



Submission to Thames Water Draft Water Resources

Management Plan 2019

Introduction

1. This submission covers the following points:
 - 1.1. Information about the Wantage and Grove Campaign Group
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 - Where we are
 - Our interest in the Draft Water Resources Management Plan 2019
 - 1.2. Our feedback on the Draft Water Resources Management Plan 2019 including:
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 - Promote the efficient use of water
 - River abstraction above Teddington Weir
 - Water reuse at Beckton & Deephams
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2. The Wantage and Grove Campaign Group

2.1. Who we are

The Wantage and Grove Campaign Group is a non-party-political group of over 1000 individuals who live in and around Wantage and Grove in Oxfordshire. We are not against any development in Wantage and Grove but:

- Developments should be proportionate and sustainable; and
- The infrastructure should enhance and improve quality of life for its residents.

2.2. Where we are

Wantage and Grove jointly comprised 7,635 households at the 2011 census. We are situated in the centre of the Vale of the White Horse. This is a predominantly rural area located in south-west Oxfordshire and is bounded to the north and the east by the River Thames and to the south by the North Wessex Downs Area of Outstanding Natural Beauty (AONB). The Vale is located



between the larger centres of Swindon, to the south-west; Oxford, to the north-east; Newbury, to the south; and Didcot, to the south-east.

2.3. **Our interest in the Draft Water Resources Management Plan 2019**

As residents of the Vale of the White Horse, this plan affects us in two ways:

- As customers of Thames Water
- As residents of the area very close to the proposed site of the Abingdon Reservoir.

3. **Draft Water Resources Management Plan 2019**

3.1. **Current supply**

Fact:- Around 25 per cent of the water supplied by Thames Water is lost through leaks from water supply pipes and customers' pipes. Yet:

- Thames Water have the worst leakage record of all water companies – they were even fined £8.5M by OFWAT for missing targets.
- They now propose to reduce leakage by 15% by 2025 - this is the minimum demanded by OFWAT. Even with this reduction they will still be the worst performing water company.
- If the Thames Water leakage per property was as good as that of the industry leaders (eg. Southern Water or Anglian Water) - they could save about 260 million litres per day well in excess of the 110 million they seek to achieve in the plan.

Fact:- Thames Water failed six discharge quality tests in 2016/17 and incurred an ODI penalty of £2.3 million and despite the reduction in sewer flooding incidents, the number of incidents still exceeded the penalty threshold and they incurred a penalty of £0.5 million. Yet

- The plan is only to reduce the number of sewage flooding incidents by 5% per year. A number of residents of our area are subject to sewage flooding incidents in their properties and 5% reduction is not enough.

3.2. **Population growth**

The Thames Water plan released on 12 February at the beginning of this consultation period included population targets based on their internal modelling. CPRE and local campaign group GARD challenged Thames Water on its population figures for the latter half of the century. Now Thames Water has agreed to use Office of National Statistic (ONS) projections, which lowers the estimated 2100 population for the region by 2 million, from 16 million to 14 million resulting in a potential overestimation of demand for water of 250 million litres of water each day. Yet the plan has not been changed to reflect the new assumptions on which it is based.



3.3. Water supply options

- Reduce leakage

As noted above, if Thames Water reduced its leakage per property to the standard of other water companies, they could save about 260 million litres per day well in excess of the 110 million they seek to achieve in the plan.

- Continue the household metering programme

The plan states that in the next five years, by 2025, Thames Water will install a further 400,000 smart meters in customers' homes saving 49 million litres of water per day. How much more could be saved after that from the remainder of the 15 million customers? A very conservative estimate would be at least an additional 200 million litres per day from a further 10% of customers.

- Promote the efficient use of water

The plan states that in the next five years, by 2025, Thames Water will visit nearly 300,000 customers' homes and businesses to promote water efficiency. The programme is estimated to save 24 million litres of water every day. Once again how much more could be saved in future years from the remainder of the 15 million customers? A very conservative estimate would be at least an additional 100 million litres per day from an additional 10% of customers.

- Oxford Canal Transfer

Most options considered in the plan include a proposal for water transfer from the Midlands using the Oxford canal which would provide 15 million litres of water per day.

- River abstraction above Teddington Weir

The plan proposes an output from the Teddington Scheme of 270 million litres per day yet our local experts* show that, by changing the way the scheme is operated the yield can be increased to 315 million litres per day. This scheme effectively recycles purified water. As water use grows, the scheme output will grow so could reach 470 million litres per day by 2050.

- Water reuse at Beckton & Deephams

The plan proposes to limit the Beckton Re-use scheme to 285 million litres per day yet our local experts* see no reason for a limit of less than 350 million litres per day.

- Water transfer from River Severn

The plan limits the water transfer possibilities from River Severn to 180 million litres per day yet our local experts* analysis shows that the plan simulates flows too low in the Severn during droughts. They believe that over 300 million litres per day is possible.



- New reservoir storage at Abingdon

The plan proposes a 150 million cubic meter reservoir near Abingdon in the Vale of the White Horse, within sight of our community which would provide up to 300 million litres of water per day. It suggests that this reservoir will provide additional water in periods of severe drought, but this reservoir will rely on top-up in winter; a succession of dry winters (as happened in 2011 and 2012) does not allow this.

3.4. Meeting the water shortfall

- Swindon and Oxfordshire (SWOX)

The SWOX deficit is only 35 million litres per day by 2080. This shortage could easily be met by a combination of leakage reduction; water efficiency; and perhaps the proposal from RWE (owners of Didcot Power Station) to purify site water and re-supply to the Thames (upstream of Farmoor) to supply 40 million litres per day.

- Thames Water Area

The deficit for the whole of the Thames Water area is likely to be approximately 660 million litres per day by 2080. This could be met by a combination of leakage reduction (up to 260 million litres per day not the 110 million litres per day shown in the plan); more smart metering and household efficiency; river abstraction above Teddington Weir (generating up to 470 million litres per day by 2050); water reuse at Beckton & Deephams (generating up to 350 million litres per day) and water transfer from River Severn (generating up to 300 million litres per day).

3.5. Why there is no need for Abingdon Reservoir

- The latest figures in the Draft Water Resources Management Plan 2019 suggest that there could be a deficit of approximately 660 million litres per day by 2080. We believe that this can easily be met by all of the other water supply options without requiring the enormous capital and environmental cost of building a 150 million cubic meter reservoir.

○ Increased leakage reduction	160m
○ More smart metering	200m
○ More water efficiency	100m
○ Oxford canal transfer	15m
○ River abstraction above Teddington Weir	470m
○ Water reuse at Beckton & Deephams	350m
○ Water transfer from River Severn	<u>300m</u>
	1,595m litres per day



- The latest plans are for a reservoir above the surrounding countryside with a capacity of up to 150 million cubic metres. This would involve building embankments to a height of between 15 and 25 metres to hold the water. That's about the height of an 8 storey block of flats and higher than anything else in the Vale of the White Horse.
- The reservoir embankments would enclose about 4 square miles and be 10.3 miles long. This would be the largest man made reservoir in the country and Thames Water have no experience of building a reservoir let alone one of this scale.
- The reservoir site covers flood-plain areas – increased flood risk in Hanney, Steventon and South Drayton unless very careful geo-engineering is done, yet Thames Water admitted at a meeting in Steventon last year that they do not yet have a flood water solution.
- The land is currently in agricultural use surrounded by rural communities expanding to cope with an additional 22,000 homes by 2031. Flooding in the area is already a problem and an infrastructure development of this scale will inevitably make this worse.
- We believe that developments should be proportionate and sustainable and that this proposal for a 150 million cubic meter reservoir is neither proportionate nor sustainable. We strongly oppose this proposal and believe that it should be removed from the plan. It is unnecessary and will have a greater environmental impact than any other means of meeting the demand for water shown in the plan.