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for people and wildlife

Environment Agency

Environment Agency - Solent & South Downs (SSD)
Position on Water Efficiency and Planning

1. The SSD position

We advise that local planning authorities in SSD incorporate policies within their local plans that provide for new residential developments to at least reach an average water consumption of 110 litres per person per day (l/p/d)[1]. We will also support local plan policies that go beyond 110 l/p/d.

We advise that local planning authorities incorporate policies within their local plans that pursue ambitious reductions in non-household water consumption.

We will support local plan policies that seek to encourage the retrofitting of water efficiency measures within existing residential and non-residential buildings to reduce water consumption.

In areas within SSD subject to water neutrality (currently the Sussex North Water Resource Zone[2]), we will support local plan policies that require a more ambitious target of 85 l/p/d for residential development.

The justification and evidence available to support this position is detailed below.

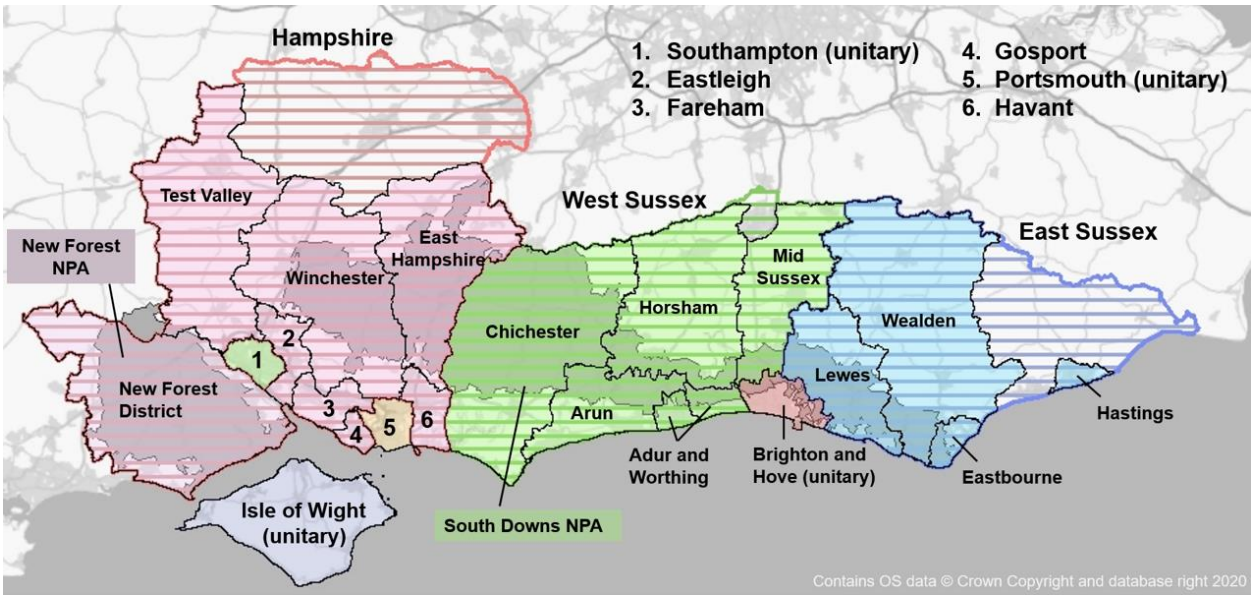
Five water companies cover the SSD area for water supply – Southern Water, Portsmouth Water, South East Water, Thames Water and Sutton and East Surrey (SES) Water. We recommend that Local Planning Authorities work collaboratively with relevant water supply companies during preparation of their Local Plan policies.

The map below identifies the Local Planning Authorities within the SSD area.

[1] The National Framework for Water Resources (Environment Agency, 16 March 2020) sets out the ambition to achieve this target by 2050. Link: Meeting our future water needs: a national framework for water resources - GOV.UK (www.gov.uk). The 110 l/p/d standard is also set out in Building Regulations (Approved document G - ADG_ONLINEx.pdf (publishing.service.gov.uk) as an optional requirement to be specified in Local Plan policies if there is a clear local need.

[2] A map of the Sussex North Water Resource Zone can be found here - StatMap Earthlight*

Version 2.0
Date: 18.08.2023



Please note this position applies to our engagement on Local Plans and other strategic work. It does not apply to consultations on planning applications.

2. Background

Within South East England there is a large population with a high water demand, yet limited water availability. So great is the pressure upon water resources that according to Waterwise*[3], there is less water available per person in the South East than the Sudan and Syria.

The Environment Agency published updated classifications of areas of water stress in England in July 2021. This publication can be accessed here - https://www.gov.uk/government/publications/water-stressed-areas-2021-classification

The whole SSD area is classified as at serious water stress.

The updated methodology for the 2021 classification identifies areas of serious water stress where: (a) the current household demand for water is a high proportion of the current effective rainfall which is available to meet that demand; or (b) the future household demand for water is likely to be a high proportion of the effective rainfall available to meet that demand.

The primary purpose of the classification is to provide evidence to support universal metering proposals in certain areas. However, it is recognised that the information can also be applied to encourage or support high water efficiency measures in new build, or to support retrofitting initiatives. Local authorities can use the water stress determination

[3] Waterwise

to inform whether they can require the tighter Building Regulations standard of 110 l/p/d in new developments.

The Government has set out measures aiming to reduce the average water consumption per person (currently at 140 l/p/d[4] across the country, but higher in the South East region at 150 l/p/d*[5]):

- There is a legally binding target under the Environment Act 2021 to reduce the use of public water supply in England per head of population by 20% by 2038. To achieve this, household water use will be reduced to 122 l/p/d, leakages reduced by 37%, and non-household water use is to be reduced by 9% by 31 March 2038. This is part of the trajectory to achieving 110 l/p/d household water use, a 50% reduction in leakage and a 15% reduction in non-household water use by 2050.

- The published Plan for Water[6] sets out a 'Roadmap to Water Efficiency'.

In 2018, the National Infrastructure Commission (NIC) made recommendations to Government about how the additional water supply and demand reduction totalling 4,000 Ml/day (equivalent to 22 million bath tubs of water) should be delivered by 2050*[7]. The report stated that increasing efficiency savings to 600 Ml/day by 2050 and near universal smart metering would reduce average (measured and unmeasured) water consumption in England from the current 141 to 118 l/p/d, alongside recommendations to create resilience to drought and reduce leakages. The recommendations were further supported in a Written Ministerial Statement by George Eustice on 1 July 2021[8] which announced measures to support water efficiency in homes.

3. The benefits of water efficiency

Efficiency is important not only from a water resource perspective (including being more resilient to drought), but also because of the link with water quality and disposal of foul water. There are real benefits in keeping down the capital cost of new water supply and wastewater infrastructure. Reducing the amount of water entering wastewater treatment works is a key way of helping to mitigate issues around the capacity of the works and the receiving environment.

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[4] As cited in the 25-year Environment Plan (2018) - 25-year-environment-plan.pdf (publishing.service.gov.uk)

[5] Water Resources South East (WRSE) 'Futureproofing our water supplies. A consultation on our draft regional plan for South East England' (2022) - Our draft best value regional plan | Water Resources South East (engagementhq.com)

[6] Our integrated plan for delivering clean and plentiful water (Defra, 2023) - Our Integrated Plan for Delivering Clean and Plentiful Water (publishing.service.gov.uk)

[7] Preparing for a drier future England's water infrastructure needs - https://www.wrse.org.uk/media/so3nq3iq/nic-preparing-for-a-drier-future-26-april-2018.pdf

[8] Reducing demand for water (1 July 2021) - Written statements - Written questions, answers and statements - UK Parliament.

The advantage of opting for a standard of 110 l/p/d in new development is a substantial saving in water consumption for a negligible outlay at the time of construction. With the increase of water metering, there is also an added benefit for house buyers due to reduced water costs. A significant proportion of local authorities in SSD have already adopted the proposed higher standard (110 l/p/d) through policies in their Local Plans. There is no evidence that this has adversely impacted on viability or acted as a deterrent to delivery of housing.

There are real long-term benefits for water efficiency - reducing power costs and carbon emissions in heating water, reducing carbon footprints of water and energy companies, maintaining ecosystem services for people, wildlife and business and protecting landscapes and the environment.

Water efficiency standards can also help deliver objectives set out in River Basin Management Plans (RBMPs). Local authorities have a legal duty to have regards to RBMPs[9] and should ensure that their decisions do not compromise those objectives. The National Planning Policy Framework also says planning policies should contribute to and enhance the natural and local environment by taking into account relevant information such as RBMPs (paragraph 174 f)). The relevant South East River Basin Management Plan[10] contains an action to encourage local authorities to adopt the optional minimum building standard of 110 litres per person per day in all new builds where there is a clear local need, such as in water stressed areas.

4. Water resources management

Water resources are managed locally through Abstraction Licensing Strategies (CAMS process). These assess how much water is available in each catchment, how much is allocated to people and how much is needed to sustain the environment. An Abstraction Licensing Strategy is derived for each catchment. Further information, including the strategies for catchments within SSD, can be accessed here - Abstraction licensing strategies (CAMS process) - GOV.UK (www.gov.uk)

The implementation of environmental legislation, including the Habitats and Water Framework Directives are influencing water company abstraction.

Environmental law is modifying water company licences where centres of population are surrounded by designated rivers, wetlands and coastlines and by managing demand through compulsory metering. In other areas, groundwater licenses have been reduced to protect designated European sites along the coast.

The Environment Agency has produced a National Framework for Water Resources (2020)[11] which sets out the scale of action needed to ensure that resilient water supplies

[9] Part 6, Regulation 33 of The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Statutory Instrument 2017 No. 407
[10] South East river basin district river basin management plan: updated 2022 - GOV.UK (www.gov.uk)
[11] Meeting our future water needs: a national framework for water resources - GOV.UK (www.gov.uk)

are available for people and the environment in the future, whilst also restoring, protecting and improving the environment. The draft regional plan for the South East*[12] identifies options to secure water supplies in the region, including increasing water efficiency.

5. Climate change and future proofing

Water companies in the South East must undertake careful planning to ensure they have sufficient supplies to meet existing and future demand. Some of the challenges they must consider include:

- Housing and population growth - more consumers and lower occupancy leading to greater demand and higher per capita consumption.
- Changing lifestyles – for example, power showers and increased recreational use of water outdoors.
- Climate change - affecting the amount and distribution of rainfall, frequency of drought events, the demand for water and the use of land. Existing water infrastructure that is designed to cope with past and present climate may not be adequate for the future.

Water companies set out Water Resource Management Plans (WRMPs) for achieving a secure supply of water at least every 5 years. These consider many options for securing supply, such as building reservoirs and educating customers on water efficiency. Effluent re-use is a valid option used by water companies where effluent is taken directly (from the treatment works) or indirectly (where effluent is discharged into a watercourse and then re-abstracted downstream), and in both cases treated to drinking water standards. A number of water companies have effluent re-use as a feasible option within their WRMPs due to large yields and relatively lower costs this option offers.

Water use in the home also has an impact on carbon and greenhouse gas emissions. Domestic water heating is responsible for around 5%[13] of UK carbon dioxide emissions and is a significant proportion of household energy bills. Simple demand management measures, particularly those which reduce the amount of hot water used in the home, have huge potential not only to promote water and energy efficiency but also to reduce the carbon footprint.

In addition to considering water efficiency measures in new homes, we encourage local councils or developers to consider the option of retrofitting. This is about improving or adapting existing homes to be more efficient and also seeking opportunities within council owned properties such as social homes, council offices or schools. It may also be an innovative idea that developers may like to explore as a way to offset water demands of a new development.

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[12] Water Resources South East (WRSE) (2022) Our draft best value regional plan | Water Resources South East (engagementhq.com)

[13] Microsoft Word - EPCRS_WR Options Carbon_Project Report_final_29Jul08.doc (publishing.service.gov.uk)

6. Water cycle guidance

Water cycle studies can help plan for sustainable growth. We have published water cycle studies guidance. The guidance sets out an efficient approach to help Local Planning Authorities and developers produce a water cycle study, drawing on existing evidence to understand local water cycle issues. The water cycle study once completed will help the Local Planning Authority/developer decide if they need to produce an Integrated Water Management Plan (IWMP), and what it should focus on. The guidance links to the CIRIA guidance on producing IWMPs.

Water cycle studies remain a valuable tool to identify and help address water cycle issues (such as water and wastewater supply, water quality and flood risk) and develop strategic solutions. The strategic evidence base water cycle studies create will be an important component of robust evidence needed to inform local plans. They will also help to identify opportunities for biodiversity and environmental net gain, as well as wider environmental objectives.

7. Water neutrality

In September 2021, Natural England issued a Position Statement for the Sussex North Water Resource Zone*[14] that it cannot be concluded that existing abstraction for water is not having an impact on the Arun Valley nature conservation sites. As such, development within this zone must not add to this impact by achieving water neutrality. Affected Local Planning Authorities within the zone have worked collaboratively to build a strategy to allow development to proceed and to put in place Local Plan policies about water neutrality including seeking greater water efficiency targets beyond the 110 l/p/d*[15].

For further information on this position on water efficiency and strategic planning, please email the SSD Sustainable Places team - PlanningSSD@environment-agency.gov.uk

**The Environment Agency is not responsible for the content of any external websites.*

[14] Water neutrality: Position statement and response | Horsham District Council

[15] Water neutrality and Planning Policy | Horsham District Council and Water neutrality and planning applications | Horsham District Council