

**Vale of White Horse Local Plan 2031**  
**Part 2 ♦ Detailed Policies and Additional Sites**

Hearing Statement prepared by Savills on behalf of  
**Thames Water Utilities Limited**

---

**Matter 4 ♦ Abingdon and Oxford fringe sub-area**

**June 2018**



## Contents

### Matter 4 – Abingdon and Oxford Fringe sub-area

#### Examination topic 4.5:

**Are the proposals to extend the area of safeguarded land for the Upper Thames Strategic Storage Reservoir justified? Would there be any adverse effects?**

---

|             |   |           |
|-------------|---|-----------|
| <b>1.</b>   | <b>INTRODUCTION</b>   | <b>5</b>  |
| <b>2.</b>   | <b>LEGAL AND POLICY CONTEXT</b>   | <b>6</b>  |
| <b>3.</b>   | <b>RESPONSE TO EXAMINATION MATTER 4 QUESTION 4.5 (PART 1):<br/>ARE THE PROPOSALS TO EXTEND THE AREA OF SAFEGUARDED LAND<br/>FOR THE UPPER THAMES STRATEGIC STORAGE RESERVOIR JUSTIFIED?</b> | <b>10</b> |
| <b>4.</b>   | <b>RESPONSE TO EXAMINATION MATTER 4 QUESTION 4.5 (PART 2):<br/>WOULD THERE BE ANY ADVERSE EFFECTS?</b>  | <b>14</b> |
| <b>5.</b>   | <b>RESPONSE TO INDIVIDUAL REPRESENTATIONS</b>   | <b>16</b> |
| <b>6.</b>   | <b>CONCLUSIONS</b>  | <b>17</b> |
| <b>♦</b>    | <b>APPENDICES</b>   | <b>20</b> |
| <b>TW-1</b> | <b>Statement of Common Ground between Vale of White Horse DC<br/>and Thames Water, February 2018</b>  |           |
| <b>TW-2</b> | <b>The Upper Thames Major Resource Development: Stage 2 Preferred<br/>Scheme and Design Options Report, Thames Water, January 2007</b>  |           |
| <b>TW-3</b> | <b>Upper Thames Reservoir – EIA Scoping Report Non-Technical Summary, October 2008</b>  |           |



**Matter 4 – Abingdon and Oxford Fringe sub-area****Examination topic 4.5:****Are the proposals to extend the area of safeguarded land for the Upper Thames Strategic Storage Reservoir justified? Would there be any adverse effects?****1. INTRODUCTION****Thames Water**

1.1 This hearing statement has been prepared on behalf of Thames Water Utilities Limited (TW). The company is the largest water and sewerage services company in the UK, operating across 8,000 square kilometres of south-east England. It provides wastewater disposal services for 15 million customers and supplies drinking water to nine million customers in Greater London and the Thames Valley. The company is the statutory water and sewerage undertaker in the Vale of White Horse Local Plan area.

**Purpose of this statement**

1.2 This statement comprises TW's response to the two questions raised by the Inspector's Matter 4 Examination topic 4.5 in the Vale of White Horse Local Plan Part Two (VoWHLP2) examination, set out above, and is structured as follows.

- The remainder of **Section 1** sets out the background to the Upper Thames Reservoir (UTR) safeguarding and proposed extension, and addresses the planning justification for draft VoWHLP2 Core Policy 14a: Upper Thames Strategic Storage Reservoir.
- **Section 2** presents the wider legal and policy context for the proposed UTR safeguarding. This is comprised of principally TW's statutory obligations under the Water Industry Act 1991 and includes the company's draft Water Resources Management Plan 2019 (WRMP19), and the emerging National Policy Statement for Water Resources.
- **Section 3** responds directly to the first question in Examination topic 4.5, namely, whether the proposal to extend the area of safeguarded land for the UTR is justified. Material considerations include the purpose of the safeguarding, the rationale for the extended safeguarding boundary and the policy, operational and environmental justifications for the extension.
- **Section 4** responds to the second question in Examination topic 4.5, namely, whether the extension would give rise to any adverse effects. It summarises the potential adverse effects of the proposed extension to the UTR and then addresses the range of safeguards inherent in the decision-making process for major infrastructure works such as reservoirs, and the range of mitigation measures likely to be available to address any harm caused.
- **Section 5** addresses and responds to comments made about the reservoir safeguarding in local plan representations received from interested parties.

- **Section 6** concludes this hearing statement with an assessment of how draft VoWHLP2 core policy 14a passes the soundness tests set out in the National Planning Policy Framework paragraph 182; that is, whether the policy is positively prepared, justified, effective and consistent with national policy.

1.3 This hearing statement incorporates weblinks to most of the background documents that are cited. Paper copies of these documents can be made available to the Examination on request.

### **Safeguarding background**

1.4 Core Policy 14: 'Strategic Water Storage Reservoirs' of the Vale of the White Horse Local Plan Part 1 adopted in 2016 (VWH LP Part 1) safeguards land for a reservoir and ancillary works between the settlements of Drayton, East Hanney and Steventon. The safeguarded area is shown on the map at Appendix F1 of the adopted plan.

1.5 The planning rationale for Core policy 14 is set out in paragraphs 5.44 to 5.51 of the VWH LP Part 1 and includes:

- that TW is examining the means by which sufficient water can be provided to meet the future needs of the region;
- that shortlisted options include a new strategic storage capacity in the Upper Thames Catchment;
- that TW has identified the possible need for a major new reservoir in the district between the villages of Drayton, East Hanney and Steventon to help manage water supply and ensure current and future needs can be met;
- that the TW Water Resources Management Plan 2014 addresses option to address long term water resource management including the development of a large storage reservoir; and
- that the UTR proposed to be located as shown on Appendix F1 remained TW's preferred option if a large storage reservoir were to be selected.

1.6 As discussed below, this planning justification for the safeguarding of land for a reservoir and ancillary works between the settlements of Drayton, East Hanney and Steventon set out in the recently adopted VWH LP Part 1 remains extant and has been reinforced by the subsequent development by TW of the draft TW Water Resources Management Plan 19 which is currently the subject of public consultation.

1.7 And as noted in paragraph 5.46 of the VWH LP Part 1:  
"As part of the preparation of the Part 2 plan consideration will be given to a revision of the boundaries of the safeguarded area for this reservoir."

## **2. LEGAL AND POLICY CONTEXT**

### **Water resource management**

2.1 As a water company, TW has a statutory obligation under section 37 of the Water Industry Act 1991 "to develop and maintain an efficient and economical system of water supply within its area." The company is required to produce, every five years, a Water Resources Management Plan (WRMP), setting out how it plans to maintain the balance between supply and demand for water in the TW area over a minimum 25 year period. TW's current WRMP was published in 2014 and covers the period 2015-2040 ('WRMP14'). The WRMP14 is available at:

<https://corporate.thameswater.co.uk/About-us/Our-strategies-and-plans/Water-resources/Our-current-plan-WRMP14>

2.2 In April 2017 the Environment Agency and Natural Resources Wales published *Water Resources Planning Guideline: Interim update* (link below). The guidance explains how WRMPs should be formulated and includes in Section 3 – ‘Technical Methods’ the following requirements:

- calculate how much water you have available to supply your customers each year over your chosen planning period;
- calculate how much demand there will be for water each year over the same period;
- allow for uncertainty in your calculations and forecasts (both supply and demand forecasts);
- compare supply with demand (including uncertainty) and see if there is a surplus (more supply than demand) or a deficit (less supply than demand). If there is a deficit you must identify options to increase supply or reduce demand so that you achieve a secure supply of water;
- consider how you will ensure that your current and future system will be resilient to a range of droughts and non-drought hazards across the planning period;
- provide all of this information at a water resource zone (WRZ) level and summarise it at a water company level).

<https://naturalresources.wales/media/681612/interim-wrpg-update-final-april-2017.pdf>

2.3 In paragraph 3.1 ‘Developing your plan’ (p.9), the guidance sets out a number of matters requiring demonstration by water companies including that they have:

“considered all the reasonable options for meeting any deficit, including cross-company and third party solutions.”

2.4 This is the approach that TW has been following in the preparation of its draft WRMP19 which extends over an 80 year period from 2020 to 2100. The draft plan is now at an advanced state of preparation following extensive iterations of supply / demand and resource modelling, options analysis and stakeholder and interested party engagement.

#### **The draft Water Resources Management Plan 2019**

2.5 In February 2018 TW published its draft WRMP19, setting out how it proposes to provide a secure and sustainable supply of water for customers over the next 80 years, from 2020 to 2100. The company ran a public consultation on the draft plan from 9 February to 29 April 2018 and is currently analysing the feedback. It will publish a report in August 2018 setting out the comments received and explaining how these have been taken into account, where appropriate, in refining the plan. The report and the final draft of the plan will be submitted to the Secretary of State for the Environment, Food and Rural Affairs (Defra) and copied to everyone who participated in the consultation. The draft plan and supporting technical reports can be viewed at the following link.

<https://corporate.thameswater.co.uk/About-us/Our-strategies-and-plans/Water-resources/Our-draft-Water-Resources-Management-Plan-2019>

2.6 The draft WRMP19 is a substantial document supported by extensive documentation, including an overview and a technical summary, the main technical report and 28 technical appendices. Headline points include the following.

- i). TW has adopted data used by the Mayor of London and local authorities to develop its forecasts of population growth. These indicate that by 2045 the population of TW's region will increase by c. 2 million. By the end of the century the population is projected to increase by a further 3.4 million to a total 15.4 million customers.
- ii). In combination with a rising population, limitations to water supply caused by factors including droughts associated with climate change and restrictions on water abstraction from aquifers for environmental reasons, will lead to a worsening shortfall between water supply and demand. This shortfall is predicted to materialise within the next five years and grow to around 360 million litres per day in 2045. By 2100 the projected deficit between supply and demand is 864 million litres per day. The challenge is most severe on London but will also affect the Swindon and Oxfordshire Water Resource Zone. Much of Thames Water's region is already classified by the Environment Agency as 'seriously water stressed'.
- iii). In addressing this predicted deficit TW is committed to a range of demand management measures for water, including reducing leakage, installing water meters and promoting the more efficient use of water. However, projections of future water demand in the draft WRMP19 while taking these initiatives into account, still indicate a demonstrable need for additional water supply. It is in this context that the draft WRMP19 appraises a wide range of supply options including the desalination of sea water, aquifer recharge and storage, purifying treated water from wastewater treatment works, flow transfer from more water-rich regions of the UK, the provision of new storage reservoirs and various combinations of these measures.
- iv). Between 2020 and 2035, TW's proposed programme adopted in the draft WRMP19 will focus on a combination of leakage reduction, metering, water efficiency and water abstractions. From 2035 onwards, however, the preferred options to meet the projected longer-term demand for water necessarily include a new reservoir, used in combination with new water supplies.

2.7 Analysis of an original long list of reservoir site options showed that, in a densely-populated region with relatively gentle terrain and extensive landscape, ecological and cultural heritage constraints, the options for additional reservoir capacity were limited. In studies undertaken to inform the draft WRMP19, however, potential reservoir sites in the Upper Thames Catchment have performed consistently well against sustainability criteria. Nevertheless, relatively few unconstrained sites were identified for the purpose of technical feasibility analysis in considering the storage option. These were at Abingdon and Longworth in the VoWHLP area and a site near Chinnor located in South Oxfordshire, Aylesbury Vale and Wycombe Districts.

2.8 Whilst these options were under consideration, Thames Water sought safeguarding provisions in local plans for each of them. As explained in section 3 below, safeguarding is a responsible and common-sense planning approach in circumstances where there is an informed forecast prospect that infrastructure of national significance will need to be brought forward. As soon as the options' evaluation work undertaken for the draft WRMP19 indicated that identified sites for major infrastructure could safely be excluded from consideration, TW has notified the local planning authorities accordingly as follows:



- the Longworth option was safeguarded in the VWH LP Part 1 but, by agreement with TW, was removed from the draft VoWHLP2 because the option had been excluded on technical grounds from the draft WRMP19.
- TW sought the safeguarding for the Chinnor option, but discarded the option before the local plans for in South Oxfordshire, Aylesbury Vale and Wycombe Districts had sufficiently progressed for its inclusion.

2.9 Section 11: ‘Preferred Plan’ of the draft WRMP19 (weblink below) explains why a proposed reservoir near Abingdon remains a preferred water supply option included the plan.

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-11---Preferred-Plan.pdf>

2.10 The plan acknowledges some of the concerns raised by local objectors, including the loss of agricultural land, the displacement of c. 20 households and businesses and an eight year construction period with the consequential disruption caused to local amenities and the potential adverse effects of the construction of heritage assets. It is acknowledged that such construction activities would need to be carefully managed with appropriate mitigation measures put in place.

2.11 However, the draft WRMP19 has identified a considered balance of advantages in favour of the reservoir as a supply option to meet the water supply deficit over the period of the plan. It would be a reliable least cost option using proven construction and operational technologies. Its running costs would be low and it would facilitate reduced water abstraction from environmentally sensitive sources during years of ‘normal’ rainfall. A new reservoir at Abingdon would facilitate the maintenance of TW’s existing reservoirs. It would also afford considerable recreation and amenity benefits. Customers consulted stated a preference for the reservoir option over the Severn Thames transfer, which was their least favoured scheme. Based upon all of the comprehensive technical water supply / demand analysis and modelling work and consultations it has undertaken, TW considers that a large reservoir near Abingdon represents the optimum means (in combination with the other measures identified above) of meeting the long term demand for water in its area consistent with the discharge of its statutory duty.

### **National Policy Statement for Water Resources**

2.12 Defra is developing a National Policy Statement on Water Resources (NPS – see weblink below) which will streamline the process of gaining planning consents for large water infrastructure projects. The role of an NPS is set out in the Planning Act 2008. The draft NPS presents the national evidence base and demonstrates the need for new large scale water resource infrastructure, and provides detailed guidance setting out the framework for decisions on new large water supply projects.

[https://consult.defra.gov.uk/water/nps-water-supply-planning-act-2008/supporting\\_documents/Consultation%20document%20for%20National%20Policy%20Statement%20for%20Water%20Resources.pdf](https://consult.defra.gov.uk/water/nps-water-supply-planning-act-2008/supporting_documents/Consultation%20document%20for%20National%20Policy%20Statement%20for%20Water%20Resources.pdf)

2.13 The Water Resources NPS will apply to projects defined as ‘nationally significant infrastructure projects’ (NSIPs) in the Planning Act 2008. The consultation on the draft Water Resources NPS has included a review of these definitions to ensure they are fit for purpose (April 2018). With a proposed

water capacity of 150 million m<sup>3</sup> the proposed reservoir in draft Core Policy 14a would be 5 times larger than the 30 million m<sup>3</sup> water capacity than the draft NPS entertains as being nationally significant. It can be expected, accordingly, that the Abingdon reservoir will qualify as an NSIP in due course in the adopted NPS; and would be a project for which a Development Consent Order would need to be applied for from the Secretary of State.

2.14 The national need for enhanced water supply resilience is summarised in paras. 25-35 of the consultation draft Water Resources NPS and covers population and economic growth, climate change and drought and the protection of the environment. Paras 36-37 continue:

***The role of water infrastructure in meeting future needs***

*36. Without further action, parts of England will face a gap between demand for water and available supplies. Despite forecasts of reductions in per capita consumption as a result of recent demand management initiatives by water companies, the overall use of water is likely to grow by the 2050's due to the scale of population growth.*

*37. The Environment Agency's 2013 'case for change' considered the implications of climate change for water supplies regionally and nationally and concluded that while demand management will have an important role, significant new water resources will also be required to meet the needs of people, businesses and the environment. This has been supported by other detailed work including the Water UK water resources long term planning framework. This need for new water resource supply options to compliment [sic] demand management is reflected in our twin track approach.*

2.15 Following precedents set out in the NPSs for Nuclear Power and Airports, both of which refer to scheme-specific infrastructure requirements, it is to be reasonably expected that the final version of the Water Resources NPS will include specific reference to the national need to address the emerging water supply shortfall in TW's area.

**3. RESPONSE TO EXAMINATION MATTER 4 QUESTION 4.5 (PART 1): ARE THE PROPOSALS TO EXTEND THE AREA OF SAFEGUARDED LAND FOR THE UPPER THAMES STRATEGIC STORAGE RESERVOIR JUSTIFIED?**

**The purpose of safeguarding**

3.1 Safeguarding is a well-established planning concept, used for example to protect existing minerals, flood risk areas, green belts, aerodromes and military sites or the sites or routes of future infrastructure such as roads and railways from development that would conflict with policy objectives or the land use itself.

3.2 In the current context, TW has identified a site considered suitable for a major reservoir against a broad balance of relevant planning criteria. These include its location, size, physical characteristics and a relatively low level of human occupancy and constraining environmental designations. The draft WRMP demonstrates that TW has considered in extensive detail a very wide range of other water supply and storage options. None, however, is considered to offer the balance of water supply advantages afforded by the Abingdon option.

3.3 TW has no desire to see land safeguarded unnecessarily and, as explained above, withdrew

its request for safeguarded sites at Longworth and Chinnor as soon as it was satisfied that these options would not be pursued in the draft WRMP19. In contrast, there is agreement between VoWHDC and TW on the strategic need to safeguard the land covered by VoWHLP2 Core Policy 14a that is exemplified by Core Policy 14 in the VWH LP Part 1. It would be nonsensical to allow new permanent development in the safeguarded area whilst there is a strong prospect established in evidence that the land will be required to meet an acknowledged national need. As a matter of principle, safeguarding of the reservoir site is clearly justified.

### **Safeguarding: planning policy justification**

3.4 In a section on plan-making, NPPF para. 156 states that:

*156. Local planning authorities should set out the strategic priorities for the area in the Local Plan. This should include strategic policies to deliver . . .*

- *the provision of infrastructure for transport, telecommunications, waste management, water supply . . .*

3.5 Under the sub-heading, *Using a proportionate evidence base*, NPPF para. 162 adds that:

*162. Local planning authorities should work with other authorities and providers to:*

- *assess the quality and capacity of infrastructure for . . . water supply . . . and its ability to meet forecast demands; and*
- *take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.*

3.6 Also relevant is the advice of the Planning Practice Guidance (PPG) *Water supply, wastewater and water quality – considerations in plan making*. Under the heading *Infrastructure* (Paragraph 005, ID: 34-005-20140306) the PPG states that:

*Plan-making may need to consider:*

- *Identifying suitable sites for new or enhanced infrastructure. In identifying sites it will be important to recognise that water and wastewater infrastructure sometimes has particular locational needs (and often consists of engineering works rather than new buildings) which mean otherwise protected areas may exceptionally have to be considered where consistent with their designation. Plan-making will also need to take into account existing and proposed development in the vicinity of a location under consideration for water and wastewater infrastructure. In two tier areas there will need to be close working between the district and county councils.*

3.7 Under the heading *When is water likely to be a consideration in making a planning application?* (Paragraph: 016, ID: 34-016-20140306) the same PPG states that:

*This will depend on the proposed development, its location and whether there could be concerns about water supply, water quality or both.*

*Water supply*

*Planning for the necessary water supply would normally be addressed through the Local Plan. Water supply is therefore unlikely to be a consideration for most planning applications . . .*

3.8 VoWHL2 core policy 14a demonstrates that the Council has assessed the capacity of water supply and taken into account the need for nationally significant strategic infrastructure in its area. The emerging WRMP19 provides a proportionate evidence base to support the policy. The draft Water Resources NPS underlines the need to plan for additional water supplies.

3.9 Appendix TW1 comprises a Statement of Common Ground between VoWHDC and TW in which it is agreed amongst other things that:

- i). the Council has discharged its duty to cooperate with TW (app TW1 paras 2.3-2.4);
- ii). a robust and up-to-date evidence base is in place in respect of water resources and supply (app TW1 paras 2.5-2.8;
- iii). in respect of the Upper Thames Strategic Storage Reservoir, WRMP19 will set out how TW intends to maintain the balance between water supply and demand in the long term, including what infrastructure is required to meet this demand (app TW1 para. 2.15).

**Safeguarding: operational justification**

3.10 The need for new water storage capacity is outlined in earlier sections of this hearing statement. A detailed substantiation is to be found in the following sections and supporting appendices of the draft WRMP19 Technical Report.

*Section 3: Current and future demand for water*

[https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-03---Current-and-Future-Demand-For-Water\\_151217.pdf](https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-03---Current-and-Future-Demand-For-Water_151217.pdf)

*Section 4: Current and future water supply*

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-04--Current--Future-Water-Supply-011217.pdf>

*Section 5: Allowing for risk and uncertainty*

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-05--Allowing-for-Risk--Uncertainty-011217.pdf>

*Section 6: Baseline supply demand position*

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-06---Baseline-Supply-Demand-Position-011217.pdf>

*Section 7: Appraisal of resource options*

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-07---Appraisal-of-Resource-Options-011217.pdf>

## Section 8: *Appraisal of demand options*

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-08---Appraisal-of-Demand-Options-011217.pdf>

3.11 Collectively these sections of the WRMP19 Technical Report and their supporting appendices show that a most detailed and broadly-based examination of water supply and demand scenarios has been undertaken, informed by extensive stakeholder engagement and public consultation, and that a well-articulated case can be made for TW's preferred options for meeting future demand – including the Upper Thames Reservoir at Abingdon.

### **Safeguarding: environmental justification**

3.12 Section 9: *Environmental Appraisal* of the draft WRMP19 Technical Report summarises the strategic environmental analysis undertaken by TW to inform the identification and appraisal of options. It confirms that the appraisal incorporated Strategic Environmental Assessment (SEA), Habitats Regulations Assessment (HRA) and assessment required under the Water Framework Directive. Cumulative effects were assessed and unconstrained and constrained lists of options were examined.

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/WRMP-Sections/dWRMP19-Section-09---Environmental-appraisal-151217.pdf>

3.13 WRMP19 Technical Report Appendix S: Stakeholder engagement summarises the consultations undertaken by TW to help inform the assessment of options.

<https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/Appendices/dWRMP19-Appendix-S---Stakeholder-engagement-011217.pdf>

### **Rationale for the boundary of the safeguarded area**

3.14 For any safeguarded scheme but particularly for major infrastructure it is essential to safeguard not only the land sufficient to accommodate the finished operational development, but in addition the wider area of land required for construction and maintenance, site access and connections and the environmental mitigation required at the construction and mitigation stages. Identifying this area requires design work to be undertaken.

3.15 TW has not yet produced a bespoke design to support work on the WRMP19 reservoir option. However, concept design work was undertaken in 2007 and is described in a *Design Options Report*, reproduced in appendix TW-2. The report includes an illustrative design for a 150 million m<sup>3</sup> reservoir – the same capacity proposed in the draft WRMP19. As the illustrative landscape and habitat plan reproduced in appendix TW-3 shows, the design shows the reservoir at the heart of a wider site boundary that generally follow clearly identifiable features on the ground – roads, a river and a railway. The boundary encapsulates all of the operational requirements including the reservoir, settlement ponds, a water treatment works and a electricity substation, along with transport connections and diversions, a range of landscape and ecological mitigation, recreational and amenity features and land that can be returned to agriculture after the construction of the reservoir is complete.

3.16 This illustrative design formed the subject of EIA screening and scoping submissions to VoWHDC in 2007-8. In the absence of a more recent design, the Council used this design in order to move from the diagrammatic 'blob' notation on the proposals map for VoWHLP1 to the more detailed boundary shown on the draft proposals map for VoWHLP2 (South-east Vale sub-area map). TW supports this approach on the basis that:

- the capacity of the proposed reservoir is unchanged at 150 million m<sup>3</sup>;
- the outer boundary logically follows features on the ground that the reservoirs is unlikely to cross – the A34 to the east, the railway to the south, the A338 to the west and water courses to the north;
- there is little practical scope to move the reservoir outside of the box described because of the presence of existing settlements – Drayton to the east, Steventon to the south-east, Grove and East Hanney to the south-west, Garford and Frilford to the north-west and Marcham to the north;
- a reservoir in this location would, as a matter of practicality, have to be located within the general area shown – albeit subject to later design refinements - and the illustrative reservoir design produced in 2007 provides a reasonable basis for the delineation of the safeguarded area in the VoWHLP2, including mitigation.

3.17 Once design and environmental assessment work progress to a point where any land could safely be excluded from the safeguarded area, TW would advise the Council, landowners and occupiers accordingly.

#### **4. RESPONSE TO EXAMINATION MATTER 4 QUESTION 4.5 (PART 2): WOULD THERE BE ANY ADVERSE EFFECTS?**

4.1 There can be no doubt that the construction and operation of a large reservoir in the safeguarded area will have a transformative effect on the environmental character of the host locality. However, change is not inherently adverse and where adverse effects arise, these need not necessarily be permanent in every case.

4.2 The question is broadly posed, presumably to incorporate adverse effects of all types. The first concern must be for those who currently occupy or own property within the safeguarded area or have close associations with it. These are relatively few in number but TW will liaise with affected parties and will want to ensure that applicable compensation procedures work effectively in the interests of this group at the land assembly stage of the reservoir project.

4.3 Inherent in TW's options appraisal process is a strategic appraisal of the likely significant social, economic and environmental effects. As noted, preparation of the draft WRMP19 is supported by SEA and HRA. The reservoir site is a preferred option partly because it performs well in these terms when compared with other sites and technical water supply options.

4.4 If the WRMP19 is approved including the Abingdon reservoir option, work would commence on a DCO application for the reservoir proposal and there would be a detailed and iterative process of engineering design and environmental impact assessment (EIA) and stakeholder engagement, as required by the Planning Act 2008. The outcome of this process would be that potential adverse effects would be identified in detail prior to a DCO application being made, enabling mitigation

strategies to be defined. Mitigation may be inherent in the refined design of the reservoir or will likely involve some other form of intervention, enforceable through the DCO. The adopted Core Policy 14/ VOWHLP2 14a would include a list of requirements to mitigate environmental impacts of “any proposal for a reservoir” if confirmed in WRMP19.

4.5 A DCO will typically include the following provisions to protect communities from the adverse effects of major infrastructure development.

- i). Works provisions to protect residents’ interests and the users of public highways and other rights of way whilst the project is under construction. These can include provision for protective works to buildings and structures and measures for the protection of trees.
- ii). A clear process for the acquisition and possession of land, which may be permanent or temporary.
- iii). Wide-ranging DCO Requirements (akin to planning conditions), which might cover:
  - the phasing of the development;
  - construction activity including requirements for a Construction Management Plan, a Construction Transport Management Plan and a Construction Environmental Management Plan;
  - limits to construction hours;
  - arrangements for community liaison during construction;
  - the provision, implementation and maintenance of landscape and ecological mitigation;
  - provisions for ground investigations;
  - requirements for archaeological investigation and the protection of heritage assets;
  - provisions for foul and surface water drainage.
- iv). Protective provisions for existing infrastructure including electricity, gas, water, wastewater, telecoms and railways.
- v). A procedure for the discharge of the DCO Requirements by the local planning authority.

4.6 Whilst TW will follow a process of design, assessment, consultation and consenting all designed to render the reservoir an acceptable form of development, TW has a higher aspiration for the project. As the illustrative layout in appendix TW-3 shows, the reservoir could include:

- enhanced biodiversity on the site, including pond, reedbed, wet woodland, broadleaved woodland, unimproved grassland and scrub and various provisions for breeding birds;
- a range of recreational opportunities including rowing, sailing, windsurfing and, around the reservoir, routes for walking and cycling through attractive landscape;

- some land returned to agriculture after construction of the reservoir.

4.7 The reservoir should be an asset for the area such that, if the circumstances were reversed and TW was proposing to remove the reservoir and restore the site to a relatively featureless farmed plain with limited public access, few recreational opportunities and less biodiversity, there would be justifiable local objection.

4.8 In summary, whilst it is acknowledged that there is the potential for adverse effects arising from the reservoir project, safeguards would apply to ensure that these are rendered acceptable if not avoided altogether. Balanced consideration should be given to the adverse effects of not providing the reservoir in terms of security of future water supply or the promotion of options that the draft WRMP19 shows to be less favourable.

## 5. RESPONSE TO INDIVIDUAL REPRESENTATIONS

5.1 TW offers the following observations on relevant representations made by other parties.

### Historic England (HE)

5.2 HE highlights the potential archaeological interest of the safeguarded reservoir site when considered at the landscape scale. It secured an acknowledgement of this in the adopted VoWHLP1 and is content with this. A future EIA for the proposed reservoir would include an assessment of the effects on archaeology and the historic landscape.

### Group Against Reservoir Development (GARD) – 21.11.17

5.3 GARD does not address the detail of examination question 4.5, which concerns whether the proposed extension of the safeguarded area is justified and would give rise to any adverse impacts. Instead, GARD expresses concern about the reservoir in principle, citing the loss of agricultural land and public rights of way and the potential for enhanced flood risk. GARD also expresses concern about the potential effects on the North Wessex Downs Area of Outstanding Natural Beauty (AONB).

5.4 The loss of the existing land use is inherent in any reservoir proposal. Flood capacity would not be completely lost because rain would be captured by the reservoir and there would be requirements for TW compensate for lost flood plain. The project would be the subject of Flood Risk Assessment and appropriate mitigation would be incorporated. TW is already engaging with the Environment Agency concerning the development of flood alleviation schemes for Abingdon and Oxfordshire more widely.

5.5 The range of landscape and planting works illustrated in appendix TW-3 would give a natural appearance to the reservoir such as to render it inoffensive in views from or towards the AONB. With such treatment the proposed reservoir would be markedly different in appearance to, for example, the steeply embanked Wraysbury reservoir beside the M25 motorway near Heathrow Airport.

5.6 In any event, it would be wrong to regard reservoirs as incompatible with protected landscapes, even where heavily engineered with dams. The Burrator reservoir in Dartmoor National Park, the Derwent reservoirs in the Peak District National Park, the Gouthwaite reservoir in the Nidderdale AONB in North Yorkshire and the Bewl Water reservoir in the High Weald AONB near Royal Tunbridge Wells are each examples of reservoirs that form a scenic and recreational centrepiece in



the local landscape.

**Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT) – 22.11.17**

5.7 BBOWT has no in-principle objection to the reservoir safeguarding but highlights the potential for harm to protected habitats in the vicinity of the safeguarded area. TW would ensure that these habitats are taken into account in the future scoping and assessment of the reservoir proposal.

**Earl of Plymouth Estates Limited (EPEL) – 22.11.17**

5.8 EPEL expresses concern at a suggested lack of substantiation for the extended boundary of the safeguarded area and the implications of the proposed reservoir being excluded from the draft WRMP19.

5.9 This hearing statement substantiates the extent and delineation of the safeguarding boundary in draft Core Policy 14a and Appendix D. In respect of what might happen in the event that the Secretary of State removed the Upper Thames Reservoir from the draft WRMP19, the terms of his decision would need to be understood before the implications for the safeguarding became clear. He might, for example, highlight a longer term need for strategic water storage. However, in the light of all the evidence signposted in this hearing statement, TW considers that it has a robust and defensible case for reservoir provision and that the responsible course of action would be to safeguard the site in the manner currently proposed in VoWHLP2 policy 14a.

**Gladman Development**

5.10 In 2015 Gladman Development obtained full planning permission for the erection of 65 residential dwellings on the edge of Steventon, including access, landscaping and associated works. (ref: P14/V1952/FUL). TW agrees that the land that forms the subject of this planning permission should be excluded from the safeguarded area shown in VoWHLP2.

**Lagan Homes Limited (LHL) and Rockspring Barwood (RB)**

5.11 LHL and RB are separately promoting land at East Hanney for development and allege a lack of evidence for the extended safeguarded area. Again, TW would contend that this hearing statement substantiates the extent and delineation of the safeguarding boundary. In particular, residential development east of the A338 would bring housing closer to the substantial engineering works involved in reservoir construction, and TW would urge that this should be resisted in favour of the safeguarding boundary established by VoWHLP2 policy 14a.

**6. CONCLUSION: DOES VoWHLP2 CORE POLICY 14a ACORD WITH THE CRITERIA OF SOUNDNESS IN NPPF 182?**

6.1 This section of the hearing statement addresses the question of whether Core Policy CP14a: *Upper Thames Strategic Storage Reservoir* is soundly based, by reference to the four soundness criteria identified in NPPF para. 182.

**NPPF criterion 1: Positively prepared - *the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with***

***achieving sustainable development.***

6.2 As demonstrated in the supporting information cited in this hearing statement, the draft WRMP19 provides an objectively-assessed statement of water supply infrastructure requirements to meet the forecast water supply deficit in the TW area. The WRMPs have been prepared in consultation with bodies including Defra and the Environment Agency and in accordance with relevant guidance, and will be subject to approval by the Secretary of State for Environment, Food and Rural Affairs following detailed scrutiny. Core Policy 14a is positively prepared because it is founded upon an up-to-date analysis of the forecast water supply/demand deficit in the TW area that is set out in the draft WRMP19 that indicates a need for a reservoir in the location shown in Appendix D to ensure future water supply.

6.3 Core Policy CP14a, therefore, fulfils the first criterion of NPPF para. 182. The policy safeguards land identified to meet objectively assessed water infrastructure requirements, and includes a comprehensive master planning process that engages planning and environmental objectives to ensure that the reservoir development would be sustainable.

***NPPF criterion 2: Justified - the plan should be the most appropriate strategy, when considered against reasonable alternatives, based on proportionate evidence.***

6.4 The attached draft WRMP19 supporting documents demonstrate that TW has given extensive consideration to technical and locational options for addressing the long term water supply needs of its region. This approach is integral to its meeting its statutory obligations to develop and maintain an efficient and economical system of water supply. As noted above, TW has investigated options including regional water transfers, reservoir options and wastewater reuse to enable the best value options to meet the forecast water supply / demand deficit identified in the WRMP19. In the absence of proven reasonable alternatives it is appropriate in the interests of good planning that Core Policy CP14a be confirmed to safeguard the land that, on the available evidence, can be reasonably expected to be required to provide a major water infrastructure requirement.

***NPPF criterion 3: Effective – the plan should be deliverable over its period and based on effective joint working on cross-boundary strategic priorities.***

6.5 In the event that the proposed reservoir be confirmed by the Secretary of State as the best means of responding to forecast future water shortages in the TW area, the scheme will be included in the approved WRMP19 and will progress to the DCO consent stage within the lifetime of the VoWHLP. Core Policy CP14a would enable the promotion of a deliverable scheme that would meet forecast demand for water and acknowledged cross-boundary strategic priorities for water supply.

***NPPF criterion 4: Consistent with national policy – the plan should enable the delivery of sustainable development in accordance with the policies in the Framework.***

6.6 Securing future water supplies in an environmentally acceptable manner is consistent with the economic, social and environmental dimensions to sustainable development identified in NPPF para. 7.

6.7 NPPF para 94 states that ‘Local planning authorities should adopt proactive strategies to mitigate and adapt to climate change, taking full account of flood risk, coastal change and water supply and demand considerations’. Para. 99 states that local plans should take account of climate change over the longer term, including factors such as water supply.

6.8 Under the heading *‘Planning strategically across local boundaries’*, para. 178 of the NPPF reminds the reader that *‘public bodies have a duty to cooperate on planning issues that cross administrative boundaries, particularly those which relate to the strategic priorities set out in para. 156’*. the strategic priorities that local plans should deliver are listed in NPPF para. 156 and include *‘the provision of infrastructure for . . . water supply . . .’* (third bullet) and *‘climate change mitigation and adaptation . . .’* (fifth bullet).

6.9 Similarly, NPPF para. 179 states that *‘Local planning authorities should work collaboratively with other bodies to ensure that strategic priorities across local boundaries are properly coordinated and clearly reflected in individual local plans’*. VoWHLP policy CP14a is consistent with this approach.

6.10 As noted above, NPPF para. 162 requires local planning authorities to have regard to both the ability of water supplies to meet forecast demands and *‘the need for strategic infrastructure including nationally significant infrastructure within their areas’*. Under the terms of section 27(1) of the Planning Act 2008 (as amended), a reservoir developed by a statutory water undertaker and storing in excess of 10 million cubic metres of water constitutes a Nationally Significant Infrastructure Project (NSIP) for the purpose of s.14(1)(m) of the same Act. The 2008 Act provides for National Policy Statements (NPS) to be produced for qualifying infrastructure. An NPS for Water is in preparation and TW reasonably expects shall include an explicit acknowledgement of the need to increase water supply in the Thames Water region.

6.11 The overall conclusion of this analysis is that VoWHLP policy CP14a is sound, fulfilling all of the criteria in para. 182 of the NPPF.



## Appendices