



Eastleigh Borough Local Plan 2016-2036



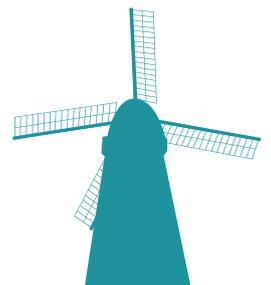
# Eastleigh Borough Local Plan 2016-2036

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## Water Efficiency Background Paper

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June 2018



This background paper supports the Eastleigh Borough Local Plan and provides background information on the approach to water efficiency as set out in policy DM2 . This document is not on deposit for consultation and is background evidence.

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## Summary

1. Policy DM2 of the emerging Eastleigh Borough Local Plan 2016 to 2036 (EBLP) requires that all new residential development must achieve, amongst other things, a predicted mains internal water consumption of no more than 110 litres per person per day. In addition, it requires that all new residential development and all non-residential and multi-residential development creating more than 500m<sup>2</sup> floorspace should, where practical and viable, aim to achieve consumption of no more than 90 litres per day. The full text of Policy DM2 is attached to this paper at Appendix 1. This paper seeks to justify the approach to water efficiency contained in policy DM2 by reference to national planning policy and guidance and other local evidence. It demonstrates that the borough sits within an area of water stress such that a more restrictive approach than that mandated in national Building Regulations is both justified, appropriate and viable.

## National Planning Policy

2. The National Planning Policy Framework (NPPF)<sup>1</sup>, in the section on “meeting the challenge of climate change, flooding and coastal change”, charges local planning authorities with the task of:

*“...adopting proactive strategies to mitigate and adapt to climate change taking full account of flood risk, coastal change and water supply and demand considerations.”* (paragraph 94) (emphasis added)

3. Paragraph 99 requires local plans to :

*“take account of climate change over the longer term, including such factors as flood risk, coastal change, water supply and changes to biodiversity and landscape”.* (emphasis added)

4. In the section on “Plan-making: Local Plans” it notes at paragraph 156 that local planning authorities should set out the strategic priorities for the area in the local plan including, amongst other things, strategic policies to deliver:

*“...the provision of infrastructure for transport, telecommunications, waste management, water supply, waste water, flood risk and coastal change management...”* (emphasis added)

5. Finally, in the section on “Using a proportionate evidence base” paragraph 162 states that:

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

- *assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care,*

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<sup>1</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6077/2116950.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf)

*education, flood risk and coastal change management, and its ability to meet forecast demands;...* (emphasis added)

## **National Practice Guidance**

6. Sitting behind the NPPF is National Planning Practice Guidance (NPPG)<sup>2</sup> which amplifies and clarifies much of the policy contained in the NPPF. On 27<sup>th</sup> March 2015 Government published, as a supplement to the NPPG, Optional Housing Technical Standards<sup>3</sup> which, amongst other things, allows local authorities to set in local plans a tighter standard than that required under Building Regulations. An extract from the water efficiency standards section of the technical standards document is attached to this paper at appendix 2.
7. The national standard mandatory through Building Regulations is 125 litres per person per day (lpppd). The optional standard allows authorities to propose a more restrictive standard of 110 lpppd “where there is a clear local need”. The guidance document clarifies how this local need should be determined and states this is a matter for the local planning authority to establish through existing sources of evidence, consultations with the local water and sewerage company, the Environment Agency (EA) and catchment partnerships and taking into account any development viability and housing supply impacts of setting more restrictive standards. In clarifying the sources of evidence to be used the guidance highlights 4 potential sources:
  - (i) the EA's Water Stressed Areas Classification (2013) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet demand;
  - (ii) Water Resource Management Plans (WRMPs) produced by water companies;
  - (iii) River Basin Management Plans which describe the river basin district and the pressure the local water environment faces;
  - (iv) Locally specific evidence such as collaborative water cycle studies which may have been carried out in areas of high growth.

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<sup>2</sup> <https://www.gov.uk/government/collections/planning-practice-guidance>

<sup>3</sup> <https://www.gov.uk/guidance/housing-optional-technical-standards>

## Evidence for the EBLP Policy Approach

### Water Stressed Areas Classification

8. Taking the above four sources of evidence in turn, firstly, the EA's Water Stressed Areas Classification 2013<sup>4</sup> identifies those areas of England & Wales suffering serious water stress where either the current or likely future household demand for water is a high proportion of the current effective rainfall to meet that demand. Table 1 from that document is reproduced below and shows that the whole of the Southern Water supply area (in which Eastleigh Borough lies) is identified both now and in all future forecast scenarios as in serious water stress.

Water Company Area	2013 Classification					Final Stress
	Current Stress	Future Scenario 1	Future Scenario 2	Future Scenario 3	Future Scenario 4	
Affinity Water (formerly Veolia Water Central)	S	S	S	S	S	Serious
Affinity Water (formerly Veolia Water East)	S	S	S	S	S	Serious
Affinity Water (formerly Veolia Water South East)	S	S	S	S	S	Serious
Anglian Water	S	S	S	S	S	Serious
Bristol Water	M	M	M	M	M	Not Serious
Cambridge Water	M	M	M	M	M	Not Serious
Cholderton & District Water	M	M	M	M	M	Not Serious
Dee Valley Water	M	M	M	M	M	Not Serious
Dwr Cymru Welsh Water	M	M	M	M	M	Not Serious
Essex & Suffolk Water	S	S	S	S	S	Serious
Northumbrian Water	M	M	M	M	M	Not Serious
Portsmouth Water	M	S	M	S	M	Not Serious
Sembcorp Bournemouth Water	L	M	M	M	L	Not Serious
Severn Trent Water	M	M	M	M	M	Not Serious
South East Water	S	S	S	S	S	Serious
South Staffordshire Water	M	M	M	M	M	Not Serious
South West Water	M	M	M	M	M	Not Serious
Southern Water	S	S	S	S	S	Serious
Sutton & East Surrey Water	S	S	S	S	S	Serious
Thames Water	S	S	S	S	S	Serious
United Utilities	M	M	M	M	M	Not Serious
Veolia Water Projects	M	M	M	M	M	Not Serious
Wessex Water	M	M	M	M	M	Not Serious
Yorkshire Water	M	M	M	M	M	Not Serious

### Water Resource Management Plans

9. Matters regarding water supply are mainly addressed through the third category of evidence; namely Water Resource Management Plans (WRMPs). These are produced by the Water Companies and set out in detail how the companies propose to ensure there is a sufficient supply of water to meet the anticipated demands of all its customers over a 25 year period.

<sup>4</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/244333/water-stressed-classification-2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244333/water-stressed-classification-2013.pdf)

10. Eastleigh borough lies wholly within the Southern Water supply area. Southern Water's latest WRMP<sup>5</sup> was published in October 2014 and covers the 25 year period 2015-2040. The process of producing WRMPs is continuous as they are updated every five years. So, while the 2015-2040 WRMP has yet to be finalised and agreed by Government, a new draft WRMP<sup>6</sup> has been published and, at the time of writing is currently out for public consultation (5<sup>th</sup> March to 28<sup>th</sup> May 2018).
11. Also at the time of writing the 2015-2040 WRMP is currently at a public examination<sup>7</sup> into proposals to amend abstraction licences on both the Rivers Test and Itchen which will reduce the amount of water Southern Water can extract from the rivers in period of low flows. The Water Company has a number of alternative proposals to address the impacts of these abstraction licence changes which include the provision of new infrastructure to facilitate the ease of transfer of water between the different catchments and beyond.
12. The emerging draft WRMP looks to the very long term and covers the 50 year period 2020 to 2070. Southern Water estimates that, by 2070, it may need to supply an extra 230m litres/day to meet likely demand; 50% more than the 530m litres/day it currently supplies to customers. All of this is at a time of uncertainty over future abstraction licensing, a changing climate which is changing the pattern of rainfall, housing and population growth and an increasing demand for water.
13. Whilst outside of the Eastleigh water supply catchment it is also worth noting the emerging proposals in the draft WRMP produced by Portsmouth Water<sup>8</sup> which is also, at the time of writing, out for public consultation (5<sup>th</sup> March to 25<sup>th</sup> May 2018). Perhaps the most significant measure proposed in the draft Portsmouth Water WRMP is the much-vaunted Havant Thicket reservoir which will act as a wider regional resource for the whole of the south east. Whilst it is estimated that it will take at least 10 years to plan, build and fill the 8.6bn litre reservoir the prime purpose is to provide additional capacity in the Portsmouth Water supply area to free up more existing supply in the west of the Portsmouth Water supply area to transfer to the Southern Water supply area.
14. The approach to water use proposed in EBLP policy DM2 will directly help support the WRMP objectives as a key plank of Southern Water's current consultation draft WRMP is the establishing of an industry-leading personal water consumption target of 100 litres per day by 2040 (the 'Target 100' initiative). It highlights that the Hampshire & Isle of Wight areas are likely to suffer particular water stress in the short term (in the context of a 50 year plan) as abstraction licence reductions are implemented and before the infrastructure solutions to mitigate them can be fully implemented.

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<sup>5</sup> <https://www.southernwater.co.uk/media/default/pdfs/WRMP-technical-report.pdf>

<sup>6</sup> <https://beta.southernwater.co.uk/securing-water/water-resources-management-plan>

<sup>7</sup> <http://www.hwa.uk.com/projects/itchen-candover-and-testwood-water-abstraction-inquiry/>

<sup>8</sup> <https://www.portsmouthwater.co.uk/news/publications/water-resources-planning/your-water-and-its-future/>

15. This is also reflected in terms of the potential ecological impacts of reduced water supply in Policy DM10 of the EBLP. Policy DM10 requires the phased delivery of new development alongside the completion of enhancements to the water supply or waste water infrastructure should this prove necessary at 'project level stage' to ensure compliance with the provisions of the Habitats Regulations.
16. All of these matters set out in detail in the various WRMP documents identified above serve to further highlight the degree of water stress suffered in the wider water supply region / catchment in which Eastleigh borough sits and help justify why there is a clear need to ensure the EBLP takes all appropriate steps it can to try to reduce water consumption in new development.

### River Basin Management Plans

17. Secondly, in terms of River Basin Management Plans (RBMP), Eastleigh Borough lies within the South East River Basin district which covers the stretch of the south coast from Hampshire in the west to Kent in the east including East and West Sussex, the Isle of Wight and parts of Wiltshire and Surrey and the New Forest and South Downs National Parks. The South East RBMP<sup>9</sup> was produced by the EA in December 2015.
18. The purpose of a RBMP is to provide a framework for protecting and enhancing the benefits provided by the water environment and, because of the close links between water and land resources, to inform decisions on land-use planning. The river Test and Itchen catchments fall within the river basin district and are the most relevant in terms of water supply for Eastleigh Borough. The RBMP identifies a number of local catchment measures proposed for the Test & Itchen catchment to address water quality, channel structure and function and, most importantly in terms of water supply, low flows.
19. The RBMP measures are largely environmental / ecological rather than focussed on water supply. Nonetheless the South East RBMP contains an action for all regulators, operators, influencers and project undertakers to ensure water is used more efficiently and that all sectors take up or encourage water efficiency measures wherever possible including a specific action that local government sets out local plan policies requiring new homes to meet the tighter water efficiency standard of 110 lpppd.

### Local Evidence

20. In addition to the above Eastleigh Borough Council is a member of the Partnership for Urban South Hampshire (PUSH) which is a partnership of 12 local authorities working together to support the sustainable economic growth of the sub-region and the facilitate the strategic planning functions necessary

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[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/500473/South\\_East\\_RBD\\_Part\\_1\\_river\\_basin\\_management\\_plan.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/500473/South_East_RBD_Part_1_river_basin_management_plan.pdf)

to support that growth. PUSH has produced a non-statutory Spatial Position Statement to guide the preparation of local plans and other strategic documents on a consistent basis across the sub-region. A number of detailed technical studies have been commissioned in support of PUSH's work, one of which is an Integrated Water Management Study (IWMS)<sup>10</sup> which was published in December 2008. Whilst now somewhat dated, that study forecast a new housing demand of between 10.75m and 13.66m litres per day across the Southern Water supply area between 2006 and 2026 depending on which scenario was selected.

21. The IWMS is currently in the process of being updated and a report is being taken to the PUSH joint committee outlining progress on the update on 28<sup>th</sup> March 2018.<sup>11</sup> The IWMS cannot be finalised until the outcomes of the abstraction inquiry referred to in paragraph 14 above are known.
22. Finally, as part of work on the 2011-2029 version of the local plan which was found unsound, the borough council sought to agree a joint statement of intent between the council, Southern Water and the EA on its emerging local plan policy seeking to limit water consumption. Policy DM2 of the 2011-2029 plan sought to achieve broadly the same water consumption targets as in EBLP policy DM2 albeit it was framed differently in the context of BREEAM targets as they existed at the time.
23. The very fact that this statement of intent was produced and agreed demonstrates compliance with the requirements of the NPPF outlined above regarding consultation and engagement with water companies and the EAs. The conclusion of the statement of intent was that:

*“The South Hampshire water resource zone that includes the borough of Eastleigh is undergoing some significant changes in terms of levels of new development, the effects of climate change and is subject to environmental improvements to benefit the health of local river catchments. Government advice already allows the ‘water stressed’ South East to be able to set higher water efficiency standards for new developments at 110 litres per person per day and this will be the minimum standard for housing within Eastleigh Borough. However, in order to meet an even greater local sustainable supply balance it is the recommendation of this partnership (of EBC, Southern Water and the EA) that a voluntary target of 95 litres per person per day be set for each new housing development and a target of a 25% reduction in domestic water consuming components (2no, BREEAM New Construction (2014) Wat 1 credits) for all non-residential and multi-residential development and that the parties to this agreement will seek to promote these developments as ‘exemplar’ in taking a ‘leadership role’ in water efficiency”.*

24. A full signed copy of the agreement is attached as a PDF at Appendix 3 to this paper. It is dated March 2015.

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<sup>10</sup> [http://www.push.gov.uk/081223 - iwms\\_final.pdf](http://www.push.gov.uk/081223 - iwms_final.pdf)

<sup>11</sup> [http://www.push.gov.uk/item\\_10 - iwms\\_final-2.pdf](http://www.push.gov.uk/item_10 - iwms_final-2.pdf)

25. More recently in connection with the public inquiry referred to at paragraph 16 above, at that inquiry Southern Water has entered into an agreement with the Environment Agency which reduces the quantities Southern Water are able to extract from the Rivers Test and Itchen in low flow periods. Southern Water will rely on drought permits or orders as required in order to make up any deficit in supply until such time as new water resources can be brought online (expected to be by 2028). The EA wrote to all PUSH authorities in May 2018 highlighting this agreement and noting that:

*“These permits are not guaranteed and can be environmentally damaging. The frequency with which this is required will be reduced by having a high standard of water efficiency. Even following the introduction of new strategic water sources, Hampshire will have some vulnerability to prolonged dry weather and high standards of water efficiency need to be considered for the future. Therefore policies requiring a higher standard of water efficiency and re-use should be adopted within the Southern Water area. These standards should be ambitious and to take us towards Southern Water’s own stated ambition of reaching 100 litres per person per day.”*

#### Viability

26. The final aspect of justifying the policy is demonstrating that any policy requirements would not adversely affect development viability or housing supply (see paragraph 7 above). The council commissioned Dixon Searle Partnership (DSP) to produce a viability study in support of the EBLP which tested the impacts of a number of policies on the viability of a suite of different development typologies in different market areas. One of the policies tested was the water efficiency criteria of policy DM2. Paragraph 3.4.82 of the DSP study notes:

*“With only a negligible (non-detectable) cost implication based on the optional standard of 110 lpppd, this is not considered a viability issue”*

27. The DSP study goes on at paragraph 3.4.84 to note, in reference to the more stringent 90lpppd requirement on larger developments:

*“...is not a viability point and more of a principle for EBC to consider in a similar way to perhaps looking at the extent to which Building Regulation standards might be expected to be exceeded in respect of energy efficiency / carbon emissions....”*

28. However the study does go on to refer to the EC Harris Costs Review<sup>12</sup> and the fact that seeking to achieve equivalent Code for Sustainable Homes level 5 & 6 water efficiency levels of 80 lpppd might cost between £900 for apartments and up to £2,700 for semi-detached or detached dwellings (3.4.85). It is not clear whether rainwater harvesting (which is necessary to hit

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[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/353387/021c\\_Cost\\_Report\\_11th\\_Sept\\_2014\\_FINAL.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/353387/021c_Cost_Report_11th_Sept_2014_FINAL.pdf)

80 lpppd) is necessary to achieve 90lpppd. However, clearly these costs are likely to be significantly in excess of the negligible £6-£9 per dwelling costs of achieving 110 lpppd. It is for this reason that the 90 lpppd element of the policy is not mandatory (unlike 110 which is) and only applies to larger developments where this is practical and viable. Applied on its own, the 90 lpppd target may be workable in some circumstances such as on larger greenfield developments. However, in considering its application, the DSP study indicates that the council will need to consider the cumulative impacts of all of its policy requirements and apply these flexibly to reflect site specific viability constraints if it is not to impacts on sites coming forward and so adversely affecting housing supply.

## **Conclusion**

29. This paper has demonstrated that Eastleigh borough is in an area of serious water stress. Under Government guidance in the NPPG, this is sufficient justification for local plan policy to seek a more restrictive level of water efficiency (110 lpppd) than that mandated nationally through Building Regulations (125 lpppd). This policy approach is supported by evidence in other relevant documents including WRMPs and the RBMP for water supply areas / catchments within which Eastleigh borough sits. EBLP Policy DM2 also contains an aspirational target for larger developments, where it is practical and viable of 90 lpppd. While this aspirational target is likely to have viability implications for some forms of development, the fact that it is an aspirational target rather than a hard-and-fast policy requirement like the 110 lpppd target means that there is sufficient elasticity built in to Policy DM2 for this criterion to be applied flexibly taking into account the cumulative financial impacts of other policy requirements and site specific considerations.

## Appendix 1 - Policy DM2, Environmentally sustainable development

The Borough Council requires that:

a. all residential development must achieve at the time a Reserved Matters or Full Planning Application is submitted:

i. a 19% improvement in predicted carbon emissions, compared with the building regulations standard current at the time, through increased energy efficiency of the building fabric, unless this is superseded by an updated building regulations requirement equivalent to 'zero carbon homes'; and

ii. a predicted mains internal water consumption of no more than 110 litres/day.

b. all non-residential and multi-residential development above 500 sqm of floorspace measured externally (including extensions to existing buildings) must achieve;

i. BREEAM 'excellent' (or equivalent) or BREEAM 'very good' plus 'passivhaus' certification including a 15% improvement in predicted carbon emissions, compared with the building regulations current at the time, through low or zero carbon energy generation on site or in a Borough location agreed by the Council.

c. All larger developments (above 150 dwellings or 10,000 sqm of floor space) must:

i. address sustainable development issues at the masterplan stage through BREEAM Communities 'excellent' certification; and

ii. fund post occupancy evaluation studies.

In addition to the above, all new residential development, and non-residential and multi-residential development above 500 sqm of floor space measured externally (including extensions to existing buildings) and external spaces should where practical and viable:

d. incorporate energy-efficient passive design principles, the best use of natural daylight and natural ventilation systems wherever possible;

e. connect to any existing near or adjacent low carbon local energy network unless this is proved unviable;

f. use recycled, low embodied carbon, low environmental impact and locally sourced materials in construction where possible;

g. be designed with sufficient flexibility to enable the life of the building to be extended by re-use for other purposes where feasible;

h. aim to achieve a predicted mains internal water consumption of no more than 90 litres/day;

i. aim to deliver at least 1% of all residential units which achieve full 'passivhaus' certification. (my emphasis)

NB – the original draft wording of this policy in the December 2017 committee papers referred to a target of 105 litres rather than 110 litres. This was in recognition of the fact that the council's March 2009 "Environmentally Sustainable Development" SPD referred to this standard as equating to a threshold level included in the now abandoned Code for Sustainable Homes. The unadopted policy requirement at the time set a target of achieving compliance with level 3 of the Code by January 2011, Level 4 by January 2012, Level 5 by January 2014 and Level 6 from January 2016. Achieving a water consumption of 105 lpppd would have secured 3 'credits' under the Code and was equivalent to a Code Level 3 or 4.

With the abandonment of the Code and the publication of the National Planning Practice Guidance (NPPG) which sets an optional level of 110 lpppd the council has decided to set a target of 110 lpppd in Policy DM2 rather than 105 despite 105 having been secured on a large number of developments since the adoption of the SPD.

NNB – in the above policy litres / day means litres per person per day (lpppd)

## Appendix 2 – Extract from Housing: Optional Technical Standards

### Water efficiency standards

#### Can local planning authorities require a tighter water efficiency standard in new dwellings?

In setting out how the planning system should contribute to the achievement of sustainable development, the National Planning Policy Framework and guidance makes clear this includes planning to provide the high quality housing required to meet the needs of present and future generations, and helping to use natural resources prudently. The Framework's policies expect local planning authorities to adopt proactive strategies to adapt to climate change that take full account of water supply and demand considerations. Early engagement between local planning authorities and water companies can help ensure the necessary water infrastructure is put in place to support new development. See [water supply guidance](#). The local planning authority may also consider whether a tighter water efficiency requirement for new homes is justified to help manage demand.

*Paragraph: 013 Reference ID: 56-013-20150327*

*Revision date: 27 03 2015*

#### What standard should be applied to new homes?

All new homes already have to meet the mandatory national standard set out in the Building Regulations (of 125 litres/person/day). Where there is a clear local need, local planning authorities can set out [Local Plan](#) policies requiring new dwellings to meet the tighter Building Regulations optional requirement of 110 litres/person/day.

*Paragraph: 014 Reference ID: 56-014-20150327*

*Revision date: 27 03 2015*

#### How should local planning authorities establish a clear need?

It will be for a local planning authority to establish a clear need based on:

- existing sources of evidence.
- consultations with the local water and sewerage company, the Environment Agency and catchment partnerships. See [paragraph 003 of the water supply guidance](#)
- consideration of the impact on viability and housing supply of such a requirement.

*Paragraph: 015 Reference ID: 56-015-20150327*

*Revision date: 27 03 2015*

#### What are the existing sources of evidence?

Primary sources of evidence which might support a tighter water efficiency standard for new dwellings are:

- The Environment Agency [Water Stressed Areas Classification \(2013\)](#) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand.
- Water resource management plans produced by water companies.
- [River Basin Management Plans](#) which describe the river basin district and the pressure that the water environment faces. These include information on where water resources are contributing to a water body being classified as 'at risk' or 'probably at risk' of failing to achieve good ecological status, due to low flows or reduced water availability.

In addition to these primary data sources, locally specific evidence may also be available, for example collaborative 'water cycle studies' may have been carried out in areas of high growth.

*Paragraph: 016 Reference ID: 56-016-20150327*

*Revision date: 27 03 2015*

### **Where can I find out more about the water efficiency standard?**

See further information on the [water efficiency standard](#).

*Paragraph: 017 Reference ID: 56-017-20150327*

*Revision date: 27 03 2015*

# Appendix 3 – Water Efficiency tri-partite statement of intent between EBC, Southern Water and the EA



## Securing our long term water needs within South Hampshire A Water Efficiency planning statement of intent

### Introduction

The South Hampshire area is undergoing significant changes in future years with large scale new developments planned in an area that faces resource availability challenges. Water resources are largely supplied from local aquifer sources and by river water abstraction from internationally designated wildlife habitats. Southern Water (SW), Eastleigh Borough Council (EBC) and the Environment Agency (EA) are in informal partnership to seek to reduce daily pressure on existing water resources with the ability to protect consumers from high bills and promote a culture of resource efficiency to residents and occupiers. The partnership is working in consultation with consultants advising developers in the area (namely Temple Group and its associates SoSustainable), given their role in advising developers in meeting the Council's policies.

This statement of intent outlines the issues being explored and represents a commitment by the partners to work together in addressing water supply and efficiency challenges in South Hampshire. The aim of the partnership is to review the evidence for a pro-active approach to setting higher water efficiency standards for the South Hampshire catchment. The output of this initiative is to meet the policy requirement DM2g in the submitted Eastleigh Borough Local Plan 2011 – 2029 (July 2014) which requires all large developments to achieve a BREEAM Communities 'excellent' rating. In particular, the statement considers the need to have water consumption targets that BREEAM Communities requires of developers and to develop these with SW, EBC and the EA. This statement therefore proposes a voluntary target of 95l per person per day for residential development and a target of a 25% reduction (against typical standard equivalent) in water consuming components (2no. BREEAM New Construction (2014) Wat 1 credits) for all non-residential and multi-residential development.

### Eastleigh Borough Council planning policies

Eastleigh Borough Council has published a Local Plan, including provision for 10,000+ new houses, confident that Southern Water will supply water, either from the Itchen, in the short term (and within the headroom of their existing abstraction licence) or, in the medium term, supplied from a new source. Southern Water has provided a position statement confirming that the level of development proposed can be provided for. This statement can be found in the Council's evidence base in the Water Background Paper (EN3).

The Council therefore screened-out risks from abstraction in their Habitats Regulations Screening Report (July 2014) of the Local Plan with a conclusion that there would be no likely significant effect to the Itchen SAC from abstraction.

Furthermore, the Council's Sustainability Appraisal (July 2014) of the Local Plan, concludes that the policy provision in the Local Plan regarding sustainable development and climate change is adequate to protect the environment, including the River Itchen.

Eastleigh borough is part of the Partnership for Urban South Hampshire (PUSH) a group of local authorities covering the sub-region. The Council believes that the proposed development set out in the Local Plan reflects the objectively assessed need for the area and the strategy for growth in South Hampshire. In relation to water resources PUSH prepared the Integrated Water Management Strategy in 2009 for the sub-region which concluded that supply would be sufficient subject to the introduction of measures to restrict water use, e.g. water meters and water-saving measures in new development. A number of additional supply options were also considered. The Local Plan includes provision for water saving measures through policy DM2, and a number of site allocation policies also have specific requirements in respect of water supply as requested by Southern Water.

Natural resources in the Borough are considered to include primarily land and water. Strategic policy S1 sets out what sustainable development means for Eastleigh Borough and what development should do or provide in the Borough to be sustainable. This includes criteria vi which seeks to avoid unacceptable impacts on quality and yield of water resources and vii, which says new development should use resources wisely and minimise waste.

Policy DM2 addresses measures to reduce use of water and energy through requiring development to meet BREEAM and Code for Sustainable Homes standards (see appendix 1).

Policy DM5 includes a requirement to ensure no net increase in surface water run-off and for the provision for sustainable drainage systems.

Policy DM7 states that development will not be permitted if it would have an unacceptable impact on the pollution of surface, groundwater, coastal or other watercourses.

Policy DM9 requires essential utilities infrastructure (including water supply and waste water infrastructure) to be provided to serve developments.

There are a number of different nature conservation designations in the Borough Policy. DM9 sets out a hierarchy of nature conservation designations and lists criteria for how development will address the protection of locations with nature conservation designations, options for creating new, or enhancing existing habitats and features of nature conservation value, including regard to the Priority Biodiversity Areas and Priority Biodiversity Links.

Therefore, the primary drivers to implement and promote water resource efficiencies through site specific development stem from the Council's key policies governing sustainable development in the Borough.

These are separate to, but complement Southern Water's own investment programme to promote and secure water use efficiencies i.e. metering and its wider water efficiency plans.

## **UK Housing Standards Review**

A review of several standards for new housing was published in mid-September. The recent consultation set out the government's revised policy on housing standards and sought views on draft technical standards and other practical matters of implementation. The proposals consolidate aspects of the Code for Sustainable Homes (CSH) into the Building Regulations. The Government is proposing to maintain the water efficiency standard for new buildings (through building regulations) at 125 litres per person per day, but also introduce the 'optional requirement' of 110 litres per person per day in 'water stressed areas'. Both of these include a fixed factor for outdoor use of 5 Litres per person per day. 'Optional requirements' are where councils will be able to decide whether certain regulations apply to developments being built in their areas and can include water efficiency in areas facing water shortage. Environmental information on water environment sensitivities will be provided by the Environment Agency during consultation on planning applications and draft plans. As an alternative to calculating the water consumption of individual households, a fittings approach, based on the water calculator method may be used.

It is likely that the housing standards review will require a change to local plan policy DM2 in relation to new residential development. With respect to water consumption, if the Code for Sustainable Homes is no longer available for planning policies, Eastleigh Borough Council would want to incorporate the optional standard of 110 litres per person per day in the revised policy DM2.

The Housing Standards Review, if implemented, would have no effect on the DM2 policies which require a BREEAM New Construction standard for new non-residential and multi-residential development. The BREEAM New Construction 'excellent' standard will require developers to score credits which help limit water consumption.

<http://www.breeam.org/page.jsp?id=667>

### **BREEAM Communities**

Eastleigh Borough Council through policy DM2 of the submitted Local Plan 2011-2029 requires all new larger developments of over 100 dwellings or 10,000sqm of floor space to meet BREEAM Communities 'excellent' standard.

BREEAM Communities is an assessment method that provides a way to improve, measure and certify the social, environmental and economic sustainability of large scale development plans by integrating sustainable design into the master planning process.

For more information on BREEAM Communities see Appendix 2 or

<http://www.breeam.org/page.jsp?id=372>

Specifically on water issues the main aim of BREEAM Communities is to ensure that the development is designed to minimise water demand through efficiency and appropriate supply-side options, taking full account of current and predicted future availability of water in the area, particularly in relation to climate change impacts.

The following criteria from issue RE03 of BREEAM Communities are required to demonstrate compliance:

1. The developer engages with water suppliers, the local authority and the appropriate regulatory body (i.e. the Environment Agency, Internal Drainage Boards, etc.) to develop overall water consumption targets for the development taking account of:
  - the current availability of water and demands in the area
  - the future predicted availability taking climate change into account
  - the predicted water demand for the area resulting from growth and climate change.
  
2. A water strategy is prepared to manage water demand on the development site to meet the above consumption targets. The strategy includes:
  - actions to minimise the predicted use on the development; and maintain this in the future
  - ownership and maintenance of any shared facilities
  - design options to reduce the water demand in landscaping, any other predicted water use and on-site collection/storage opportunities
  - targets for water use in residential and non-domestic buildings in the development site.

Other BREEAM Communities issues, such as those pertaining to Adapting to climate change (SE10), are also relevant to water efficiency and water management. Given that a developer is expected to develop water consumption targets with the local authority, Environment Agency and the water supplier, there is a need for the latter three bodies to consider what these targets should be taking account of, namely:

- the current availability of water and demands in the area
- the future predicted availability taking climate change into account
- the predicted water demand for the area resulting from growth and climate change.

#### **Southern Water resource strategy**

The Eastleigh borough is situated within the South Hampshire area of the Southern Water region. One third of this area is supplied by groundwater and two thirds supplied by the River Test and the River Itchen. The majority of the water supplied to the borough of Eastleigh is provided by abstracting water from the River Itchen at Otterbourne. Southern Water is granted a licence to abstract from the Environment Agency. Currently this abstraction is less than the licence allows and therefore there is unused headroom; however this is set to change.

The Environment Agency intends to reduce the amount of water that can be abstracted by Southern Water from the River Itchen in order to protect aquatic ecology, namely that afforded statutory protection under the Habitats Regulations as the River Itchen Special Area of Conservation (SAC). The scale of that licence reduction removes the unused

headroom but also, in extreme drought events, would cause Southern Water to cease abstracting from the River Itchen altogether because of a potential major supply deficit.

Southern Water has published a new Water Resources Management Plan (Oct 2014) in which a commitment is made to secure a new source of water to enable the Itchen licence reductions to be implemented by 2018 at the earliest. This plan outlines the new sources of water secured as a replacement; however it also sets out the other measures that are being committed to including further leakage reductions and a significant increase in the scale of demand reduction.

Southern Water is keen to work in partnership to implement both retrofitting programmes for existing homes and businesses, and in the setting of higher water efficiency standards for new domestic and commercial properties. Both in setting a 'minimum' standard and laying plans for an 'exemplar' standard this document outlines how meeting BREEAM Communities standard for water efficiency (issue RE03) for large new development sites in the borough will make a significant contribution to reducing the pressure on internationally important habitats and secure water supplies for the future.

The Southern Water approach is set out in detail in the published Water Resources Management Plan (available to download at [www.southernwater.co.uk](http://www.southernwater.co.uk)) which was produced following extensive customer and stakeholder engagement across the region. For Hampshire the significant highlights include:

- Water efficiency schemes in homes, schools and businesses
- An upgrade to the Testwood water supply works
- A transfer of water from Portsmouth Water

Water efficiency has been identified as a very significant part of the overall plans and accordingly resources will be allocated to realise these ambitions.

It is the intention of the partners identified in this document to promote the 'exemplar' standard to show the benefits to both house buyers and commercial tenants of being water efficient with its associated savings on water and energy bills and related benefits to the local environment.

For more details on the Southern Water Resource Strategy see Appendix 3

#### **Beyond 110 litres for residential development**

There are other drivers that collectively could justify a 'go the extra-mile ethos', in particular the ambition to exceed the likely maximum standard (110 litres/person/day) that Government will allow Local Authorities to insist on for new housing development

Those include (not in priority order, and not an exhaustive list):

1. The River Itchen is biologically one of the richest rivers in the UK and one of the most important in Europe. Policy and law points towards respecting this natural asset in the highest regard. On-going work will result in the abstraction of water and discharge of waste water to be "Habitats Regulations-compliant". This requirement squeezes development. The water to supply Eastleigh, including extant development

as well as planned growth, will come from outside of the catchment at times of extreme environmental stress, but that has environmental impacts in that locality; and environmental standards may cap future growth in terms of water quality in the River Itchen and the receiving coastal waters. Those are legacies we will leave for future generations. Going the extra mile now, while we can, to strive for truly sustainable development will pay-off in years to come, even if they add minimal costs in the short term.

2. The PUSH South Hampshire Integrated Water Management Strategy confirms that there is tension between growth in south Hampshire and the potential impact of existing and future wastewater discharges on the internationally designated River Itchen and downstream coastal waters. On this basis, there may be little or no “environmental capacity” left in the receiving waters for the consented loads of pollutants to be increased. Southern Water is undertaking a study to determine whether it may be required to improve waste water treatment at Chickenhall STW, in order to improve the quality of water discharged to the Itchen, but that won’t allow greater capacity to be built-in, just an improvement in the treatment of the existing capacity.

However, the loading may be reduced if water efficiency measures are deployed at the supply end of the equation. Improved water use efficiency would therefore protect the Itchen in terms of quantity and quality, support sustainable development and potentially create greater capacity for future growth.

3. Water quality has been fluctuating in Eastleigh since 1990, with little overall improvement. Significant improvements in the Borough are therefore required to meet Water Framework Directive targets.

### **Impact of climate change**

A key aspect of the BREEAM Communities assessment is to take into consideration the potential impacts of climate change on buildings, habitats and the quality and yield of local water resources and have regard to the impact of abstraction and discharges on water quality and biodiversity interests. A clear case has been made for why sustainability reductions need to be made to the existing Itchen catchment and climate change projections only make potential shortfalls in river levels greater during future summer months. Demand management will also drive a fall in the overall amounts of energy usage in home and businesses (27% of water use in the home is hot water and so has been heated using energy) and overall 1% of UK carbon emissions are in the production of potable water.

### **Conclusions**

The South Hampshire water resource zone that includes the borough of Eastleigh is undergoing some significant changes in terms of levels of new development, the effects of climate change and is subject to environmental improvements to benefit the health of local river catchments. Government advice already allows the ‘water stressed’ South East to be able to set higher water efficiency standards for new developments at 110 litres per person

per day and this will be the minimum standard for housing within the Eastleigh Borough. However in order to meet an even greater local sustainable supply balance it is the recommendation of this partnership that a voluntary target of 95 litres per person per day be set for each new housing development and a target of a 25% reduction in domestic water consuming components (2no. BREEAM New Construction (2014) Wat 1 credits) for all non-residential and multi-residential development and that the parties to this agreement will seek to promote these developments as 'exemplar' in taking a 'leadership role' in water efficiency.

Having such targets is proposed to be the basis for engaging with developers to enable fulfilment of BREEAM Communities requirements for their proposed schemes. By adopting this target developers will demonstrate/achieve a "beyond compliance" approach to sustainable water management.

We the undersigned acknowledge the support of our organisation to this document:



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[www.eastleigh.gov.uk/localplan2016-2036](http://www.eastleigh.gov.uk/localplan2016-2036)

