

**Test Valley Revised Local Plan DPD
2011 – 2029
Regulation 22 – Submission to
Secretary of State**

**Policy E7:
Water Efficiency Topic Paper**

June 2014

REVISED LOCAL PLAN

TOPIC PAPER – POLICY E7 WATER EFFICIENCY

1 Introduction

- 1.1 The purpose of this topic paper is to provide context and the rationale for seeking higher levels of water efficiency for new development through the Test Valley Borough Revised Local Plan DPD 2011 - 2029.
- 1.2 The potential to seek higher levels of water efficiency is supported by current national policy. It is recognised that this is currently under review, however, the proposed standard, and this paper, have been prepared based on the current position and latest available information.

2 Background

- 2.1 Water is recognised as being a finite resource. As set out within the Revised Local Plan, the availability of water is important for a number of reasons including as a source of drinking water (for the Borough, South Hampshire and the Isle of Wight) and through its role in supporting the environment, which includes protected habitats and species¹.
- 2.2 A number of competing demands on water need to be balanced. This balancing act is anticipated to become more challenging in the future, including when accounting for increased population (through additional development) and the likely effects of a changing climate on the availability of water resources. This emphasises the importance of ensuring that new development is planned in such a way to reduce the extra pressure it causes on water resources.
- 2.3 Policy ENV09 within the Borough Local Plan (2006) sought to minimise the impact of development on water resources, including managing demand for water. This did not include any specific standards. The Infrastructure and Developer Contributions SPD put forward that residential development should achieve Code for Sustainable Homes level 3. This provides a mechanism to support the implementation of policy ENV09.
- 2.4 The South East Plan previously highlighted the need for higher standards of sustainable development including through water efficiency, as set out in policies CC4, NRM1 and SH8 (the latter focusing on South Hampshire).
- 2.5 The South Hampshire Strategy² highlights the importance of environmental sustainability, including in relation to water (see section 12 and policy 19), with

¹ River Test is designated as a Site of Special Scientific Interest, Lower Test forms part of international designations (Special Protection Area, Special Area of Conservation and Ramsar site).

² South Hampshire Strategy, Partnership for Urban South Hampshire (PUSH), 2012.

a policy included seeking new development to achieve Code for Sustainable Homes level 4 from 2012. Similarly, the Solent Local Enterprise Partnership's Solent Strategic Economic Plan³ makes a commitment to managing demand for water, including via reduced water consumption.

- 2.6 The North Wessex Downs AONB Management Plan (2014 – 19) highlights the demand for water as a key issue, with an objective to ensure the water environment is managed sustainably.

3 Context

- 3.1 There are a number of legal and policy drivers that influence the availability of water and the controls on water resources more generally. A summary of some of these factors and key documents is provided below.

Building Regulations

- 3.2 Minimum water efficiency standards for new homes were introduced to the Building Regulations in 2010. Part G establishes a requirement of homes being designed so water use is no more than 125 litres per person per day. This includes a 5 litre per person per day allowance for external water use. For comparison, average water use in the locality is approximately 150 litres per person per day⁴.

Water Framework Directive

- 3.3 The Water Framework Directive establishes legal requirements to aim to achieve 'good' status or 'good ecological potential' for all water bodies by 2027. In addition, there should be no deterioration in the status of water bodies. This has implications on the quality and quantity of ground and surface water bodies. More information is available within the River Basin Management Plan⁵.

Abstraction Licensing Strategies

- 3.4 These documents have links to the requirements of the Water Framework Directive. They seek to identify how water resources are managed and provide a guide about where water is available for further abstraction. These superseded Catchment Abstraction Management Strategies. The majority of the Borough is covered by the Test and Itchen Abstraction Licensing Strategy.

³ Transforming Solent: Solent Strategic Economic Plan, Solent Local Enterprise Partnership, 2014 (including page 45) (available: http://solentlep.org.uk/uploads/documents/Solent_Strategic_Economic_Plan.pdf).

⁴ Based on figures provided by Southern Water for 2011/12 for the Hampshire Andover and Hampshire South water supply areas.

⁵ River Basin Management Plan South East River Basin District, Environment Agency, 2009 (Available: <https://www.gov.uk/government/publications/south-east-river-basin-management-plan>).

Water Company Water Resource Management Plans and Business Plans

- 3.5 Water Resource Management Plans are prepared by water companies to establish 25 year plans for how water will be supplied. At present, plans are being finalised for the period 2015 to 2040. While a number of water companies cover the Borough, the majority is within the remit of Southern Water⁶. The main water resource zones in Test Valley served by Southern Water are known as Hampshire: Andover and Hampshire: South.
- 3.6 Water Company business plans look at 5 year periods, providing detail on the specific projects that are to be delivered in the period. They draw on the content of the Water Resource Management Plans. The Business Plans for the period 2015 to 2020 are in the process of being finalised.

National Planning Policy and Guidance

- 3.7 The National Planning Policy Framework (NPPF) covers a range of topics; therefore water availability is not covered in great detail. However, paragraphs 94 and 99 highlight the need to take a proactive approach to water supply in the context of adaptation to climate change. Paragraph 156 and the National Planning Practice Guidance also identifies the need to consider water infrastructure, including water supply and waste water.

4 Need for Water Efficiency in Test Valley

- 4.1 In reviewing the need for higher levels of water efficiency for new development, regard needs to be had to how this matter has arisen in the recent past and the overlap with documents prepared by other organisations.

Water Stress

- 4.2 In 2007 the Environment Agency published a report classifying areas based on their level of water stress. This was undertaken to inform the preparation of Water Resource Management Plans in terms of the need to consider measures to promote water efficiency. Through this, Southern Water's operational area was classified as being of 'serious' water stress⁷. This required Southern Water to consider the option of universal metering.
- 4.3 Through its Water Resource Management Plan (2010-2035) and Business Plan (2010 – 2015), Southern Water established a scheme to roll out a programme of universal metering to its customers. This is now underway, with meters installed in many of the existing properties within Southern Water's supply area within the Borough as part of the wider strategy to ensure sufficient water resources are available.

⁶ <http://www.southernwater.co.uk/about-us/about-southern-water/our-publications/our-reports/wrmp/>

⁷ Areas of Water Stress: final classification, Environment Agency, 2007.

- 4.4 For information, a review of the water stress classifications for water companies in 2013 continued to identified Southern Water's operation area as being of 'serious' stress for current and future scenarios⁸.

Abstraction Licensing

- 4.5 The Test and Itchen Catchment Abstraction Management Strategy (CAMS) was published in 2006 by the Environment Agency. It sought to establish the availability of water resources within the catchment. This established that for the Test, each of the assessment points was either 'no water available' or 'over licensed'.
- 4.6 The CAMS covering the Test and Itchen has been superseded by the Abstraction Licensing Strategy⁹. It identifies that most water resources within Test Valley have restricted water available for licensing purposes at low and moderate flows. As a result, the Environment Agency has identified that there is no likelihood of increasing the amount of water licensed to be abstracted from local rivers or aquifers.
- 4.7 The Abstraction Licensing Strategy sets out that the major impacts of abstraction are linked to public water supply, with this being the main consumptive use in the catchment. The Environment Agency highlights strong support for demand management measures as a means of making best use of water resources (see page 18 of the Licensing Strategy).
- 4.8 The Abstraction Licensing Strategy identifies that availability of water for licensing on the Test reflects the greatest pressures for abstraction being in the lower stretches of the Test. A portion of the water abstracted at this point is transferred to the Isle of Wight to supplement its resources, whilst also supplying part of the Hampshire: South water resource zone.
- 4.9 It is also noted that public water supply abstraction for the Andover area is resulting in flows in the River Anton being depleted, as waste water discharges from Andover enter the River Test rather than returning to the Anton. This matter is due to be subject to further investigation under the Environment Agency's 'Restoring Sustainable Abstraction' programme.
- 4.10 As such, there is a need to ensure that resources are used effectively given the current pressures through abstraction that affect the whole of the river system.

Water Resource Management – Hampshire: South

- 4.11 The Hampshire: South water resource zone serves a wide area, incorporating approximately the western half of the South Hampshire sub-region. Abstractions from the Test, including the lower Test, act as a source for this

⁸ Water stressed areas – final classification, Environment Agency, 2013.

⁹ Test and Itchen Abstraction Licensing Strategy, Environment Agency, 2013.

zone and supplement supplies to the Isle of Wight. A substantial level of growth is envisaged for this area.

- 4.12 Southern Water has identified through its Water Resource Management Plan process that required reductions in abstraction from the River Itchen¹⁰ would result in a deficit in water availability at low flows. As such options have needed to be identified to ensure that sufficient water is available to meet demand over the period up to 2040. The proposals include further abstraction (within the existing license) from the lower Test. However, there is some uncertainty regarding the availability of this resource. Investigations are currently underway to review if any reductions in the potential abstraction from this site are required – the outcomes are expected in early 2016.
- 4.13 Other proposals falling within the preferred option for ensuring water supplies are available up to 2040 for Hampshire: South include further water efficiency schemes (linked to homes, schools and businesses), leakage reduction below current targets, provision of a desalination plant on the Isle of Wight and a bulk water transfer from Portsmouth Water. The costs of these measures would be funded through customer bills.

Waste Water Treatment Capacity

- 4.14 Waste water treatment is provided by a number of treatment works across the Borough. A proportion of the Borough does not have access to such provisions, with private waste water treatment provisions, including septic tanks, being utilised. Many of the treatment works within the Borough discharge into designated water courses (including the River Test), with all discharging into water bodies protected through the Water Framework Directive.
- 4.15 The Environment Agency has identified that there are environmental constraints on certain treatment works, including Fullerton, which serves Andover and the surrounding villages¹¹. The capacity of treatment works is in part linked to the amount of waste water that they receive. There are controls on the amount of effluent discharged and the quality of it. Reducing the input to treatment works has the potential to release additional treatment capacity, this includes through achieving higher levels of water efficiency¹². This may reduce the infrastructure requirements to support new development and play a role in helping to conserve the quality of the water environment.
- 4.16 The Environment Agency noted in its representation on the Revised Local Plan the positive impact water efficiency measures are likely to have on some of the issues linked to Fullerton Waste Water Treatment Works¹³.

¹⁰ In order to satisfy the requirements of the Habitats Regulations for the River Itchen SAC.

¹¹ See Fullerton Waste Water Treatment Works Position Statement for more information.

¹² The Environment Agency has identified that based on a report commissioned by UK Water Industry Research, reductions in per capita consumption (PCC) of up to 25% can have a positive effect in the ability to treat waste water – see Technical Briefing Note: Water Quality Benefits of Reducing Domestic Water Consumption, Environment Agency, 2013.

¹³ Environment Agency (no. 10918) representation in relation to policy E7 – Water Management.

Summary

- 4.17 As noted above, investigations are planned / underway in relation to the sustainability of abstraction licenses linked to the River Anton and the lower River Test. The outcomes of these reviews and their implication on abstraction are not certain at this stage. It is recognised that for the part of the Borough falling within Southern Water's Hampshire: South zone, considerable investment is required to avoid a deficit in water supply in the future. Higher levels of water efficiency on new development would have the potential to reduce additional pressure on existing water resources. In addition, higher levels of water efficiency have the potential to reduce pressure on capacity for waste water treatment, which is particularly relevant for the Andover area within the Borough.
- 4.18 Taking account of the above, it is considered that there are a range of reasons linked to the supply of water and treatment of waste water which justify securing a higher level of water efficiency for new development within the Borough. This approach also has the potential to release additional infrastructure capacity for the Borough, and in relation to waster supply, for other parts of South Hampshire.

5 Local Policy Proposals and Housing Standards Review

- 5.1 The Council considers it is appropriate to seek to ensure that demand for water from new development is minimised in light of advice from statutory consultees and having regard to the background evidence. This has been set out through policy E7 within the Revised Local Plan (both Regulation 18 and 19).
- 5.2 In order to be clear on the expectations for developers, national standards were drawn upon – the Code for Sustainable Homes for residential proposals and BREEAM for non-residential schemes. As such, policy E7 within the Revised Local Plan Regulation 19 document sought that new residential development achieve a maximum indoor water consumption of 105 litres per person per day (based on the mandatory requirement for Code level 3 or 4). For non-residential development, a BREEAM credit rating equivalent to 'excellent' was sought for water consumption (reference Wat1).
- 5.3 Whilst the Regulation 19 version of the Revised Local Plan was being prepared, a consultation commenced on reviewing housing standards¹⁴. The outcomes of the Housing Standards Review were reported on the 13th March 2014, shortly after the close of the consultation on the Regulation 19 document.
- 5.4 The outcome of the Housing Standards Review consultation proposes that the Code for Sustainable Homes would be wound down, with a greater focus on the use of the Building Regulations. The timescales for implementation of

¹⁴ <https://www.gov.uk/government/consultations/housing-standards-review-consultation>

these changes is not certain. However, the Council has taken account of the proposed changes.

- 5.5 With regard to water consumption, the outcomes of the Housing Standards Review indicated it is proposed to continue the current requirements of Part G (see paragraph 3.2 above), with the option of a higher standard of 110 litres per person per day (i.e. 105 litres per person per day, with an allowance of 5 litres per person per day for outdoor use). The higher standard would only be applied in areas with specific local needs. Higher standards would need to be justified through the local plan process and would be implemented through Building Regulations¹⁵. Further guidance on this matter is not currently available. This does not change the position in relation to non-residential proposals. As such, the Council proposes to continue to use BREEAM in these cases.
- 5.6 Drawing on section 4 of this paper, the Council considers that there is sufficient justification within the Borough to seek the higher standard of water efficiency in conjunction with new residential development within the Borough. This includes when accounting for:
- No likelihood of increasing the amount of water licensed to be abstracted from local rivers or aquifers, therefore there is a need to use existing resources more efficiently
 - Promoting higher levels of water efficiency has the potential to reduce the quantity of waste water that needs to be treated, thus impacting on the capacity available to serve additional development without further investment¹⁶
 - The potential to support water quality objectives and requirements indirectly through the above matters, particularly relevant given the number of nature conservation designations within the Borough linked to the water environment (e.g. River Test SSSI)
- 5.7 The costs of requiring this higher standard is not considered to have a substantial impact on the viability of development. Achieving this level of water efficiency has become more commonplace as part of achieving Code for Sustainable Homes level 3. Research undertaken for the Department for Communities and Local Government identified that average costs for achieving a water consumption of no more than 105 litres per person per day (internally) was between £150 and £200 per dwelling¹⁷.
- 5.8 The Council undertook an assessment of the viability of the emerging plan, this assumed that the full requirements of the Code for Sustainable Homes level 4 is achieved, which goes beyond the policy requirement in relation to water¹⁸. This did not identify any specific constraints in terms of delivery or viability. In addition, the Council has proposed wording in the policy that

¹⁵ <https://www.gov.uk/government/publications/building-regulations-housing-standards-review>

¹⁶ Also see the Fullerton Waste Water Treatment Works Position Statement.

¹⁷ Cost of Building to the Code for Sustainable Homes: Updated Cost Review, Element Energy and David Langdon, 2011.

¹⁸ Considering Development Viability Implications – Provisional Audit of Policies, Dixon Searle, 2012.

identifies that the requirements would not need to be satisfied if it is demonstrated that it is not financially viable to achieve.

6 Proposed Way Forward

- 6.1 The Council considers that it remains appropriate to seek higher levels of water efficiency from housing than would be required through Building Regulations. However, as a result of the outcomes of the Housing Standard Review it is proposed to update the wording of policy E7 on Water Management to remove reference to the Code for Sustainable Homes and utilise the emerging higher standards for water efficiency for residential development. Therefore, it is proposed to amend the wording of the policy and supporting text as set out in Annex 1.
- 6.2 Southern Water and the Environment Agency have indicated that they have no objection to the proposed amended wording for the policy reflecting the outcomes of the Housing Standard Review.
- 6.3 Those comments made on Policy E7 during the Regulation 19 consultation have been considered and, where appropriate, changes have been proposed. Details of the comments raised can be found within the schedule of officers responses to representations received on the Test Valley Borough Revised Local Plan (pages 249 – 252).

Annex 1: Proposed Changes to Policy E7 and Supporting Text

Policy E7: Water Management

Development will be permitted provided that:

- a) it does not result in the deterioration of, and where possible assists in improving, water quality and be planned to support the attainment of the requirements of the Water Framework Directive;
- b) it does not result in a risk to the quality of groundwater within a principal aquifer, including Groundwater Source Protection Zones and there is no risk to public water supplies;
- c) all new homes (including replacement dwellings) achieve ~~at least level 4 of the Code for Sustainable Homes in terms of indoor water consumption (reference Wat 1)~~ a water consumption standard of no more than 110 litres per person per day (including external water use);
- d) ~~all new homes (including replacement dwellings) achieve the Code for Sustainable Homes credit for external water use (reference Wat 2);~~ and
- e) d) all new non-residential development of 500sqm or more achieve the BREEAM 'excellent' credit required for water consumption (reference Wat 1).

Criteria c) – ~~e)~~ d) need to be satisfied unless it can be demonstrated that it is not technically or financially viable.

7.53 Promoting more efficient use of water will be essential to help balance the needs of the community and the environment. The policy uses ~~credits set out within the Code for Sustainable Homes~~ the proposed higher Building Regulations requirement for housing and BREEAM to secure increased water efficiency. Alternative approaches to securing the equivalent level of water efficiency sought through criteria c) to ~~e)~~ d) will be considered by the Council, where supported by appropriate evidence.