. Most households who shift to using meters will see a saving on their bills unless they are profligate with water in which case they deserve to pay more. Education will help those households to reduce usage. Every home should have a meter installed, just as we have gas & electricity meters, as this should be the normal situation. Rainwater collection projects that provide storage facilities and hose equipment for parks/gardens/green spaces etc. could also be a small part of an incentivising programme.

6. *Do you support the use of smart meters? (So customers can track their water use and spot leaks)?*

Yes, if customers can get a continuous readout of how they are consuming water then the use of smart meters seems worth the additional outlay by PW and would help achieve consumer savings. In the future the use of variable tariffs could be considered, a base rate based on average reasonable consumer consumption and then one or more higher rates for additional consumption (subject to social safeguards for those who have special needs for high water use).

7. *How did you hear about our consultation on our water resource plans?*

Through the Council's membership of the Havant Thicket Reservoir Stakeholder Group in the first instance.

### **Final comment**

Just to reiterate the final comment from the main letter as this point is considered really important by Rowlands Castle PC and our residents, PW has proved to be a conscientious local water company and shown that it is willing to engage with, and deliver improvements to, its customers in a way that other companies do not. The HTR project as approved was welcomed by many people as a good thing for the wider environment as well as improving water resilience. The proposal by Southern Water to continuously feed millions of litres of recycled water a day into the HTR will greatly diminish the value of this project in terms of environmental improvement in the eyes of local residents, plus diminish the water quality that PW customers will receive and is considered a betrayal of the original concept that was welcomed by so many. Therefore this particular proposal should not be allowed to proceed and the Council requests that PW respect the views of its customers in this matter.