NUTRIENT MITIGATION STRATEGY

KENT

RETROFITTING

ASHFORD BOROUGH COUNCIL

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WATER | ENVIRONMENT

Water Environment Limited
6 Coppergate Mews
103 Brighton Road
Surbiton
London
KT6 5NE

Tel: 020 8545 9720

www.WaterEnvironment.co.uk

Authorisation and Version Control

Water Environment was commissioned by Ashford Borough Council to provide advice on the retrofitting existing properties to reduce potable water consumption and calculate the resulting nutrient reductions within the Stodmarsh catchment, Kent.

Author:	**Guy Laister** MSc Eng BSc Eng (Civil) CEng CEnv C.WEM MCIWEM	
Checker:	**Christopher Garrard** BSc Eng (Civil)	
Approver:	**Guy Laister** Director	

for and on behalf of Water Environment Limited

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ABBREVIATIONS

Acronym	Definition
ABC	Ashford Borough Council
AMP	Asset Management Plan
BOD	Biological Oxygen Demand
EA	Environment Agency
LURA	Levelling Up and Regeneration Act
NE	Natural England
NNR	National Nature Reserve
PTP	Package Treatment Plant
SAC	Special Area of Conservation
SEW	South East Water
SNWRZ	Sussex North Water Resources Zone
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
TAL	Technically Achievable Limits
TN	Total Nitrogen
TP	Total Phosphorus
TSS	Total Suspended Solids
WINEP	Water Industry National Environment Programme
WwTW	Wastewater Treatment Works

1 INTRODUCTION

1.1 Water Environment are commissioned by Ashford Borough Council (ABC) to produce a Stodmarsh Nutrient Mitigation Strategy to support housing delivery with the River Stour hydrological catchment upstream of Stodmarsh.

1.2 In 2018, the European Court of Justice refined the definition of plans and projects and ruled that mitigation needs to be in place to ensure that there will be no significant adverse impacts on the conservation status of designated sites. Additional nutrient loading to designated sites already in an unfavourable conservation status is effectively therefore not permissible unless mitigation is in place. This ruling has come to be known as 'The Dutch Case'.

1.3 In the Stour River catchment in East Kent, developments could adversely affect the designated site known as Stodmarsh. Several of the units are in a state of eutrophication (an unfavourable conservation status). Therefore, developments in the catchment should demonstrate 'nutrient neutrality' in order to ensure no adverse effect on the integrity of the designated site, meaning that the nutrients generated by the development must be less than or equal to the nutrients generated by the existing land use. The nutrients of interest in the Stodmarsh catchment are Total Nitrogen (TN) and Total Phosphorus (TP).

1.4 A large number of developers and planning applications have been unable to gain planning approval due to the fact that they have been unable to achieve nutrient neutrality on site or through other means of nutrient offsetting.

1.5 One of the nutrient mitigation measures under consideration as part of the strategy is for refurbishment or 'retrofitting' of existing properties with water saving measures with the aim of reducing water consumption of the property. Reducing water consumption from existing properties could result in a reduction in nutrients (TN and TP) within the Stodmarsh catchment reaching Stodmarsh provided certain conditions can be met.

1.6 This report aims to set out the opportunities and constraints of retrofitting existing properties and explain the conditions under which a reduction in water consumption will reduce nutrients reaching Stodmarsh.

1.7 The report discusses the options for reducing water consumption in existing 'qualifying' properties[1] (properties with overnight stays) to reduce TN and TP loading at Stodmarsh at Wastewater Treatment Works (WwTWs) with permit limits, as well as at WwTWs without permit limits with regards to TN (commonly referred to as 'Nitrogen at source'). This 'Nitrogen at source' proposal has become apparent because TN concentrations in the groundwater abstracted in East Kent are relatively high, and that although the groundwater is treated before being distributed into the potable water supplies, the TN concentrations remain relatively high in the drinking water. The approach proposed is that these relatively high concentrations in drinking water are effectively passed through the wastewater system without treatment/removal and therefore any reduction in water consumption would result in a reduction in the TN load being discharged to Stodmarsh. This does not apply to TP as no data exists of TP concentrations in drinking water.

1.8 Currently no WwTWs in the catchment have permit limits for Nitrogen. Several WwTWs in the catchment (not all, but most WwTWs) will be upgraded[2] in accordance with the requirements of the Levelling Up and Regeneration Act - LURA) and permit limits for TN will be introduced at these WwTWs. The Nitrogen at source will fall away and a consistent approach for TP and TN (and generating mitigation from retrofitting) can be followed for WwTWs with permit limits. This

[1] Qualifying development as 'overnight stay accommodation' in accordance with the NE methodology
[2] https://www.gov.uk/government/publications/notice-of-designation-of-sensitive-catchment-areas-2024/information-about-nutrient-significant-plants

'Nitrogen at source' approach therefore covers the period from commencement of a retrofitting scheme until 2030 (or earlier as permit limits are introduced at WwTWs) at WwTWs which will have permit limits post 2030.

2 RETROFITTING TO REDUCE WATER CONSUMPTION

2.1 The principle aim of retrofitting existing properties in this context is to reduce nutrient loading in the River Stour catchment, however, reducing water consumption has multiple benefits, such as:

- Reducing the burden on abstraction of groundwater to supply potable water[3]
- Reduce the burden on the wastewater sewerage and on WwTWs
- Reducing customer bills, not only relating to the cost of water supply but also in terms of energy costs as a result on less heating requirements

2.2 There are two primary ways in which existing properties can be adapted to reduce water consumption:

- Refurbishment of existing properties which could include modification of sanitary ware such as replacing taps and shower heads, and/or by replacing whole bathrooms and change the configuration (e.g. replace baths with showers), and/or replacing white appliances. This is commonly referred to as replacing 'fittings and fixtures'.
- Retrofitting of existing properties with a flow control device which limits the peak flow rate of potable water into the property.

Replacing fittings and fixtures

2.3 Replacing fittings and fixtures has the potential to reduce water consumption, and this approach has been accepted in West Sussex to achieve Water Neutrality (see: more detail below). However,

- Whilst relatively cost effective (£100's) it remains challenging to provide sufficient certainty that measures will remain effective in perpetuity (e.g. in the case of replacing taps and shower heads),
- Replacing white appliances suffers from the similar uncertainty as replacing taps and shower heads as residents can replace appliances in the future with relative ease and cost (£100s). It also requires a lot of resources to inspect and enforce these changes.
- Refurbishing bathrooms to replace baths with showers is more certain, however this is a more expensive option (£1,000s), and

2.4 Proposals for refurbishment of existing properties in West Sussex to reduce water consumption and offset new development are therefore taken on a case-by-case basis and supported by evidence such as surveys of existing properties and detailed assessments of the water usage before and after refurbishment. This would be a time-consuming and costly exercise to roll out on a borough-wide basis.

Flow control devices

2.5 Retrofitting a flow control device is a more certain mitigation measure than retrofitting properties by replacing fittings and fixtures such as taps, cisterns, showerheads and white appliances.

2.6 The control devices reduce water flow at the point of entering the property, rather than on each of the individual water fittings, e.g. taps etc. The flow control device is fitted to the cold supply

[3] South East Water (October 2022) The River Stour: An introduction to our flagship chalk stream project

pipe and therefore there is greater difficulty in tampering with or removing the device than taps or showerheads.

Summary

2.7 On the balance of the 'precautionary principle' it is this aspect that the flow control measure is more robust.

2.8 Refurbishing bathrooms by replacing baths with showers, and replacing toilet cisterns have a high degree of confidence as well, and therefore these upgrades should be considered as part of ongoing property maintenance regardless of nutrient reduction mitigation scheme.

2.9 For the purposes of this study, the focus is on the use of the Control Flow device[4] which is being installed in council owned and controlled residential properties in the borough[5].

Water Neutrality vs Nutrient Neutrality

2.10 In considering the potential, and assessing the risks, of a retrofitting nutrient mitigation scheme, parallels can be drawn with the Water Neutrality retrofitting scheme being implemented by Crawley Homes in West Sussex.

2.11 By way of background, NE issued a position statement in September 2021 stating that it cannot be concluded that existing abstractions in the Sussex North Water Resources Zone (SNWRZ) are not having an adverse impact on the Arun Valley sites including the Arun Valley Special Area of Conservation (SAC), Special Protection Area (SPA) and RAMSAR site. Therefore, it must be proved that proposed development does not increase this potential impact by increasing demand for water resources.

2.12 At present, the only manner in which it can be proved beyond reasonable scientific doubt that proposed development would not exacerbate the impact of the current abstractions, is to show that there is no increase in abstraction within the SNWRZ. Therefore, all proposed development on sites within Crawley Borough which are also within the SNWRZ must demonstrate "Water Neutrality" i.e. that water demand following development does not exceed the current water use on the site.

2.13 Crawley Borough Council are one of the affected Local Planning Authorities and have successfully implemented a retrofitting strategy through Crawley Homes (council stock) properties by fitting flow control devices supplied by Cenergist[6].

2.14 NE have endorsed the water neutrality mitigation strategy developed by affected councils in the SNWRZ, which includes retrofitting using flow restrictors[7]. This has also been confirmed by the NE Kent areas office:

> *"I can confirm that Natural England have broadly agreed to the use of flow restrictors for housing association housing stock. Which was considered in the Part C WN Mitigation Strategy (Dec 2022). We are re-reviewing this as part of our ongoing WN work, but indications are that we will continue to support use of flow restrictors for housing association controlled dwellings."*

[4] https://www.controlflow.co.uk/
[5] https://www.controlflow.co.uk/resources/ashford-chooses-control-flow-technology-to-unlock-nutrient-neutrality
[6] https://crawley.gov.uk/council-information/news-and-events/latest-news/2022/council-unblocks-two-key-housing-schemes-water
[7] https://crawley.gov.uk/sites/default/files/2022-11/Natural%20England%27s%20endorsement%20of%20Sussex%20North%20Mitigation%20Strategy.pdf

2.15 Cenergist have also completed pilot studies in other areas, and according to Cenergist, they have agreed an average saving of 27 litres per person per day for every device fitted. A report from Cenergist is appended.

2.16 This provides confidence that a retrofitting scheme using Cenergist flow control devices is an accepted as a means of reducing water consumption with the intention of offsetting water use in new dwellings.

Nutrient Neutrality

2.17 The 'Crawley approach' is specific to Water Neutrality where it is only necessary to balance water consumption. i.e. where new development will increase water demand, this demand needs to be offset, and one way is by reducing existing demand elsewhere in the catchment, which can be achieved by retrofitting existing properties to reduce consumption. That is the full extent of the scope of Water Neutrality and there is no consideration of water quality.

2.18 Nutrient Neutrality has a second step whereby it is necessary to also prove that the reduction in water consumption translates into a reduction in nutrient loading at a designated site. Reducing the volume of water consumed (and therefore passed through a WwTW) doesn't necessarily translate into a reduction in nutrients, for the primary reasons:

- Wastewater treatment: where there is no legal requirement to reduce TN and TP (e.g. through a discharge permit), it is not sufficiently certain that there is any reduction to the TN and TP concentrations in treated effluent. Many WwTWs in Kent have a discharge permit for TP, and thus in these cases, the reductions are sufficiently certain, however, there are no WwTWs with a discharge permit for TN. In line with the "Precautionary Principle", it is therefore assumed that, in these cases, the concentration in the effluent is equal to the concentration in the influent. The human nutrient loading wastewater will not change, so a reduction in volume will result in an increase in concentration, but the change in water quantity would have no effect on the total nutrient load from the WwTW.
- Water and TN cycle: Stodmarsh (the designated site in this case), has various sources of TN, and it is necessary to prove beyond reasonable scientific doubt that a reduction in the volume of water abstracted from the ground (groundwater is the primary source of drinking water in the Stodmarsh catchment) will result in a reduction in the TN reaching Stodmarsh, and that this reduction be quantified with sufficient certainty.

3 NUTRIENT REDUCTIONS AT WWTWS WITH PERMIT LIMITS

Water consumption and wastewater treatment theory

3.1 Wastewater from buildings is collected and typically discharged to the public sewage system which conveys untreated wastewater to WwTWs or treated on the property using a Septic Tank or 'Package Treatment Plant' (PTP). The wastewater is treated in these WwTWs (or PTPs) before being discharged to surface waters such as watercourses or to groundwater (typically to watercourses – due to the flow rates and volumes involved).

3.2 The Environment Agency (EA) regulate these discharges of treatment wastewater[8] by issuing Discharge Permits. Discharge Permits are subject to conditions which vary between treatment plants in terms of flow rates; both the number and type of substances referenced, and the limits for each. For example, it is typical for a WwTW to have a Permit with limits on the acceptable concentrations of Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), Ammonia, and, in many cases, TP. Ammonia is one component of TN but it is unusual for a Permit to include a TN limit.

3.3 The total loading, or 'flux' of a substance contained in treated effluent and discharged into a watercourse (for the purposes of this technical note) is the total mass of a dissolved component (in this case nutrients) passing through a WwTW on average, normally measured in kg/day. The flux is the combination of the flowrate and the concentration of the substance contained in the flow (Mass balance: Flux = Flow × Concentration). The substances of interest in this case are nutrients (TN and TP).

3.4 Reducing water consumption reduces the flow of untreated wastewater entering the treatment plant. The amount of nutrients produced in a building do not change though (there is a residual concentration in the potable water, but this is considered negligible in the context of the nutrient flux generated by daily human activities), even if the volume of water reduces. Therefore, if water consumption (or volume) decreases, the concentration of nutrients in the wastewater increases.

3.5 Where a WwTW has a Permit limit, there is a level of certainty that the concentration of the treated effluent cannot increase above the limit, and in order to ensure that the WwTW does not exceed the limit the plant will need to actively remove nutrients from the wastewater as part of the treatment process. Therefore, there is certainty that a reduction in flow will directly reduce the flux even if the incoming concentration in the untreated effluent increases. In other words where a WwTW has a Permit limit:

- a reduction in water consumptions means:
    - the flow rate entering and leaving the WwTW is lower,
    - the total incoming flux is the same so the incoming concentration is higher but
        - the WwTW cannot let the discharged concentration in the treated effluent increase above the Permit limit and therefore
            - Effluent Flux = Effluent Flow x Concentration is lower.
            - From a mass balance perspective, this results in more nutrients being entrained within the sewage sludge.

3.6 However, where there is no limit for a nutrient, a reduction in flow will not necessarily decrease the flux of nutrients in the effluent. This is because the incoming concentration increases but there is no requirement for the WwTW to remove nutrients and no upper limit that the WwTW

[8] Discharges to surface water and groundwater: environmental permits - GOV.UK (www.gov.uk)

must achieve. Therefore, the concentration in the discharged treated effluent will most likely increase. The higher concentration in the influent is likely to lead to a marginally more efficient treatment process, resulting in a faster rate of growth of biomass, and thereby a higher intrinsic nutrient removal, but this difference is unquantifiable without modelling of each specific WwTW. Therefore, in line with the Precautionary Principle, it is assumed that there will be no change.

3.7 The same argument applies to TN and TP and it is entirely dependent on whether the receiving WwTW has a Permit limit for particular nutrients.

The Natural England nutrient budget calculator

3.8 Natural England have produced a calculator to determine the nutrient budget of new development. The calculator includes the Permit limits (where they apply) in the catchment. For WwTWs that do not have a Permit limit, the calculator uses average discharge concentrations of 8mg/l TP and 27mg/l for TP and TN respectively based on monitored data from Southern Water.

3.9 Different values could be used for WwTWs without Permit limits, however there would need to be a robust evidence base of monitored discharge concentrations to adopt a different value to the average. If different values were be adopted then it would also be necessary to adopt different values for each WwTW in the catchment, as using a different value for individual WwTWs would skew the average used elsewhere.

3.10 Adopting individual discharge concentrations at each WwTW is also a flawed methodology because there is no active treatment process at the WwTW with the intention of removing nutrients. The discharged effluent concentration will be more variable than at WwTWs where WwTWs include treatment to achieve certain concentrations (The Permit limit). Therefore the value adopted in the calculator for WwTWs without a Permit would need to be continuously updated based on ongoing monitoring and the calculation of the nutrient budget would be different for each planning application.

3.11 By contrast, a WwTW with a Permit limit provides certainty in that the calculator can use the Permit limit as the highest possible concentration which therefore results in the most precautionary nutrient budget.

WwTWs in the Stodmarsh catchment

3.12 There are 15 WwTWs operated and maintained by OfWAT regulated water companies with the Stodmarsh hydrological catchment (Appendix A). Of these, Dambridge (Wingham) and Newnham Valley WwTWs are no longer relevant as the Little Stour sub-catchment is no longer subject to NE advice on Nutrient Neutrality.

3.13 Of the remaining 13 WwTWs, 6 have (or will have by the end of 2024) Permit limits for TP. No WwTWs have Permit limits for TN.

3.14 Therefore, only properties connected to the following WwTWs will realise a reduction in TP loading at Stodmarsh by reducing water consumption:

- Ashford (Bybrook)
- Canterbury (Sturry)
- Charing
- Lenham
- May St (Herne Bay)
- Sellindge

3.15 Reducing water consumption will not result in a reduction in TP at the remaining 7 WwTWs.

3.16 The following table is from the Natural England (November 2020) Advice on Nutrient Neutrality for New Development in the Stour Catchment in Relation to Stodmarsh Designated Sites - For Local Planning Authorities Table A 1.2 Wastewater Treatment Works covered by this Guidance (Stodmarsh)

November 2020 – Final version V3 Natural England

Table A 1.2 Waste Water Treatment Works covered by this Guidance

Southern Water Waste Water Treatment Works Continuous Discharges considered as part of WINEP investigation * (waterbody/ catchment into which it discharges in brackets)	TP Limit current (planned permit by 2024 in brackets)	TN Limit current	Population Equivalent (2020)
Ashford (Bybrook)WwTW **(Stour -Ashford Wye)**	0.5 mg/l OSM**	None	115,149
Canterbury WwTW **(Stour A2 to West Stourmouth)**	2 mg/l	None	72,498
Charing Wwtw **(Upper Great Stour)**	1 mg/l (OSM only) (0.5 mg/l by 2024)	None	2,057
Chartham Wwtw **(Stour Wye –A2)**	None	None	6,966
Chilham **(Stour Wye- A2)**	None	None	946
Dambridge **(Wingham)**	2 mg/l (0.25 mg/l by 2024)	None	21,347
Lenham Wwtw **(Upper Great Stour)**	1 mg/l (OSM only) (0.5 mg/l by 2024)	None	3,206
May St (Herne Bay) WwTW **(Oyster coast brooks)**	2 mg/l (0.3 mg/l by 2024)	None	43,025
Newnham valley WwTW **(Little Stour)**	None (1 mg/l by 2024)	None	7,372
Sellindge WwTW **(East Stour)**	1 mg/l OSM annual mean (0.5 mg/l by 2024)	None	5,443
Westbere WwTW **(Stour A2 to West Stourmouth)**	None	None	6,503
Wye **(Stour –Ashford Wye)**	None	None	2,135
Good intent cottages WwTW **Nats Lane Brook WwTW** **Westwell WwTW**	None None None	None None None	15 308 216

*Natural England have excluded Minster WwTW from this advice as we have objective evidence that there is no pathway to Stodmarsh for inputs below Plucks Gutter on the Stour.
** This works has an UWWTD annual mean figure of 1 mg/l but the OSM figure is sufficiently certain to be used for planning purposes.

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Figure 1 - WwTW within Stodmarsh catchment

3.17 Based on the permit limits between 2025 and 2030, the following reductions in TP loading can be achieved at each property through retrofitting the Control Flow device. This is based on a water consumption reduction of 27l/p/d and an occupancy of 2.4.

Table 1 - WwTW TP Permit limits in the Stodmarsh catchment

WwTW	TP Permit limit (mg/l)	TP reduction (kg/property/year)
Ashford (Bybrook)	0.5	**0.011**
Canterbury (Sturry)	2.0	N/A
Charing	0.5	**0.011**
Lenham	0.5	**0.011**
May St (Herne Bay)	0.3	N/A
Sellindge	0.5	**0.011**

3.18 Of these, properties in Ashford borough are served by Ashford (Bybrook), Charing, Lenham and Sellindge WwTW (annotated in bold in . The TP permit limit at all three of these WwTWs is the same, at 0.5mg/l and therefore retrofitting Ashford owned and controlled properties connected to these WwTWs result in the same nutrient reductions.

Post 2030

3.19 The LURA requires that all WwTWs in designated catchments[9] with a Population Equivalent (PE) of more than 2,000 will need to be upgraded to achieve Technically Achievable Limits (TAL) nutrient concentrations in the treated effluent of 0.25mg/l TP and 10mg/l TN[10].

3.20 Therefore, after 2030 the following WwTWs in the catchment and serving properties in Ashford borough will all be performing to the same standard for TP and TN:

- Ashford (Bybrook)
- Charing
- Lenham
- Sellindge
- Wye

3.21 All of these treatment works will have a TP and TN permit limit of 0.25mg/l and 10mg/l post 2030 which equates to a reduction in nutrient loading resulting from retrofitting of 0.005kg/property/year and 0.213kg/property/year.

3.22 It is understood that the Southern Water business plan for Asset Management Plan (AMP) Period 8 for 2025 – 2030 includes an upgrade at Chilham WwTW to TAL. This upgrade is not yet confirmed and not covered by the LURA, and therefore TP reductions at properties retrofitted which connect to Chilham WwTW is not sufficiently certain post 2030 at this stage.

[9] https://www.gov.uk/government/publications/notice-of-designation-of-sensitive-catchment-areas-2024/notice-of-designation-of-sensitive-catchment-areas-2024
[10] https://www.gov.uk/government/publications/notice-of-designation-of-sensitive-catchment-areas-2024/information-about-nutrient-significant-plants

4 TOTAL NITROGEN REDUCTIONS 'AT SOURCE'

4.1 The "Nitrogen at Source" argument differs from the principles set out in the previous chapter that a reduction in water use would not result in a decrease to the influent flux of nutrients, specifically TN in this case.

4.2 That assumption was based on the principle that the sources of nutrients within wastewater are human in origin, however it has become apparent that the concentration of Nitrogen in groundwater, which is abstracted for water supply, is high. If this source of Nitrogen in groundwater is consumed and discharged to surface water via the foul sewerage and WwTWs without treatment or removal then it stands to reason that a reduction in water consumption will reduce the nutrient loading in the River Stour and Stodmarsh.

4.3 A high-level water resources assessment has been undertaken in the form of a literature review to determine whether reducing water consumption will result in TN loading reductions at Stodmarsh, including any impact of the retrofitting devices and any treatment at the WwTWs, including consideration of:

- Sources of potable water in East Kent,
- TN levels in the groundwater supplying potable water in the catchment,
- Hydrogeology: connectivity of the groundwater to the relevant Stodmarsh Lakes,
- Impact on a reduction in water consumption on concentrations of TN in wastewater,
- The WwTW process, including how much TN the WwTW removes (either actively or indirectly)

4.4 A similar argument can be made for TP, however there is insufficient data available to support such a case.

Hydrology and Hydrogeology

4.5 Hydrological or hydrogeological connections between groundwater, surface water and with Stodmarsh is important because if groundwater were to reach Stodmarsh in a similar timeframe to the water supply and wastewater treatment process, either indirectly (groundwater forming the baseflow of the River Stour) or indirectly (through the ground) and without reduction then even if less groundwater is abstracted for the water supply system due to lower demand, that groundwater would reach Stodmarsh anyway and no benefit would accrue.

4.6 Groundwater is abstracted from the North Kent Chalk aquifer which is indicated by the Chalk subgroups in Figure 2. The North Kent Chalk (Grey and White Chalk) aquifer is a 'Principal aquifer'.

4.7 The lakes at Stodmarsh are generally within the Alluvium (clay, silt, sand and gravel) and underlain by the Thanet Formation (Sand, Silt and Clay), which is in continuity with the Chalk beneath.

4.8 The two lakes of interest with regards to Nutrient Neutrality are Collards Lake (Unit 7) and the Stodmarsh National Nature Reserve (NNR) lake (Unit 10)[11].

[11] Natural England (November 2020) Advice on Nutrient Neutrality for New Development in the Stour Catchment in Relation to Stodmarsh Designated Sites – For Local Planning Authorities. Final version V3

4.9 Various studies on the hydrology and hydrogeology of the lakes at Stodmarsh have been carried out over the past decade, including the Atkins Stodmarsh Lake Hydrology Study[12].

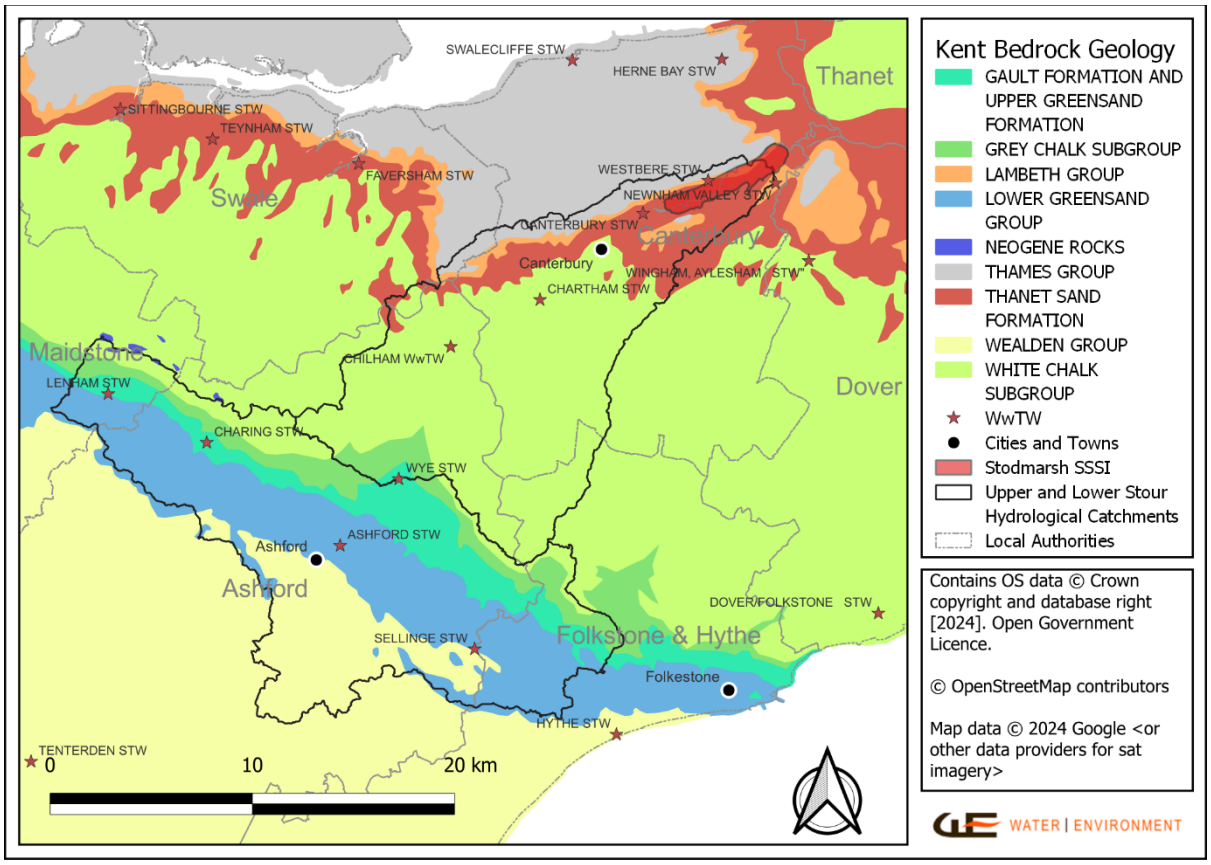


Figure 2 - Bedrock Geology in North and East Kent

4.10 Figure 2-1 of the Atkins report shows the hydrology of Stodmarsh (Figure 3).

4.11 The Atkins study summarised the main inflows to the Stodmarsh NNR lake as follows:

- From Collards Lake through a culvert when the levels in this lake are higher than the Stodmarsh NRP4;
- From the Lampen Stream through a sluice;
- Groundwater from local or regional aquifers underlying the site (although this could be relatively small);
- Direct inflows from River Stour, and/or potential seepage through the river embankments that separate the lakes and the main watercourses (mostly likely during high flows and/or high spring tides); and
- Direct rainfall.
- Groundwater from local or regional aquifers underlying the site; and
- Potential seepage into the NNR Lake through the river embankments that separate the lakes and the main watercourses (mostly likely during high flows and/or high spring tides).

[12] Atkins (31st May 2016) Stodmarsh Lake Hydrology Study

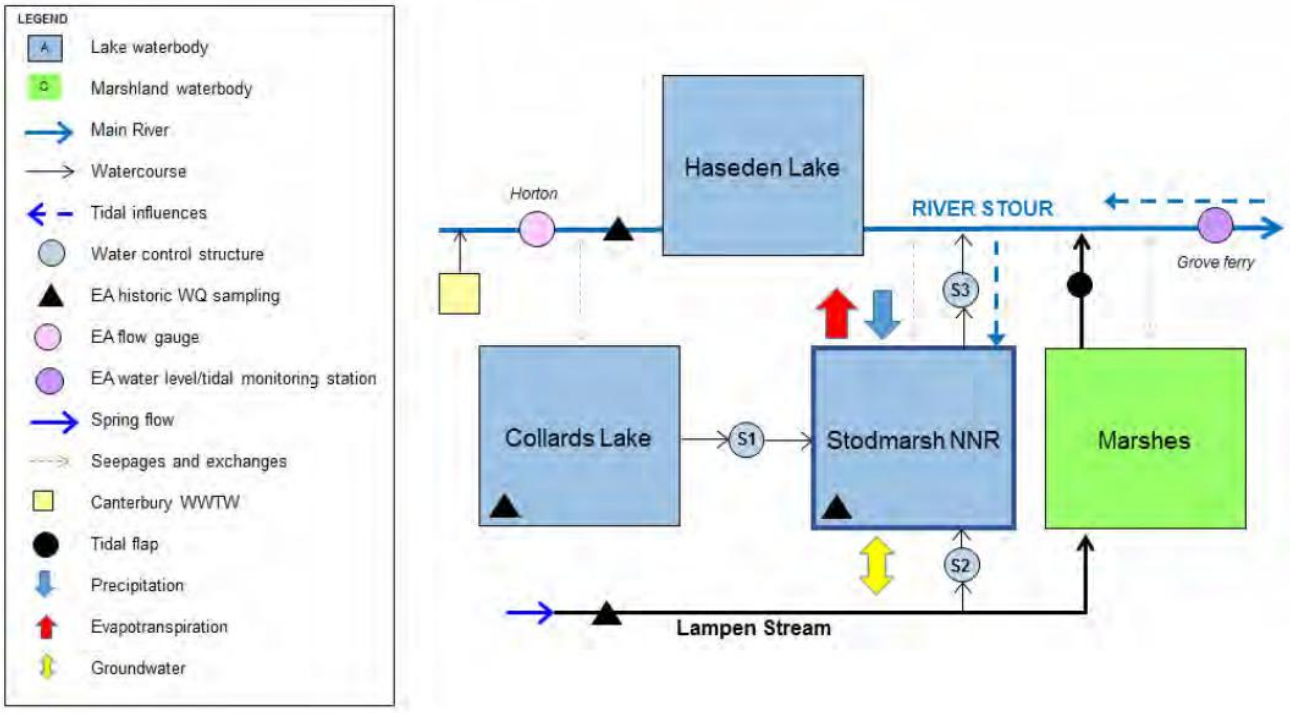


Figure 2-1 Summary of the hydrology of the Stodmarsh site and hydrodynamics of the lake in relation to proximal waterbodies

Figure 3 - Hydrology of Stodmarsh

4.12 The Atkins Study concludes that:

- Under 'average' conditions, water levels in the Stodmarsh NNR will typically be higher than in the River Stour and water will flow from the lake into the river; and
- During high spring tides and/or when flows in the River Stour are high, water in the River Stour can be higher than in the lake and the marshes and water will flow from the River Stour into the Stodmarsh NNR.

4.13 The WINEP study[13] included sampling and monitoring, and provides further details the geology, hydrology and hydrogeology of the catchment which is not repeated here for brevity.

4.14 The WINEP study summarises the inflows into Stodmarsh NNR lake set out in the Atkins report and notes that direct groundwater inflow could be relatively small.

4.15 Neither the Atkins report or WINEP study provide much detail on the inflows into Collards Lake, and figure 2-1 of the Atkins report shows no inflows.

4.16 The WINEP study reports that:

- Overtopping or direct connection to the lakes from the Stour is the main pathway for nutrients and other pollutants, and therefore the catchment, including upstream and downstream due to tidal influence is considered the main source.
- Baseflow in its catchment is considered to be a relatively large contributor to flow in the Great Stour where the river is underlain by the Chalk. This is likely to have a large influence over the nitrogen concentration observed in the region.

[13] Southern Water Services & Wood (September 2022) Stodmarsh SSSI CSMG WINEP Investigation for Southern Water: Final Report.

4.17 Abstraction of groundwater to provide potable water, which is consumed and transferred to WwTWs, discharges into the River Stour, provides a pathway for TN in the groundwater to reach Stodmarsh through dwellings.

4.18 The WINEP report assess mitigation options for reducing Southern Waters nutrient loading and comments that any measures to reduce TN inputs to the lakes from groundwater (either direct or via the river) will need to take into account a potential lag-time of 20-40 years or beyond to see reductions through this pathway.

4.19 Therefore, a reduction in water use would see a benefit under the "Nitrogen at Source" argument, and any nutrient loading from the groundwater would only affect Stodmarsh 20-40 years later. At that point, the upgrades to the WwTWs under the LURA will be complete, and there would be no need to rely on the "Nitrogen at Source" argument any longer, as WwTWs will have a licence limit for TN.

Sources of potable water in East Kent

4.20 The majority of potable water in the Stodmarsh catchment is supplied by South East Water (SEW) as shown in Figure 4. Affinity Water supply a, largely rural, area within the borough east of Sellindge and therefore if ABC propose to retrofit any existing properties that connect to Sellindge WwTW that area also supplied by Affinity Water then further research and analysis ideally be undertaken to consider the source and supply of potable water by Affinity Water. However, it is unlikely that Affinity potable water which originates from groundwater would differ from that which SEW supplies and therefore there is a high probably that that the "Nitrogen at Source" approach will also apply to properties with water supplied by Affinity Water.

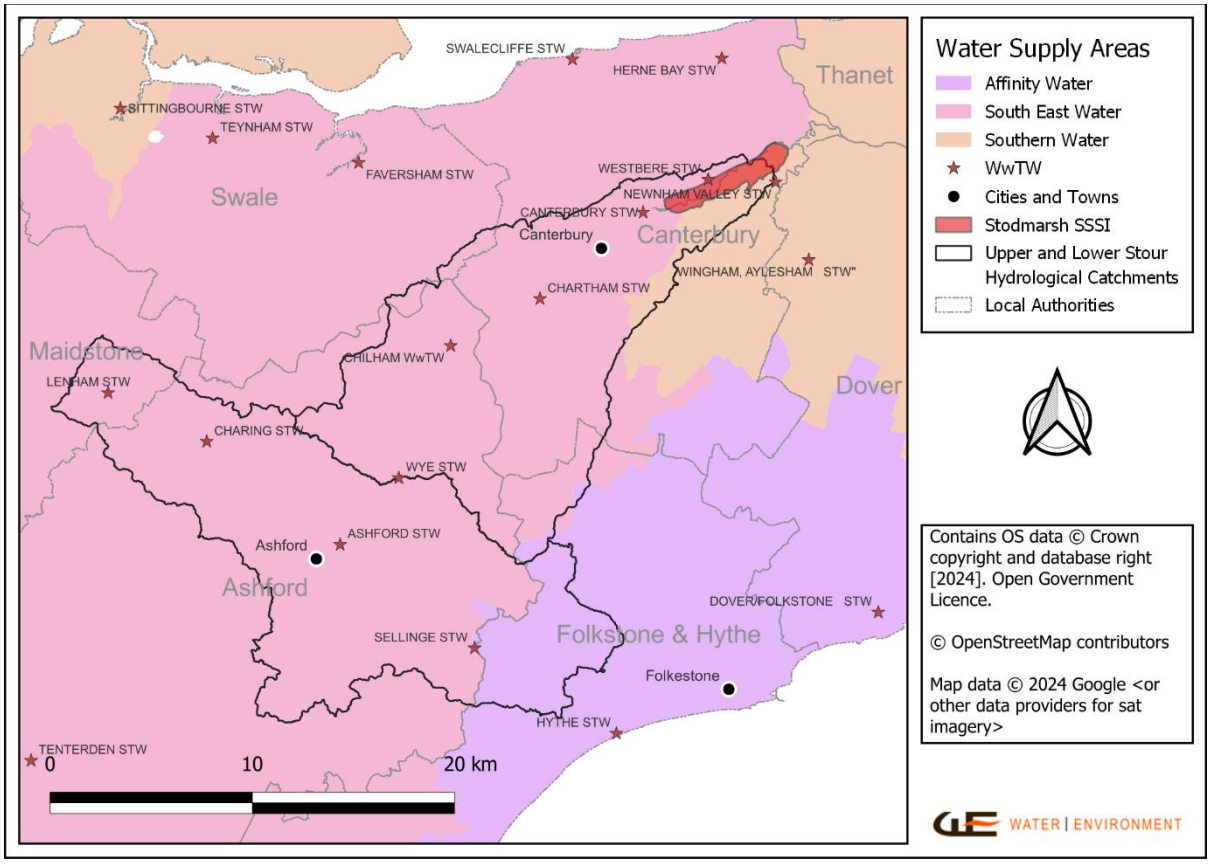


Figure 4 - Potable water supply catchments

4.21 SEW Water Resource Zone 8 (Ashford) in east Kent serves the urban areas of Herne Bay, Whitstable, Canterbury and Ashford.

4.22 The zone consists entirely of groundwater sources[14].

4.23 SEW have identified nitrates (a constituent of TN) as a pressure on the groundwater catchment in the North Kent Chalk aquifer and a number of Drinking Water Protected Areas (DWPAs) have been designated to prevent deterioration in water quality[15].

Nitrogen levels in potable water

4.24 SEW records concentrations of various compounds and pollutants in water abstracted from the groundwater. Records have been requested and received from SEW for the past 8 years (2015 – 2022 inclusive – appended).

4.25 The records include all relevant forms of TN, including Ammonia, Nitrate and Nitrite. Ammonia and Nitrite are only found in trace amounts and therefore for this discussion will focus on Nitrate.

4.26 The SEW records include a Maximum, Mean and Minimum annual average concentration. The concentration of Nitrate is provided in mg/l as NO_3. Two Ashford Water Supply Zones have been provided by SEW (East and West).

4.27 Table 2 shows the records of Nitrate for the period 2015 - 2022. The maximum recording in each year varies widely by 50% and 100%, however this is not relevant to the strategy as it is necessary to apply the precautionary principle to the analysis and therefore a maximum concentration would not be used to determine how much TN can be removed from the environment by reducing water consumption. The mean at each site is relatively consistent and the minimum and maximum over the time period differ by approximately 5 mg/l as N (19% - 22%).

Table 2 – South East Water Nitrate records 2015 – 2022

	West Ashford WSZ			East Ashford WSZ			Combined		
	Maximum	Mean	Minimum	Maximum	Mean	Minimum	Maximum	Mean	Minimum (outliers excluded)
2015	20.50	18.43	16.70	23.20	22.84	21.90	23.20	20.64	16.70
2016	24.10	19.59	16.80	25.40	23.83	22.10	25.40	21.71	16.80
2017	21.40	18.11	15.58	29.10	24.68	22.90	29.10	21.40	15.58
2018	23.00	18.59	16.50	29.10	23.28	18.30	29.10	20.94	16.50
2019	35.40	22.67	15.90	29.00	21.44	2.00	35.40	22.06	15.90
2020	27.60	23.19	18.20	31.30	26.58	22.20	31.30	24.89	18.20
2021	33.20	20.30	1.00	45.20	26.43	22.60	45.20	23.37	22.60
2022	33.00	23.24	19.50	32.50	24.59	20.80	33.00	23.92	19.50
MEAN								22.36	

4.28 There are two clear outliers in the minimum concentrations, one at each WSZ (1 mg/l as NO_3 at West Ashford WSZ in 2021 and 2.00 mg/l as NO_3 at East Ashford WSZ in 2019). These are most

[14] South East Water (August 2023) Water Resource Zone Integrity Assessment. 2B_Water_Resource_Zone_integrity_assessment.pdf (southeastwater.co.uk)
[15] South East Water (August 2023) Revised Water Resources Management Plan 2025 – 2075. SEW-rWRMP-Technical-Overview-Document_updated-22-09-23.pdf (southeastwater.co.uk)

likely either sampling, testing or recording errors as they are isolated and inconsistent with all other records. Therefore, these outliers have been removed from the dataset for analysis.

4.29 The average of the mean concentrations in each WSZ over the 8 year period is approximately 22.36 mg/l as NO_3.

4.30 Concentrations at West and East WSZ are broadly similar, and it is not possible to correlate individual properties that would be retrofitted to either WSZ, and therefore the records from each can be combined as indicated.

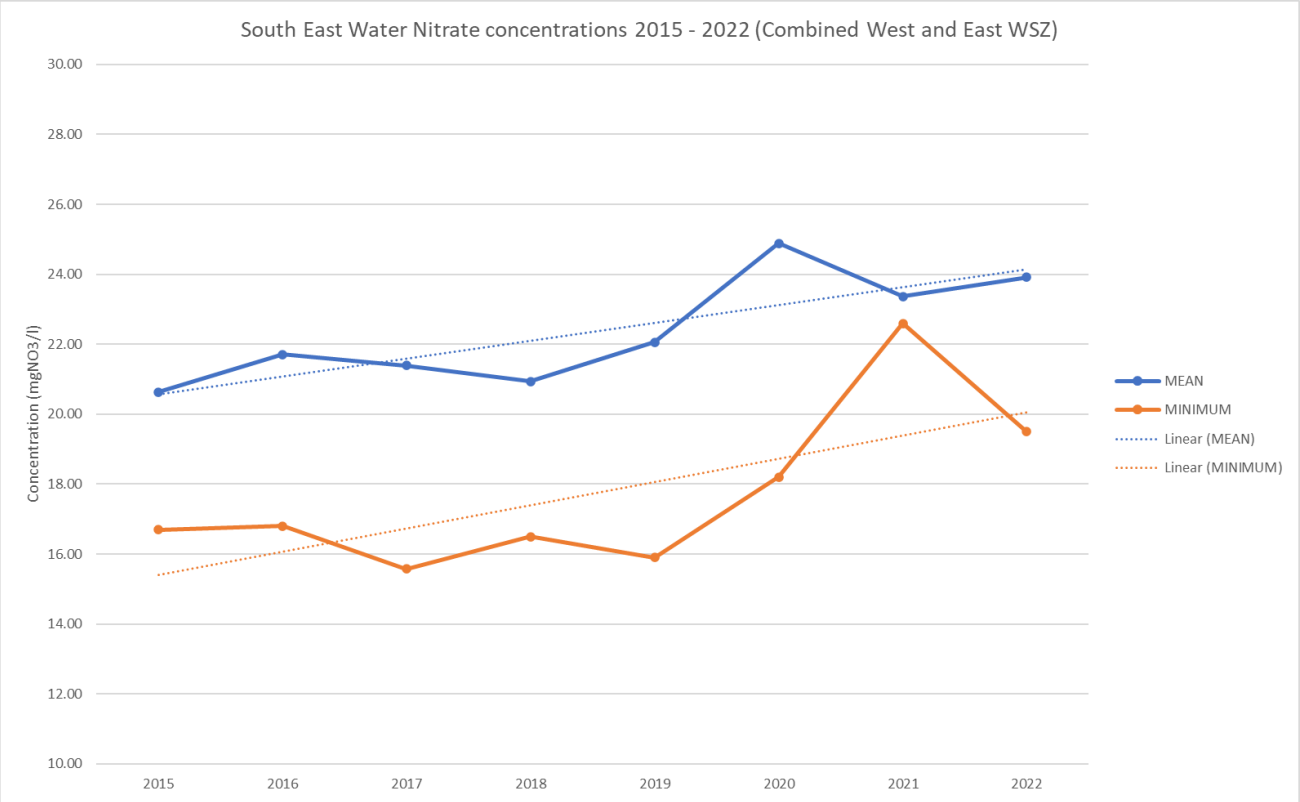


Figure 5 – South East Water Nitrate concentrations 2015 – 2022

4.31 The length of records provided by SEW are significant (8 years) and records are consistent. Mean and minimum records rise and fall over the 8 year period but there does appear to be a general upward trend in concentrations over the time period. The mean concentration in the most recent years' worth of data is around 24 mg/l as NO_3 with a minimum recorded value in that year of 19.50 mg/l as NO_3.

4.32 It is therefore considered sufficiently precautionary to use the average of the annual mean concentrations in the analysis, which equates to 22.36 mg/l as NO_3.

4.33 Nitrate consists of one part Nitrogen (molecular mass of 14) and three parts Oxygen (molecular mass of 16) and therefore Nitrogen makes up 22.6% of the Nitrate ion (molecular mass of 62). The Nitrogen component of Nitrate which would potentially be saved by reducing water consumption therefore equates to 5 mg/l as N.

Nutrient reductions from Nitrogen 'At source'

4.34 Based on a saving of 27 l/p/d, and a Nitrogen component in drinking water of 5 mg/l this 'Nitrogen at source' mitigation measure could result in a total Nitrogen saving of 354 kg from retrofitting 3,000 properties with the Cenergist flow control device.

4.35 All new properties will have different Nitrogen budget requirements to offset, hence expressing the capacity/value of the scheme in terms of 'kg' but based on the typical nutrient budget range in Ashford (1.3 – 3.4 kg/dwelling) a credit bank of 354 kg would equate to offsetting between 104 – 272 new dwellings.

5 SUMMARY

5.1 ABC have adopted occupancy rates for different types of qualifying development, as follows[16]:

Average occupancy rates by property type

Accommodation type	Population (per bedroom)	Population (per unit)
Dwelling - house		2.4
Dwelling - flat		1.75
Holiday Let		2.4
C2 / Care home	1.75	
Hotel / B&B	1.75	
House of Multiple Occupation (HMO)	1.75	

Table 3 - ABC Average occupancy rates by property type

5.2 Table 4 provides the nutrient reductions for TP and TN pre- and post-2030 in kg per property retrofitted with a Cenergist Control Flow device per year.

	Total Phosphorus (TP)		Total Nitrogen (TN)	
	Kg/property/year			
	Pre 2030	Post 2030	Pre 2030	Post 2030
Flat (Occupancy 1.75)	0.01	0.00	0.09	0.16
House (Occupancy 2.4)	0.01	0.01	0.12	0.21

Table 4 - Nutrient reductions from retrofitting Control Flow in kg/property/year

5.3 The TN reduction increases post 2030 due to the change in methodology. Pre 2030 it is only possible to deduct the TN loading through the savings realised from lower water consumption and less abstraction of groundwater which contains TN. This is because there is no known treatment removal of TN at WwTWs. Humans add TN to the TN already present in the potable water and post 2030 WwTWs will have to actively remove TN in wastewater through the treatment process to achieve the permit limit of 10mg/l. More TN loading will be removed post 2030 through the treatment process than through lower consumption of potable water only pre 2030.

[16] https://www.ashford.gov.uk/nutrient-neutrality-developer-information

6 CONCLUSIONS

6.1 It has been shown that there is a robust mechanism for the retrofitting of existing qualifying properties with Control Flow devices to reduce water consumption at a rate of 27l/p/d which will reduce nutrients reaching Stodmarsh for both TN and TP, in the short term (2025 – 2030) and the long term (post 2030).

6.2 In the short term TP reductions will be achieved for qualifying properties which connect to WwTWs at Ashford (Bybrook), Charing, Lenham and Sellindge based on discharge permit limits. In addition, TN reductions can be achieved through the reduction in groundwater abstracted which contains TN.

6.3 Post 2030, TP and TN reductions can be achieved at Ashford (Bybrook), Charing, Lenham, Sellindge, and Wye based on permit limits. As these WwTW will be actively treating the wastewater to reduce TN, the 'Nitrogen at source' mechanism is no longer sufficiently robust and TN reductions will be based on permit limits.

APPENDIX A – CENERGIST REPORT ON PILOT STUDIES

Cenergist

UK | INDIA | SPAIN | NETHERLANDS

Your Water Efficiency Partner



Control Flow HL2024

Crawley Borough Council

Our Company

Cenergist is a specialist water and energy services specialist and are pleased to continue to support our UK Water Company Partners in achieving their ambitious water efficiency goals.

Part of the Eneraqua Technologies plc group, we currently work with 7 UK water companies, helping them meet their water efficiency goals in both domestic and commercial buildings. Through our own patented water saving technologies, we can deliver PCC savings of up to 22% in domestic properties and 30% in commercial premises.

On average we improve some 30,000 homes and buildings each year with a current CSAT rating of 99% across all of our programmes of work. The high levels of customer satisfaction are due to the quality ethos embedded within the company – our employees treat each home as if it were their own. Householders and commercial building managers recognise this commitment to quality and the respect shown to their property.

Control Flow HL2024 are our family of patent protected products that provide unmatched performance in terms of pressure-independent flow control. With the ability to be installed at various points within the property, Control Flow HL2024 eliminates flow variations caused by pressure fluctuations in the supply system. By providing a controlled and steady flow with variations of less than 2%, Control Flow HL2024 provides a great experience for householders with:

- Customer satisfaction rates in excess of 99%
- Reduction in water consumption of up to 75 litres per day or PCC of 23%
- Total water and energy bill savings of up to £350 a year based on metered data
- Legionella safe – Control Flow HL2024 does not increase the risk of legionella or require any specialist legionella treatment

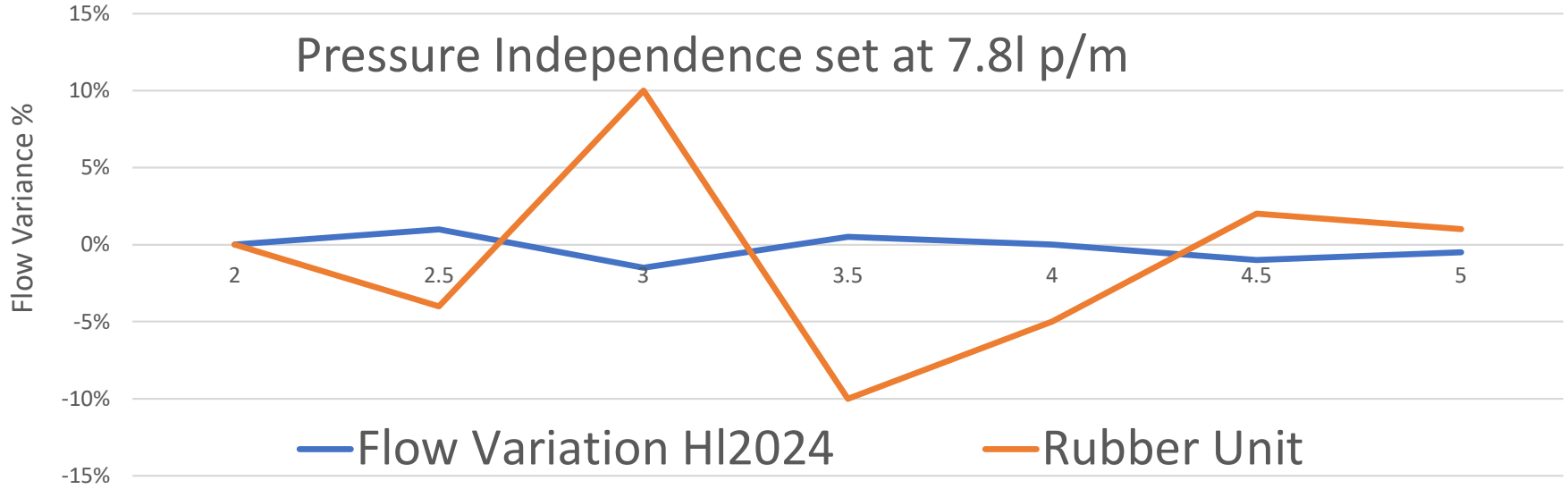
The benefits of the product are being recognised across the sector. In addition, Control Flow HL2024 is also being adopted by local authorities seeking to achieve water neutrality for new build developments.

Control Flow HL2024

Control Flow HL2024 is a pressure independent flow controller that can be set at varying flow rates, the lowest being 5 litres per minute, and the highest being 23.4 litres per minute. For higher, measured water savings, we would recommend installing the Control Flow inline at either 10, 12.8 or 15.6 litres per minute within each home, either at the cold- water inlet or within the meter chamber (if they have a meter), depending on occupancy. The homeowner will notice no difference to their water usage, and as such, we have a 99% customer satisfaction rating across all our projects.

Traditional flow controllers often claim pressure independence. However, this is often incorrect and used to paper over the cracks of poor response times; up to 10% variance in flow rate and a short life span. A common issue with flow controllers that utilise rubber parts is the degrading and ultimately destruction of the unit over a short period. In addition, they are often easily removed by the homeowner, negating any long- term water savings.

Control Flow HL2024 is designed using high grade materials, offering a high level of durability and superior flow regulation that other products do not. As such, the Control Flow technology will offer lifetime savings of 10 years or more.



Control Flow Meter Save

Control Flow MeterSave is a water saving device that can be installed in the meter chamber of each home as a retrofit measure or as part of a new install/repair programme. This is an ideal way to control water consumption within the home and maximise water savings to achieve AMP delivery targets.

Control Flow MeterSave can be included in a wide range of water company programmes as a supply only product too, such as existing water efficiency projects, metering/smart metering programmes and developer services projects.



Why Control Flow HL2024 is better than other products:

- Only flow controller to be approved as pressure independent by KIWA the water testing institute
- Measured saving of 75 litres per property on average
- Proven PCC saving of 23%
- Can easily be installed as retrofit, not just part of newbuild programme.
- Highly engineered and designed product with a lifetime of 10 years or more.
- Pressure independence and reduction relieves demand on network.

Control Flow HL2024- 3P Inline



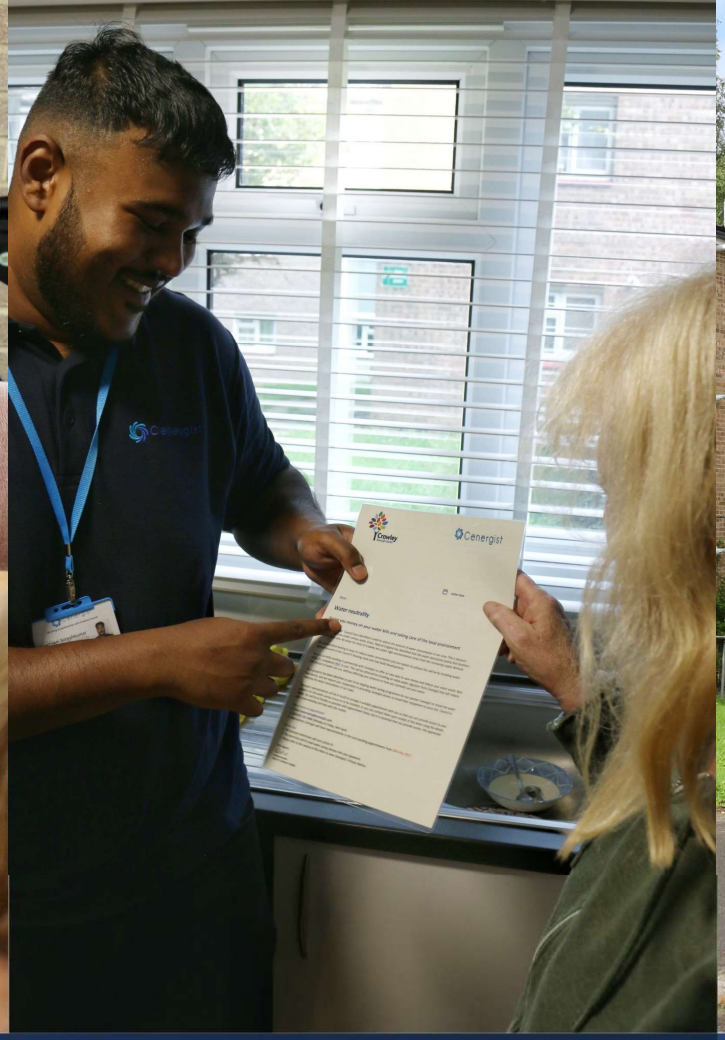
Fitted into the piping, the Control Flow 3P Inline is optimally suitable to control flows into specified areas of any water system. As such it ensures system stabilisation, optimal user comfort and water savings. The product is installed inline, negating the risk of the customer removing it and last 10 years- much longer than the traditional water saving products.

It can be set at a flow rate from 5-23.4 litres per minute. Before installing, we will always check flow rates and occupancy levels.

Across all of our projects so far, average measured savings are sat at 70 litres of water per property, per day. The PCC reduction is currently 23% on average.

The average household gas consumption reduction is measured at £195.50 per annum.







Crawley Borough Council

Pilot – Final Report

How we carried out the study with Crawley Council



Fairlawn House, Three Bridges

The main requirement of this project was to show the water consumption reduction through the installation of Control Flow HL2024 into Crawley Council properties. This will then support the method of installing the product into wider existing housing stock to allow the development of new build properties to take place without drawing down more precious resource from the existing water network.

To prove the water savings within the identified properties, we delivered the project over a set timeframe to allow for pre- installation consumption meter readings to be taken, a meter reading on the day of install four weeks later, and a final meter reading another four weeks post install.

The customer journey was as follows:

Pre- Installation- Week One:

- Properties were provided by Crawley Council.
- Each householder received a letter from Cenergist outlining the project.
- A Cenergist householder Liaison Officer visited the properties to schedule an installation appointment.
- First water meter readings were obtained.

Installation- Week Four:

- Installations of Control Flow HL2024 complete.
- Second water meter readings were obtained on the day of installation.

Post Installation- Week Eight:

- Third water meter readings were obtained.

Water Saving Results



Cenergist have installed Control Flow products into 100 Crawley Council householdered properties. We obtained pre and post installation consumption data for all installations.

Following our analysis, the pilot has shown a successful water consumption reduction across the 100 homes.

The key outcomes are as follows:

Control Flow HL2024	
No. of properties	100
Average PCC Reduction (L)	30.53
Average Occupancy	2.8
Average Daily Saving (L)	73.07
% Decrease in Consumption	23%

Gas Saving Results



The project was delivered 6th of June – 5th of August. It is assumed that gas usage is from hot water use only. Gas savings are expected to be higher during months where householders will be using their heating as well as hot water.

As part of our savings analysis we gathered gas meter readings at the appointment booking stage (4 weeks pre install), at the point of install and 4 weeks post installation. We used this data to produce the below savings.

The key outcomes are as follows:

Gas	
No. of properties	**95**
Average Daily Saving (Kwh)	7.65
% Decrease in Consumption	49.33%
Financial Saving Per Annum	£195.50

The above financial savings are based on the current £ per Kwh in the UK of £0.07p.

In October 2022 across the UK we will see the current £ per Kwh increase.
With this in mind the Financial Saving Per Annum is also likely to increase.

Long Term Water Industry Savings

Cenergist have installed Control Flow products into water company properties since early 2020. The savings below show the measured savings across each project since that time. The readings are spread across a two year timeframe, proving ongoing measured savings across time, and seasonal variance.

Control Flow HL2024	
Average Pre Consumption (L)	396.34
Average Post Consumption (L)	326.93
Average Pre PCC (L)	199.85
Average Post PCC (L)	166.52
Average PCC Reduction (L)	31.64
Average Occupancy	**2.32**
Average Daily Saving (L)	**69.40**

Long Term Water Industry Savings Validation



"Working with Cenergist has been a real pleasure to date. The whole team are very knowledgeable about their products and fully commit to driving change and reducing water consumption. They have been extremely helpful, flexible and proactive to our approaches, allowing us to make the easy decision of looking at future options within our Demand Management Portfolio to include Cenergist as a supplier to help with our tough demand reduction targets."

"We have worked with them since early 2020 by installing products into 3000 homes, and through meter read analysis, pre and post product installation, we have seen steady average measured savings of 69 litres per day across that time period to the present day. We're really pleased about the consistent savings even across the different seasons,"

- Steve Johnston of Affinity Water

Customer Satisfaction

Across our installs, following the completion of the pilot, we received feedback from every customer who received an install. Our customer satisfaction feedback shows an average rating of **4.88**. We revisit each customer around 2-4 weeks post install to retrieve feedback. We ask about; impact on usage and the customers main feedback has been they don't notice any difference following the installation of Control Flow HL2024.



Householder Quotes

85 The Birches, RH10 1RU

"Great service, hoping this will save me money" 5/5

2 Fairlawn House, RH10 1EL

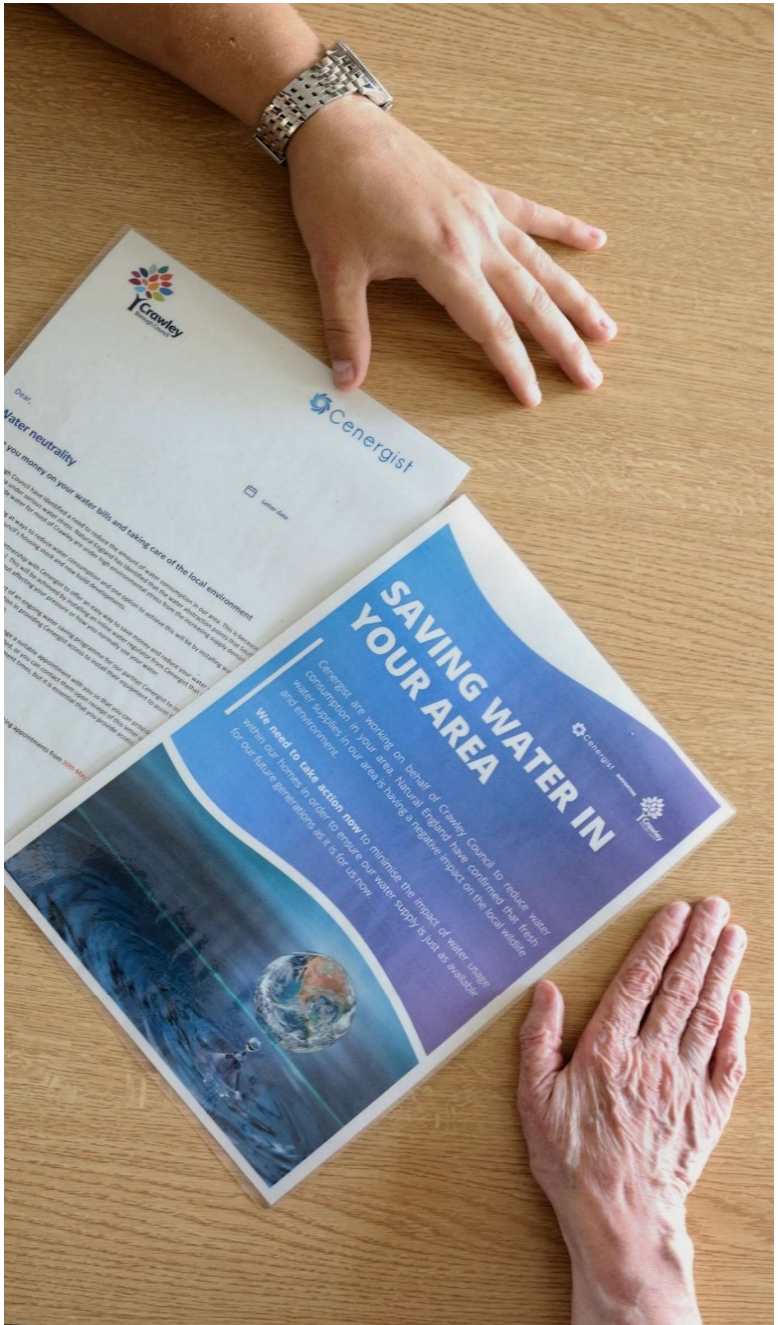
"No issues with install, really happy with Marc and the team very friendly" 5/5

87 The Birches, RH10 1RU

"Excellent. thank you for the service". 5/5

Customer Satisfaction Rating 1-5	Satisfaction Score %
4.88	99%

Conclusion



- The average daily saving show 73.07 litres per property per day
- Average PCC reduction of 30.53 litres
- Annual gas saving for householders is £195.50.
- Long term savings from wider water industry work sat at 69 litres
- 99% CSAT Score



CONTACT US

enquiries@cenergist.com

+ 44 (0) 191 261 0406

www.cenergist.com

7, Bede House, Glover Industrial Estate, Tower Road, Washington NE37 2SH

Driving Sustainable Change: Natural England Validates Control Flow's Impact.

Case Study

Posted 19/3/2024

Read Time 0 mins

This blog delves into the validation by Natural England, confirming Control Flow's substantial impact on water conservation. With an average saving of 27 litres per person per property, Control Flow installations emerge as a potent force in driving sustainable change. Through innovative technology and strategic partnerships, Control Flow empowers individuals and communities to make a tangible difference in water usage. Natural England's endorsement underscores the effectiveness of Control Flow in achieving measurable results, further solidifying its position as a leader in environmental preservation.

At Control Flow, our commitment to water conservation extends beyond mere rhetoric; it's ingrained in our very DNA. Natural England's confirmation sheds light on a pivotal aspect of our mission at Control Flow: driving sustainable change through water conservation. With their validation, we're thrilled to announce an average saving of 27 litres per person per property for every Control Flow installation.

APPENDIX B – SOUTH EAST WATER WATER QUALITY DATA

south east water

EAST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2015

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	7	0	0.27	0.27	0.27	No Limit	µg/l
1,2-Dichloroethane	7	0	0.03	0.03	0.03	3	µg/l
2,4,5-T	7	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	7	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	9	0	0.01	0.01	0.00	0.03	µg/l
Aluminium	7	0	4.40	4.40	4.40	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	16	0	0.03	0.02	0.01	0.5	mg NH4/l
Antimony	7	0	0.34	0.15	0.08	5	µg Sb/l
Arsenic	7	0	1.00	0.39	0.10	10	µg As/l
Atrazine	7	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	7	0	0.01	0.01	0.00	0.1	µg/l
Benzene	7	0	0.02	0.02	0.02	1	µg/l
Benzo[11,12]fluoranthene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	7	0	0.00	0.00	0.00	0.01	µg/l
Boron	7	0	0.03	0.03	0.03	1	mg B/l
Bromate	7	0	0.40	0.31	0.10	10	µg BrO3/l
Bromoxynil	7	0	0.01	0.01	0.01	0.1	µg/l
Cadmium	7	0	0.10	0.08	0.08	5	µg Cd/l
Calcium	7	0	119.70	111.50	107.10	No Limit	mg Ca/l
Carbendazim	7	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	7	0	0.01	0.01	0.01	0.1	µg/l
Chloride	7	0	23.73	22.55	20.47	250	mg Cl/l
Chromium	7	0	0.50	0.50	0.50	50	µg Cr/l
Clostridium perfringens (including spore	7	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	39	0	25.00	1.41	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	39	0	35.00	1.21	0.00	No Abnormal Change	cfu/ml
Colour	37	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	16	0	548.00	523.56	481.00	2,500	µS/cm
Copper	7	0	0.18	0.05	0.02	2	mg Cu/l
Cyanide	7	0	2.00	2.00	2.00	50	µg CN/l
Dibromochloromethane	7	0	0.83	0.61	0.43	100	µg/l
Dicamba	7	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	8	0	0.01	0.00	0.00	0.1	µg/l
Dichlorobromomethane	7	0	0.20	0.15	0.10	100	µg/l
Dichlorprop	7	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	8	0	0.01	0.00	0.00	0.03	µg/l
Diuron	7	0	0.01	0.01	0.01	0.1	µg/l
E coli	110	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	7	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	7	0	0.01	0.01	0.01	0.1	µg/l
Fluoride	7	0	0.12	0.11	0.09	1.5	mg F/l
Fluroxypyr	7	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	7	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.00	0.1	µg/l
Heptachlor	8	0	0.01	0.01	0.00	0.03	µg/l
Heptachlor Epoxide	8	0	0.01	0.01	0.01	0.03	µg/l
Hydrogen Ion (pH)	16	0	7.50	7.38	7.20	10	pH_unit
Indeno(1,2,3-cd)Pyrene	7	0	0.00	0.00	0.00	0.1	µg/l

south east water

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Iron	7	0	15.30	7.76	6.50	200	µg Fe/l
Isoproturon	7	0	0.01	0.01	0.01	0.1	µg/l
Lead	7	0	6.70	1.67	0.70	10	µg Pb/l
Linuron	7	0	0.01	0.01	0.01	0.1	µg/l
Magnesium	7	0	2.60	2.46	2.30	No Limit	mg Mg/l
Manganese	7	0	1.20	1.20	1.20	50	µg Mn/l
MCPA	7	0	0.01	0.01	0.01	0.1	µg/l
MCPB	7	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	7	0	0.01	0.01	0.01	0.1	µg/l
Mercury	7	0	0.02	0.02	0.02	1	µg Hg/l
Nickel	7	0	1.00	0.83	0.80	20	µg Ni/l
Nitrate	7	0	23.20	22.84	21.90	50	mg NO3/l
Nitrite	7	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	7	0	0.46	0.46	0.44	1	
Odour - Quantitative	19	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	7	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	7	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	7	0	0.01	0.00	0.00	0.5	µg/l
Polycyclic Aromatic Hydrocarbons	7	0	0.00	0.00	0.00	0.1	µg/l
Prometryn	7	0	0.01	0.01	0.01	0.1	µg/l
Propazine	7	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	8	0	0.01	0.01	0.00	0.1	µg/l
Residual Disinfectant - Free	110	0	0.51	0.21	0.05	No Limit	mg/l
Residual Disinfectant - Total	110	0	0.61	0.26	0.05	No Limit	mg/l
Selenium	7	0	1.00	0.67	0.30	10	µg Se/l
Simazine	7	0	0.01	0.01	0.01	0.1	µg/l
Sodium	7	0	13.70	11.66	10.50	200	mg Na/l
Sulphate	7	0	14.70	13.10	11.40	250	mg SO4/l
Taste - Quantitative	19	0	0.00	0.00	0.00	1	
Terbutryn	7	0	0.01	0.01	0.01	0.1	µg/l
Tetrachloroethene	7	0	0.06	0.06	0.06	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	7	0	0.00	0.00	0.00	10	µg/l
Total coliforms	110	0	0.00	0.00	0.00	0	mpn/100ml
Total Organic Carbon	7	0	1.20	0.74	0.50	No Abnormal Change	mg C/l
Total Trihalomethanes	7	0	2.80	2.16	1.60	100	µg/l
Tri-allate	8	0	0.01	0.01	0.00	0.1	µg/l
Tribromomethane	7	0	1.61	1.19	0.90	100	µg/l
Trichloroethene	7	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	7	0	0.23	0.21	0.19	100	µg/l
Triclopyr	7	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	7	0	0.01	0.01	0.01	0.1	µg/l
Turbidity	37	0	0.14	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2000.

south east water

EAST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2016

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	7	0	0.27	0.19	0.18	No Limit	µg/l
1,2-Dichloroethane	7	0	0.04	0.04	0.03	3	µg/l
2,4,5-T	7	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	7	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Aluminium	7	0	5.00	4.74	4.40	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	18	0	0.03	0.03	0.03	0.5	mg NH4/l
Antimony	7	0	0.05	0.05	0.05	5	µg Sb/l
Arsenic	7	0	0.50	0.50	0.50	10	µg As/l
Atrazine	7	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	7	0	0.01	0.01	0.01	0.1	µg/l
Benzene	7	0	0.02	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	7	0	0.00	0.00	0.00	0.01	µg/l
Boron	7	0	0.05	0.05	0.03	1	mg B/l
Bromate	7	0	0.40	0.40	0.40	10	µg BrO3/l
Bromoxynil	7	0	0.01	0.01	0.01	0.1	µg/l
Cadmium	7	0	0.08	0.07	0.06	5	µg Cd/l
Calcium	7	0	114.00	95.66	3.90	No Limit	mg Ca/l
Carbendazim	7	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	7	0	0.01	0.01	0.01	0.1	µg/l
Chloride	7	0	24.17	22.90	19.66	250	mg Cl/l
Chromium	7	0	0.50	0.43	0.30	50	µg Cr/l
Clostridium perfringens (including spore	7	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	121	0	162.00	2.60	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	121	0	144.00	2.26	0.00	No Abnormal Change	cfu/ml
Colour	35	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	35	0	553.00	508.17	451.00	2,500	µS/cm
Copper	7	0	0.46	0.11	0.01	2	mg Cu/l
Cyanide	7	0	2.00	2.00	2.00	50	µg CN/l
Dibromochloromethane	7	0	1.40	0.88	0.56	100	µg/l
Dicamba	7	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	9	0	0.01	0.01	0.01	0.1	µg/l
Dichlorobromomethane	7	0	0.75	0.30	0.14	100	µg/l
Dichlorprop	7	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	9	0	0.01	0.01	0.01	0.03	µg/l
Diuron	7	0	0.01	0.01	0.01	0.1	µg/l
E coli	121	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	9	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	7	0	0.01	0.01	0.01	0.1	µg/l
Fluoride	7	0	0.09	0.09	0.07	1.5	mg F/l
Fluroxypyr	7	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	7	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	9	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	9	0	0.02	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	9	0	0.01	0.01	0.01	0.03	µg/l
Hydrogen Ion (pH)	35	0	7.60	7.29	7.20	10	pH_unit
Indeno(1,2,3-cd)Pyrene	7	0	0.00	0.00	0.00	0.1	µg/l

south east water

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Iron	7	0	9.60	6.39	3.00	200	µg Fe/l
Isoproturon	7	0	0.01	0.01	0.01	0.1	µg/l
Lead	7	0	1.90	0.91	0.50	10	µg Pb/l
Linuron	7	0	0.01	0.01	0.01	0.1	µg/l
Magnesium	7	0	9.90	3.19	0.50	No Limit	mg Mg/l
Manganese	7	0	1.20	0.94	0.90	50	µg Mn/l
MCPA	7	0	0.01	0.01	0.01	0.1	µg/l
MCPB	7	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	7	0	0.01	0.01	0.01	0.1	µg/l
Mercury	7	0	0.02	0.02	0.02	1	µg Hg/l
Nickel	7	0	1.40	0.77	0.30	20	µg Ni/l
Nitrate	7	0	25.40	23.83	22.10	50	mg NO3/l
Nitrite	7	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	7	0	0.51	0.48	0.44	1	
Odour - Quantitative	35	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	7	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	7	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	8	0	0.02	0.00	0.00	0.5	µg/l
Polycyclic Aromatic Hydrocarbons	7	0	0.00	0.00	0.00	0.1	µg/l
Prometryn	7	0	0.01	0.01	0.01	0.1	µg/l
Propazine	7	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	9	0	0.01	0.01	0.01	0.1	µg/l
Residual Disinfectant - Free	121	0	0.54	0.26	0.05	No Limit	mg/l
Residual Disinfectant - Total	121	0	0.63	0.34	0.05	No Limit	mg/l
Selenium	7	0	1.24	0.80	0.53	10	µg Se/l
Simazine	7	0	0.01	0.01	0.01	0.1	µg/l
Sodium	7	0	138.50	28.66	9.50	200	mg Na/l
Sulphate	7	0	14.90	13.11	10.50	250	mg SO4/l
Taste - Quantitative	35	0	0.00	0.00	0.00	1	
Terbutryn	7	0	0.01	0.01	0.01	0.1	µg/l
Tetrachloroethene	7	0	0.06	0.05	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	7	0	0.00	0.00	0.00	10	µg/l
Total coliforms	121	0	0.00	0.00	0.00	0	mpn/100ml
Total Organic Carbon	7	0	1.70	1.00	0.50	No Abnormal Change	mg C/l
Total Trihalomethanes	7	0	5.40	2.93	1.90	100	µg/l
Tri-allate	9	0	0.01	0.01	0.01	0.1	µg/l
Tribromomethane	7	0	2.05	1.37	0.98	100	µg/l
Trichloroethene	7	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	7	0	1.15	0.36	0.18	100	µg/l
Triclopyr	7	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	7	0	0.01	0.01	0.01	0.1	µg/l
Turbidity	36	0	0.10	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2016.

south east water

EAST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2017

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	8	0	0.18	0.18	0.18	No Limit	µg/l
1,2-Dichloroethane	8	0	0.04	0.04	0.04	3	µg/l
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Aluminium	8	0	5.00	5.00	5.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	18	0	0.07	0.04	0.03	0.5	mg NH4/l
Antimony	8	0	0.05	0.05	0.05	5	µg Sb/l
Arsenic	8	0	0.50	0.50	0.50	10	µg As/l
Atrazine	8	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg/l
Benzene	8	0	0.01	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg/l
Boron	8	0	0.05	0.05	0.05	1	mg B/l
Bromate	8	0	0.40	0.40	0.40	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Cadmium	8	0	0.06	0.06	0.06	5	µg Cd/l
Calcium	8	0	112.70	110.19	107.90	No Limit	mg Ca/l
Carbendazim	8	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	8	0	0.01	0.01	0.01	0.1	µg/l
Chloride	8	0	26.45	24.25	22.59	250	mg Cl/l
Chromium	8	0	0.40	0.33	0.30	50	µg Cr/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	36	0	17.00	0.72	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	36	0	15.00	0.81	0.00	No Abnormal Change	cfu/ml
Colour	36	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	36	0	574.00	537.97	499.00	2,500	µS/cm
Copper	8	0	0.05	0.03	0.01	2	mg Cu/l
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dibromochloromethane	8	0	2.10	1.16	0.80	100	µg/l
Dicamba	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlorobromomethane	8	0	0.75	0.35	0.22	100	µg/l
Dichlorprop	8	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Diuron	8	0	0.01	0.01	0.01	0.1	µg/l
E coli	120	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	8	0	0.01	0.01	0.01	0.1	µg/l
Fluoride	8	0	0.11	0.10	0.09	1.5	mg F/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	8	0	0.01	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	8	0	0.01	0.01	0.01	0.03	µg/l
Hydrogen Ion (pH)	36	0	8.20	7.50	7.20	10	pH_unit
Indeno(1,2,3-cd)Pyrene	8	0	0.00	0.00	0.00	0.1	µg/l

south east water

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Iron	8	0	9.00	5.04	3.00	200	µg Fe/l
Isoproturon	8	0	0.01	0.01	0.01	0.1	µg/l
Lead	8	0	2.20	0.98	0.50	10	µg Pb/l
Linuron	8	0	0.01	0.01	0.01	0.1	µg/l
Magnesium	8	0	2.90	2.59	2.30	No Limit	mg Mg/l
Manganese	8	0	0.90	0.90	0.90	50	µg Mn/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.02	0.02	0.02	1	µg Hg/l
Nickel	8	0	0.60	0.43	0.30	20	µg Ni/l
Nitrate	8	0	29.10	24.68	22.90	50	mg NO3/l
Nitrite	8	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	8	0	0.58	0.49	0.46	1	
Odour - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	8	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	8	0	0.01	0.00	0.00	0.5	µg/l
Polycyclic Aromatic Hydrocarbons	8	0	0.00	0.00	0.00	0.1	µg/l
Prometryn	8	0	0.01	0.01	0.01	0.1	µg/l
Propazine	8	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	8	0	0.01	0.01	0.01	0.1	µg/l
Residual Disinfectant - Free	120	0	0.48	0.27	0.09	No Limit	mg/l
Residual Disinfectant - Total	120	0	0.54	0.32	0.13	No Limit	mg/l
Selenium	8	0	0.82	0.61	0.33	10	µg Se/l
Simazine	8	0	0.01	0.01	0.01	0.1	µg/l
Sodium	8	0	12.90	10.99	9.60	200	mg Na/l
Sulphate	8	0	14.40	12.94	11.20	250	mg SO4/l
Taste - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Terbutryn	8	0	0.01	0.01	0.01	0.1	µg/l
Tetrachloroethene	8	0	0.05	0.05	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	8	0	0.00	0.00	0.00	10	µg/l
Total coliforms	120	0	0.00	0.00	0.00	0	mpn/100ml
Total Organic Carbon	8	0	3.50	0.88	0.50	No Abnormal Change	mg C/l
Total Trihalomethanes	8	0	5.50	3.39	2.40	100	µg/l
Tri-allate	8	0	0.01	0.01	0.01	0.1	µg/l
Tribromomethane	8	0	2.23	1.63	1.15	100	µg/l
Trichloroethene	8	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	8	0	0.43	0.26	0.15	100	µg/l
Triclopyr	8	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	8	0	0.01	0.01	0.01	0.1	µg/l
Turbidity	36	0	0.14	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2016.

south east water

EAST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2018

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	9	0	0.18	0.18	0.18	No Limit	µg/l
1,2-Dichloroethane	9	0	0.04	0.04	0.04	3	µg/l
2,4,5-T	9	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	9	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	9	0	0.01	0.01	0.01	0.03	µg/l
Aluminium	8	0	10.30	5.66	5.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	27	0	0.04	0.04	0.04	0.5	mg NH4/l
Antimony	9	0	0.10	0.10	0.10	5	µg Sb/l
Arsenic	9	0	0.50	0.50	0.50	10	µg As/l
Atrazine	9	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	9	0	0.01	0.01	0.01	0.1	µg/l
Benzene	9	0	0.01	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	9	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	9	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	9	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	11	0	0.00	0.00	0.00	0.01	µg/l
Boron	9	0	0.05	0.05	0.05	1	mg B/l
Bromate	9	0	0.90	0.47	0.40	10	µg BrO3/l
Bromoxynil	9	0	0.01	0.01	0.01	0.1	µg/l
Cadmium	8	0	0.06	0.06	0.06	5	µg Cd/l
Calcium	9	0	113.70	111.90	109.90	No Limit	mg Ca/l
Carbendazim	9	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	9	0	0.01	0.01	0.01	0.1	µg/l
Chloride	9	0	26.07	24.45	22.93	250	mg Cl/l
Chromium	8	0	1.60	0.53	0.30	50	µg Cr/l
Clostridium perfringens (including spore	9	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	40	0	74.00	3.30	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	40	0	55.00	3.30	0.00	No Abnormal Change	cfu/ml
Colour	26	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	37	0	587.00	535.89	483.00	2,500	µS/cm
Copper	9	0	0.17	0.06	0.02	2	mg Cu/l
Cyanide	9	0	2.00	2.00	2.00	50	µg CN/l
Dibromochloromethane	9	0	1.55	0.87	0.54	100	µg/l
Dicamba	9	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	10	0	0.01	0.01	0.01	0.1	µg/l
Dichlorobromomethane	9	0	0.68	0.30	0.18	100	µg/l
Dichlorprop	9	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	10	0	0.01	0.01	0.01	0.03	µg/l
Diuron	9	0	0.01	0.01	0.01	0.1	µg/l
E coli	123	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	9	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	9	0	0.01	0.01	0.01	0.1	µg/l
Fluoride	9	0	0.13	0.11	0.09	1.5	mg F/l
Fluroxypyr	9	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	9	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	10	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	10	0	0.01	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	10	0	0.01	0.01	0.01	0.03	µg/l
Hydrogen Ion (pH)	37	0	7.60	7.36	7.20	9.5	pH_unit
Indeno(1,2,3-cd)Pyrene	9	0	0.00	0.00	0.00	0.1	µg/l

south east water

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Iron	8	0	5.60	3.86	3.00	200	µg Fe/l
Isoproturon	9	0	0.01	0.01	0.01	0.1	µg/l
Lead	9	0	1.20	0.82	0.50	10	µg Pb/l
Linuron	9	0	0.01	0.01	0.01	0.1	µg/l
Magnesium	9	0	3.20	2.58	2.30	No Limit	mg Mg/l
Manganese	8	0	0.90	0.90	0.90	50	µg Mn/l
MCPA	9	0	0.01	0.01	0.01	0.1	µg/l
MCPB	9	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	9	0	0.01	0.01	0.01	0.1	µg/l
Mercury	9	0	0.02	0.02	0.02	1	µg Hg/l
Nickel	9	0	1.00	0.62	0.40	20	µg Ni/l
Nitrate	9	0	29.10	23.28	18.30	50	mg NO3/l
Nitrite	9	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	9	0	0.58	0.47	0.37	1	
Odour - Quantitative	28	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	9	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	9	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	10	0	0.00	0.00	0.00	0.5	µg/l
Polycyclic Aromatic Hydrocarbons	9	0	0.00	0.00	0.00	0.1	µg/l
Prometryn	9	0	0.01	0.01	0.01	0.1	µg/l
Propazine	9	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	10	0	0.01	0.01	0.01	0.1	µg/l
Residual Disinfectant - Free	123	0	0.68	0.31	0.07	No Limit	mg/l
Residual Disinfectant - Total	123	0	0.71	0.35	0.11	No Limit	mg/l
Selenium	9	0	0.70	0.53	0.40	10	µg Se/l
Simazine	9	0	0.01	0.01	0.01	0.1	µg/l
Sodium	9	0	12.00	11.38	10.40	200	mg Na/l
Sulphate	9	0	19.40	13.26	11.80	250	mg SO4/l
Taste - Quantitative	28	0	0.00	0.00	0.00	1	Dil No
Terbutryn	9	0	0.01	0.01	0.01	0.1	µg/l
Tetrachloroethene	9	0	0.05	0.05	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	9	0	0.00	0.00	0.00	10	µg/l
Total coliforms	123	0	0.00	0.00	0.00	0	mpn/100ml
Total Organic Carbon	9	0	0.50	0.50	0.50	No Abnormal Change	mg C/l
Total Trihalomethanes	9	0	4.80	2.82	1.70	100	µg/l
Tri-allate	10	0	0.01	0.01	0.01	0.1	µg/l
Tribromomethane	9	0	2.20	1.41	0.79	100	µg/l
Trichloroethene	9	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	9	0	0.32	0.23	0.17	100	µg/l
Triclopyr	9	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	9	0	0.01	0.01	0.01	0.1	µg/l
Turbidity	27	0	0.23	0.11	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water

EAST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2019

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	9	0	0.18	0.18	0.18	No Limit	µg/l
1,2-Dichloroethane	8	0	0.04	0.04	0.04	3	µg/l
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Aluminium	8	0	5.00	5.00	5.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	35	0	0.04	0.04	0.04	0.5	mg NH4/l
Antimony	8	0	0.10	0.10	0.10	5	µg Sb/l
Arsenic	8	0	0.50	0.50	0.50	10	µg As/l
Atrazine	8	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg/l
Benzene	8	0	0.01	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg/l
Boron	8	0	0.05	0.05	0.05	1	mg B/l
Bromate	8	0	0.40	0.40	0.40	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Cadmium	8	0	0.06	0.06	0.06	5	µg Cd/l
Calcium	7	0	118.40	96.89	1.00	No Limit	mg Ca/l
Carbendazim	8	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	8	0	0.01	0.01	0.01	0.1	µg/l
Chloride	8	0	51.60	27.26	22.67	250	mg Cl/l
Chromium	8	0	0.90	0.56	0.30	50	µg Cr/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	35	0	300.00	8.83	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	35	0	28.00	1.17	0.00	No Abnormal Change	cfu/ml
Colour	35	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	35	0	664.00	541.29	488.00	2,500	µS/cm
Copper	8	0	0.24	0.07	0.01	2	mg Cu/l
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dibromochloromethane	8	0	2.48	1.17	0.64	100	µg/l
Dicamba	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlorobromomethane	8	0	1.33	0.42	0.19	100	µg/l
Dichlorprop	8	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Diuron	8	0	0.01	0.01	0.01	0.1	µg/l
E coli	119	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	8	0	0.01	0.01	0.01	0.1	µg/l
Fluoride	8	0	0.12	0.11	0.09	1.5	mg F/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	8	0	0.01	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	8	0	0.01	0.01	0.00	0.03	µg/l
Hydrogen Ion (pH)	35	0	7.80	7.27	7.10	9.5	pH_unit
Indeno(1,2,3-cd)Pyrene	8	0	0.00	0.00	0.00	0.1	µg/l

south east water

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Iron	8	0	6.90	4.63	3.00	200	µg Fe/l
Isoproturon	8	0	0.01	0.01	0.01	0.1	µg/l
Lead	8	0	2.70	1.06	0.50	10	µg Pb/l
Linuron	8	0	0.01	0.01	0.01	0.1	µg/l
Magnesium	7	0	8.90	3.09	0.50	No Limit	mg Mg/l
Manganese	8	0	0.90	0.90	0.90	50	µg Mn/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.02	0.02	0.02	1	µg Hg/l
Nickel	8	0	1.10	0.59	0.30	20	µg Ni/l
Nitrate	8	0	29.00	21.44	2.00	50	mg NO3/l
Nitrite	8	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	8	0	0.58	0.42	0.00	1	
Odour - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	8	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	8	0	0.00	0.00	0.00	0.5	µg/l
Polycyclic Aromatic Hydrocarbons	8	0	0.00	0.00	0.00	0.1	µg/l
Prometryn	8	0	0.01	0.01	0.01	0.1	µg/l
Propazine	8	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	8	0	0.01	0.01	0.01	0.1	µg/l
Residual Disinfectant - Free	119	0	0.63	0.31	0.05	No Limit	mg/l
Residual Disinfectant - Total	119	0	0.69	0.37	0.05	No Limit	mg/l
Selenium	8	0	0.70	0.53	0.40	10	µg Se/l
Simazine	8	0	0.01	0.01	0.01	0.1	µg/l
Sodium	8	0	133.90	27.33	10.30	200	mg Na/l
Sulphate	9	0	63.80	18.91	12.40	250	mg SO4/l
Taste - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Terbutryn	8	0	0.01	0.01	0.01	0.1	µg/l
Tetrachloroethene	8	0	0.05	0.05	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	8	0	0.00	0.00	0.00	10	µg/l
Total coliforms	119	0	0.00	0.00	0.00	0	mpn/100ml
Total Organic Carbon	8	0	0.50	0.50	0.50	No Abnormal Change	mg C/l
Total Trihalomethanes	8	0	6.20	3.45	1.80	100	µg/l
Tri-allate	8	0	0.01	0.01	0.00	0.1	µg/l
Tribromomethane	8	0	2.17	1.54	0.81	100	µg/l
Trichloroethene	8	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	8	0	0.65	0.31	0.18	100	µg/l
Triclopyr	8	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	8	0	0.01	0.01	0.01	0.1	µg/l
Turbidity	35	0	0.10	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water

EAST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2020

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	8	0	0.60	0.60	0.60	No Limit	µg/l
1,2-Dichloroethane	8	0	0.12	0.12	0.12	3	µg/l
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	9	0	0.01	0.01	0.01	0.03	µg/l
Aluminium	8	0	43.10	11.08	6.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	36	0	0.02	0.02	0.02	0.5	mg NH4/l
Antimony	8	0	0.20	0.20	0.20	5	µg Sb/l
Arsenic	8	0	1.00	1.00	1.00	10	µg As/l
Atrazine	8	0	0.00	0.00	0.00	0.1	µg/l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg/l
Benzene	8	0	0.02	0.02	0.02	1	µg/l
Benzo[11,12]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg/l
Boron	8	0	0.04	0.04	0.04	1	mg B/l
Bromate	8	0	0.80	0.80	0.80	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Cadmium	8	0	0.12	0.12	0.12	5	µg Cd/l
Calcium	8	0	120.40	115.13	111.90	No Limit	mg Ca/l
Carbendazim	8	0	0.00	0.00	0.00	0.1	µg/l
Carbetamide	8	0	0.00	0.00	0.00	0.1	µg/l
Chloride	8	0	32.16	25.81	23.53	250	mg Cl/l
Chromium	8	0	1.60	1.01	0.50	50	µg Cr/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	36	0	3.00	0.22	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	7	0	0.00	0.00	0.00	No Abnormal Change	cfu/ml
Colour	36	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	36	0	620.00	542.75	514.00	2,500	µS/cm
Copper	8	0	0.51	0.18	0.01	2	mg Cu/l
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dibromochloromethane	8	0	2.70	1.40	0.50	100	µg/l
Dicamba	8	0	0.02	0.02	0.02	0.1	µg/l
Dichlobenil	9	0	0.01	0.01	0.01	0.1	µg/l
Dichlorobromomethane	8	0	0.64	0.47	0.43	100	µg/l
Dichlorprop	8	0	0.00	0.00	0.00	0.1	µg/l
Dieldrin	9	0	0.01	0.01	0.01	0.03	µg/l
Diuron	8	0	0.00	0.00	0.00	0.1	µg/l
E coli	117	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	8	0	0.00	0.00	0.00	0.1	µg/l
Fluoride	8	0	0.12	0.10	0.09	1.5	mg F/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.00	0.00	0.00	0.1	µg/l
Gamma-HCH (Lindane)	9	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	9	0	0.01	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	9	0	0.00	0.00	0.00	0.03	µg/l
Hydrogen Ion (pH)	36	0	7.60	7.27	7.00	9.5	pH_unit
Indeno(1,2,3-cd)Pyrene	8	0	0.00	0.00	0.00	0.1	µg/l

south east water

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Iron	8	0	16.50	6.96	4.00	200	µg Fe/l
Isoproturon	8	0	0.00	0.00	0.00	0.1	µg/l
Lead	8	0	1.50	0.93	0.50	10	µg Pb/l
Linuron	8	0	0.00	0.00	0.00	0.1	µg/l
Magnesium	8	0	3.30	2.73	2.50	No Limit	mg Mg/l
Manganese	8	0	2.60	1.81	1.70	50	µg Mn/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.04	0.04	0.04	1	µg Hg/l
Nickel	8	0	2.00	1.15	0.30	20	µg Ni/l
Nitrate	8	0	31.30	26.58	22.20	50	mg NO3/l
Nitrite	8	0	0.00	0.00	0.00	0.5	mg NO2/l
Nitrite/Nitrate formula	8	0	0.63	0.53	0.44	1	
Odour - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	8	0	0.00	0.00	0.00	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	9	0	0.02	0.00	0.00	0.5	µg/l
Polycyclic Aromatic Hydrocarbons	8	0	0.00	0.00	0.00	0.1	µg/l
Prometryn	8	0	0.00	0.00	0.00	0.1	µg/l
Propazine	8	0	0.00	0.00	0.00	0.1	µg/l
Propyzamide	9	0	0.01	0.01	0.01	0.1	µg/l
Residual Disinfectant - Free	117	0	0.58	0.31	0.09	No Limit	mg/l
Residual Disinfectant - Total	117	0	0.65	0.36	0.12	No Limit	mg/l
Selenium	8	0	0.80	0.80	0.80	10	µg Se/l
Simazine	8	0	0.01	0.00	0.00	0.1	µg/l
Sodium	8	0	14.70	12.25	10.40	200	mg Na/l
Sulphate	8	0	19.50	14.50	12.40	250	mg SO4/l
Taste - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Terbutryn	8	0	0.00	0.00	0.00	0.1	µg/l
Tetrachloroethene	8	0	0.15	0.15	0.15	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	8	0	0.00	0.00	0.00	10	µg/l
Total coliforms	117	0	0.00	0.00	0.00	0	mpn/100ml
Total Organic Carbon	8	0	0.90	0.40	0.30	No Abnormal Change	mg C/l
Total Trihalomethanes	8	0	8.00	3.54	0.00	100	µg/l
Tri-allate	9	0	0.01	0.01	0.01	0.1	µg/l
Tribromomethane	8	0	4.68	2.26	0.60	100	µg/l
Trichloroethene	8	0	0.10	0.10	0.10	10	µg/l
Trichloromethane	8	0	0.50	0.50	0.50	100	µg/l
Triclopyr	8	0	0.02	0.02	0.02	0.1	µg/l
Trietazine	8	0	0.00	0.00	0.00	0.1	µg/l
Turbidity	36	0	0.11	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water
scientific services

EAST ASHFORD WATER SUPPLY ZONE

January 1st 2021 to December 31st 2021

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,2-Dichloroethane	9	0	0.12	0.12	0.12	3	µg / l
2,4,5-T	10	0	0.01	0.01	0.01	0.1	µg / l
2,4-D	10	0	0.01	0.01	0.01	0.1	µg / l
Aldrin	9	0	0.01	0.01	0.01	0.03	µg / l
Alkalinity	5	0	337.00	324.00	304.00	No PCV	mg/l
Aluminium	11	0	95.90	14.17	6.00	200	µg / l
Ammonium (Ammonia and Ammonium Ions)	10	0	0.02	0.02	0.02	0.5	mg/l
Antimony	8	0	0.20	0.20	0.20	5	µg / l
Arsenic	8	0	1.00	1.00	1.00	10	µg / l
Atrazine	9	0	0.00	0.00	0.00	0.1	µg / l
Bentazone	10	0	0.01	0.01	0.01	0.1	µg / l
Benzene	8	0	0.02	0.02	0.02	1	µg / l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg / l
Boron	9	0	0.04	0.04	0.04	1	mg/l
Bromate	9	0	0.80	0.80	0.80	10	µg / l
Bromoxynil	10	0	0.01	0.01	0.01	0.1	µg / l
Cadmium	10	0	0.12	0.12	0.12	5	µg / l
Calcium	3	0	111.90	99.83	88.60	No PCV	mg/l
Carbendazim	9	0	0.00	0.00	0.00	0.1	µg / l
Carbetamide	9	0	0.00	0.00	0.00	0.1	µg / l
Chloride	9	0	25.14	24.11	22.62	250	mg/l
Chlortoluron	9	0	0.00	0.00	0.00	0.1	µg / l
Chromium	10	0	2.30	1.04	0.50	50	µg / l
Clostridium perfringens (including spore	9	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3 Days at 22°C	37	0	10.00	0.49	0.00	No Abnormal Change	cfu/ml
Colour	37	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	37	0	617.00	540.05	505.00	2500	uS/cm
Dicamba	10	0	0.02	0.02	0.02	0.1	µg / l
Dichlobenil	9	0	0.01	0.01	0.01	0.1	µg / l
Dichlorprop	10	0	0.00	0.00	0.00	0.1	µg / l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg / l
Diuron	9	0	0.00	0.00	0.00	0.1	µg / l
E coli	120	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	9	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	9	0	0.00	0.00	0.00	0.1	µg / l
First Draw Copper	8	0	0.31	0.06	0.01	2	mg/l
First Draw Lead	8	0	0.90	0.90	0.90	10	µg / l
First Draw Nickel	8	0	2.00	1.06	0.70	20	µg / l
Fluoride	9	0	0.12	0.10	0.07	1.5	mg/l
Fluroxypyr	10	0	0.01	0.01	0.01	0.1	µg / l
Flutriafol	9	0	0.00	0.00	0.00	0.1	µg / l
Gamma-HCH (Lindane)	9	0	0.01	0.01	0.01	0.1	µg / l
Heptachlor	9	0	0.01	0.01	0.01	0.03	µg / l
Heptachlor Epoxide	9	0	0.00	0.00	0.00	0.03	µg / l
Hydrogen Ion (pH)	37	0	7.50	7.28	7.10	range 6.5-9.5	pH_unit
Iron	11	0	6.50	4.92	4.40	200	µg / l
Isoproturon	9	0	0.00	0.00	0.00	0.1	µg / l
Linuron	9	0	0.00	0.00	0.00	0.1	µg / l
Magnesium	3	0	2.50	2.30	2.10	No PCV	mg/l
Manganese	11	0	1.70	1.70	1.70	50	µg / l
MCPA	10	0	0.01	0.01	0.01	0.1	µg / l
MCPB	10	0	0.01	0.01	0.01	0.1	µg / l
Mecoprop (MCPP)	10	0	0.01	0.01	0.01	0.1	µg / l
Mercury	9	0	0.04	0.04	0.04	1	µg / l
Nitrate	10	0	45.20	26.43	22.60	50	mg/l
Nitrite	10	0	0.00	0.00	0.00	0.5	mg/l
Nitrite/Nitrate	10	0	0.90	0.53	0.45	1	mg/l
Odour - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	9	0	0.00	0.00	0.00	0.1	µg / l

south east water
scientific services

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
PAH Total	7	0	0.00	0.00	0.00	0.1	ug/l
Pendimethalin	9	0	0.01	0.01	0.01	0.1	µg / l
Pesticides - Total Substances	9	0	0.02	0.00	0.00	0.5	ug/l
Prometryn	9	0	0.00	0.00	0.00	0.1	µg / l
Propazine	9	0	0.00	0.00	0.00	0.1	µg / l
Propyzamide	9	0	0.01	0.01	0.01	0.1	µg / l
Residual Disinfectant- Free	120	0	0.73	0.33	0.12	No Limit	mg/l
Residual Disinfectant- Total	120	0	0.74	0.38	0.20	No Limit	mg/l
Selenium	8	0	0.80	0.80	0.80	10	µg / l
Simazine	9	0	0.01	0.00	0.00	0.1	µg / l
Sodium	9	0	12.20	10.28	4.70	200	mg/l
Sulphate	9	0	14.90	13.03	12.40	250	mg/l
Taste - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Terbutryn	9	0	0.00	0.00	0.00	0.1	µg / l
Tetrachloroethene/ Trichloroethene- Sum	9	0	0.00	0.00	0.00	10	µg / l
Tetrachloromethane	9	0	0.11	0.11	0.11	100	µg / l
Total Coliforms	120	0	0.00	0.00	0.00	0	mpn/100ml
Total Cyanide	9	0	7.40	3.77	2.00	50	µg / l
Total Hardness	5	0	116.40	111.24	107.20	No PCV	mg/l
Total Organic Carbon	9	0	0.60	0.39	0.30	No Abnormal Change	mg/l
Total Trihalomethanes	9	0	4.08	2.30	0.00	100	µg / l
Tri-allate	9	0	0.01	0.01	0.01	0.1	µg / l
Triclopyr	10	0	0.02	0.02	0.02	0.1	µg / l
Trietazine	9	0	0.00	0.00	0.00	0.1	µg / l
Turbidity	37	0	0.10	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

Component Name	mg/l Ca	mg/l CaCO3	Clark Degrees	French Degrees	German Degrees
Total Hardness	111.24	278.10	19.47	27.81	15.57

south east water
scientific services

EAST ASHFORD WATER SUPPLY ZONE

January 1st 2022 to December 31st 2022

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,2-Dichloroethane	8	0	0.12	0.12	0.12	3	µg / l
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg / l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg / l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg / l
Alkalinity	7	0	333.00	321.14	311.00	No PCV	mg/l
Aluminium	36	0	9.70	6.10	6.00	200	µg / l
Ammonium (Ammonia and Ammonium Ions)	8	0	0.02	0.02	0.02	0.5	mg/l
Antimony	8	0	0.20	0.20	0.20	5	µg / l
Arsenic	8	0	1.00	1.00	1.00	10	µg / l
Atrazine	8	0	0.01	0.00	0.00	0.1	µg / l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg / l
Benzene	8	0	0.02	0.02	0.02	1	µg / l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg / l
Boron	8	0	0.04	0.04	0.04	1	mg/l
Bromate	8	0	0.80	0.80	0.80	10	µg / l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg / l
Cadmium	8	0	0.12	0.12	0.12	5	µg / l
Calcium	4	0	110.90	106.25	99.50	No PCV	mg/l
Carbendazim	8	0	0.00	0.00	0.00	0.1	µg / l
Carbetamide	8	0	0.00	0.00	0.00	0.1	µg / l
Chloride	8	0	31.45	24.98	23.07	250	mg/l
Chlortoluron	8	0	0.01	0.00	0.00	0.1	µg / l
Chromium	8	0	0.90	0.65	0.50	50	µg / l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3 Days at 22°C	36	0	105.00	3.25	0.00	No Abnormal Change	cfu/ml
Colour	36	0	2.00	1.56	1.00	20	mg/l Pt/Co
Conductivity	36	0	626.00	545.72	408.00	2500	uS/cm
Dicamba	8	0	0.02	0.02	0.02	0.1	µg / l
Dichlobenil	8	0	0.01	0.01	0.01	0.1	µg / l
Dichlorprop	8	0	0.00	0.00	0.00	0.1	µg / l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg / l
Diuron	8	0	0.00	0.00	0.00	0.1	µg / l
E coli	120	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	8	0	0.00	0.00	0.00	0.1	µg / l
First Draw Copper	8	0	0.36	0.11	0.01	2	mg/l
First Draw Lead	8	0	2.20	1.11	0.90	10	µg / l
First Draw Nickel	8	0	3.60	1.16	0.70	20	µg / l
Fluoride	8	0	0.13	0.11	0.11	1.5	mg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg / l
Flutriafol	8	0	0.00	0.00	0.00	0.1	µg / l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.01	0.1	µg / l
Heptachlor	8	0	0.01	0.01	0.01	0.03	µg / l
Heptachlor Epoxide	8	0	0.00	0.00	0.00	0.03	µg / l
Hydrogen Ion (pH)	36	0	7.50	7.26	7.10	range 6.5-9.5	pH_unit
Iron	36	0	11.20	7.42	4.70	200	µg / l
Isoproturon	8	0	0.00	0.00	0.00	0.1	µg / l
Linuron	8	0	0.00	0.00	0.00	0.1	µg / l
Magnesium	4	0	3.00	2.55	2.30	No PCV	mg/l
Manganese	36	0	1.70	1.70	1.70	50	µg / l
MCPA	8	0	0.01	0.01	0.01	0.1	µg / l
MCPB	8	0	0.01	0.01	0.01	0.1	µg / l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg / l
Mercury	8	0	0.04	0.04	0.04	1	µg / l
Nitrate	8	0	32.50	24.59	20.80	50	mg/l
Nitrite	8	0	0.00	0.00	0.00	0.5	mg/l
Nitrite/Nitrate	8	0	0.65	0.49	0.42	1	mg/l
Odour - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	8	0	0.00	0.00	0.00	0.1	µg / l

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
PAH Total	8	0	0.00	0.00	0.00	0.1	ug/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg / l
Pesticides - Total Substances	8	0	0.03	0.00	0.00	0.5	ug/l
Prometryn	8	0	0.00	0.00	0.00	0.1	µg / l
Propazine	8	0	0.00	0.00	0.00	0.1	µg / l
Propyzamide	8	0	0.01	0.01	0.01	0.1	µg / l
Residual Disinfectant- Free	120	0	0.69	0.29	0.08	No Limit	mg/l
Residual Disinfectant- Total	120	0	0.89	0.33	0.12	No Limit	mg/l
Selenium	8	0	0.80	0.80	0.80	10	µg / l
Simazine	8	0	0.01	0.00	0.00	0.1	µg / l
Sodium	8	0	13.10	11.58	10.50	200	mg/l
Sulphate	8	0	37.70	15.63	12.10	250	mg/l
Taste - Quantitative	36	0	0.00	0.00	0.00	1	Dil No
Terbutryn	8	0	0.00	0.00	0.00	0.1	µg / l
Tetrachloroethene/ Trichloroethene- Sum	8	0	0.00	0.00	0.00	10	µg / l
Tetrachloromethane	8	0	0.11	0.11	0.11	100	µg / l
Total Coliforms	120	0	0.00	0.00	0.00	0	mpn/100ml
Total Cyanide	8	0	4.10	4.10	4.10	50	µg / l
Total Hardness	7	0	115.20	109.57	105.70	No PCV	mg/l
Total Organic Carbon	8	0	0.90	0.41	0.30	No Abnormal Change	mg/l
Total Trihalomethanes	8	0	5.22	2.56	1.53	100	µg / l
Tri-allate	8	0	0.01	0.01	0.01	0.1	µg / l
Triclopyr	8	0	0.02	0.02	0.02	0.1	µg / l
Trietazine	8	0	0.00	0.00	0.00	0.1	µg / l
Turbidity	36	0	0.12	0.11	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

Component Name	mg/l Ca	mg/l CaCO3	Clark Degrees	French Degrees	German Degrees
Total Hardness	109.57	273.93	19.18	27.39	15.34

south east water

WEST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2015

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	7	0	0.27	0.27	0.27	No Limit	µg/l
1,2-Dichloroethane	7	0	0.03	0.03	0.03	3	µg/l
Aluminium	7	0	9.70	5.16	4.40	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	25	0	0.04	0.02	0.01	0.5	mg NH4/l
Antimony	7	0	0.08	0.08	0.08	5	µg Sb/l
Arsenic	7	0	0.20	0.13	0.10	10	µg As/l
Benzene	7	0	0.02	0.02	0.02	1	µg/l
Benzo[11,12]fluoranthene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	7	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	7	0	0.00	0.00	0.00	0.01	µg/l
Boron	10	0	0.03	0.03	0.03	1	mg B/l
Cadmium	7	0	0.08	0.08	0.08	5	µg Cd/l
Calcium	7	0	119.60	113.11	109.00	No Limit	mg Ca/l
Chloride	7	0	28.89	26.32	24.20	250	mg Cl/l
Chromium	7	0	0.60	0.51	0.50	50	µg Cr/l
Colony Count 3days at 22°C	51	0	26.00	1.16	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	51	0	21.00	1.47	0.00	No Abnormal Change	cfu/ml
Colour	25	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	25	0	584.00	546.48	501.00	2,500	µS/cm
Copper	7	0	0.23	0.09	0.01	2	mg Cu/l
Dibromochloromethane	7	0	2.63	1.69	1.29	100	µg/l
Dichlorobromomethane	7	0	0.78	0.60	0.48	100	µg/l
E coli	143	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	7	0	0.00	0.00	0.00	0	cfu/100ml
Fluoride	7	0	0.12	0.10	0.09	1.5	mg F/l
Hydrogen Ion (pH)	25	0	7.80	7.53	7.10	10	pH_unit
Indeno(1,2,3-cd)Pyrene	7	0	0.00	0.00	0.00	0.1	µg/l
Iron	7	0	10.50	7.61	6.50	200	µg Fe/l
Lead	7	0	1.20	0.80	0.70	10	µg Pb/l
Magnesium	7	0	3.40	3.20	3.00	No Limit	mg Mg/l
Manganese	7	0	1.20	1.20	1.20	50	µg Mn/l
Nickel	7	0	1.10	0.84	0.80	20	µg Ni/l
Nitrate	7	0	20.50	18.43	16.70	50	mg NO3/l
Nitrite	7	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	7	0	0.41	0.37	0.33	1	
Odour - Quantitative	26	0	0.00	0.00	0.00	1	Dil No
Polycyclic Aromatic Hydrocarbons	7	0	0.00	0.00	0.00	0.1	µg/l
Residual Disinfectant - Free	143	0	0.61	0.23	0.04	No Limit	mg/l
Residual Disinfectant - Total	143	0	0.73	0.30	0.06	No Limit	mg/l
Selenium	7	0	1.03	0.69	0.30	10	µg Se/l
Sodium	7	0	15.00	13.03	12.00	200	mg Na/l
Sulphate	10	0	24.90	20.39	16.10	250	mg SO4/l
Taste - Quantitative	26	0	0.00	0.00	0.00	1	
Tetrachloroethene	7	0	0.06	0.06	0.06	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	7	0	0.00	0.00	0.00	10	µg/l
Total coliforms	143	1	2.00	0.01	0.00	0	mpn/100ml
Total Trihalomethanes	7	0	7.90	4.87	3.70	100	µg/l

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Tribromomethane	7	0	4.17	2.28	1.54	100	µg/l
Trichloroethene	7	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	7	0	0.35	0.29	0.25	100	µg/l
Turbidity	25	0	0.15	0.10	0.10	4	NTU
	Sum:	1					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. The failure(s) reported have been satisfactorily investigated and submitted to the Drinking Water Inspectorate, who regulates the water industry in England and Wales for approval.

All other samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2000.

south east water

WEST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2016

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	8	0	0.27	0.19	0.18	No Limit	µg/l
1,2-Dichloroethane	8	0	0.04	0.04	0.04	3	µg/l
Aluminium	9	0	5.00	4.87	4.40	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	26	0	0.03	0.03	0.03	0.5	mg NH4/l
Antimony	8	0	0.06	0.05	0.05	5	µg Sb/l
Arsenic	8	0	0.50	0.50	0.50	10	µg As/l
Benzene	8	0	0.02	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg/l
Cadmium	8	0	0.08	0.07	0.06	5	µg Cd/l
Calcium	8	0	114.00	96.85	1.00	No Limit	mg Ca/l
Chloride	8	0	29.72	26.41	22.96	250	mg Cl/l
Chromium	8	0	0.70	0.46	0.30	50	µg Cr/l
Colony Count 3days at 22°C	154	0	17.00	0.68	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	154	0	41.00	0.77	0.00	No Abnormal Change	cfu/ml
Colour	50	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	50	0	582.00	517.96	415.00	2,500	µS/cm
Copper	8	0	0.09	0.04	0.01	2	mg Cu/l
Dibromochloromethane	8	0	2.60	1.61	0.15	100	µg/l
Dichlorobromomethane	8	0	1.19	0.63	0.12	100	µg/l
E coli	154	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Fluoride	8	0	0.12	0.10	0.09	1.5	mg F/l
Hydrogen Ion (pH)	50	0	7.90	7.38	7.20	10	pH_unit
Indeno(1,2,3-cd)Pyrene	8	0	0.00	0.00	0.00	0.1	µg/l
Iron	57	0	90.10	6.99	3.00	200	µg Fe/l
Lead	8	0	0.90	0.61	0.50	10	µg Pb/l
Magnesium	8	0	3.80	2.60	0.50	No Limit	mg Mg/l
Manganese	13	0	1.20	0.92	0.90	50	µg Mn/l
Nickel	8	0	1.00	0.66	0.30	20	µg Ni/l
Nitrate	8	0	24.10	19.59	16.80	50	mg NO3/l
Nitrite	8	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	8	0	0.48	0.39	0.34	1	
Odour - Quantitative	52	1	2.00	0.04	0.00	1	Dil No
Polycyclic Aromatic Hydrocarbons	8	0	0.00	0.00	0.00	0.1	µg/l
Residual Disinfectant - Free	154	0	0.52	0.27	0.05	No Limit	mg/l
Residual Disinfectant - Total	154	0	0.61	0.34	0.08	No Limit	mg/l
Selenium	8	0	0.92	0.67	0.30	10	µg Se/l
Sodium	8	0	143.50	27.89	10.30	200	mg Na/l
Taste - Quantitative	52	0	0.00	0.00	0.00	1	
Tetrachloroethene	8	0	0.06	0.05	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	8	0	0.00	0.00	0.00	10	µg/l
Total coliforms	154	0	0.00	0.00	0.00	0	mpn/100ml
Total Trihalomethanes	8	0	7.70	4.66	0.00	100	µg/l
Tribromomethane	8	0	3.05	1.99	0.18	100	µg/l
Trichloroethene	8	0	0.03	0.03	0.03	10	µg/l

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Trichloromethane	8	0	1.89	0.50	0.15	100	µg/l
Turbidity	50	0	1.84	0.13	0.10	4	NTU
	Sum:	1					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. The failure(s) reported have been satisfactorily investigated and submitted to the Drinking Water Inspectorate, who regulates the water industry in England and Wales for approval.

All other samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2016.

south east water

WEST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2017

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	8	0	0.18	0.18	0.18	No Limit	µg/l
1,2-Dichloroethane	9	0	0.04	0.04	0.04	3	µg/l
Aluminium	9	0	5.00	5.00	5.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	27	0	0.04	0.04	0.03	0.5	mg NH4/l
Antimony	9	0	0.45	0.09	0.05	5	µg Sb/l
Arsenic	9	0	0.50	0.50	0.50	10	µg As/l
Benzene	9	0	0.01	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	9	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	9	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	9	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	9	0	0.00	0.00	0.00	0.01	µg/l
Bromate	9	0	0.40	0.40	0.40	10	µg BrO3/l
Cadmium	9	0	0.06	0.06	0.06	5	µg Cd/l
Calcium	9	0	117.70	112.22	106.50	No Limit	mg Ca/l
Chloride	9	0	33.53	28.34	25.71	250	mg Cl/l
Chromium	9	0	0.40	0.33	0.30	50	µg Cr/l
Colony Count 3days at 22°C	53	0	57.00	2.25	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	53	0	106.00	2.15	0.00	No Abnormal Change	cfu/ml
Colour	53	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	53	0	584.00	549.13	509.00	2,500	µS/cm
Copper	9	0	0.08	0.04	0.01	2	mg Cu/l
Dibromochloromethane	9	0	2.60	1.91	1.50	100	µg/l
Dichlorobromomethane	9	0	0.98	0.70	0.57	100	µg/l
E coli	169	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	9	0	0.00	0.00	0.00	0	cfu/100ml
Fluoride	9	0	0.12	0.09	0.01	1.5	mg F/l
Hydrogen Ion (pH)	53	0	8.40	7.68	7.30	10	pH_unit
Indeno(1,2,3-cd)Pyrene	9	0	0.00	0.00	0.00	0.1	µg/l
Iron	53	0	10.90	4.32	3.00	200	µg Fe/l
Lead	9	0	5.90	1.32	0.50	10	µg Pb/l
Magnesium	9	0	3.90	3.49	3.10	No Limit	mg Mg/l
Manganese	9	0	0.90	0.90	0.90	50	µg Mn/l
Nickel	9	0	0.70	0.48	0.30	20	µg Ni/l
Nitrate	9	0	21.40	18.11	15.80	50	mg NO3/l
Nitrite	9	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	9	0	0.43	0.36	0.32	1	
Odour - Quantitative	53	0	0.00	0.00	0.00	1	Dil No
Polycyclic Aromatic Hydrocarbons	9	0	0.00	0.00	0.00	0.1	µg/l
Residual Disinfectant - Free	169	0	0.48	0.28	0.05	No Limit	mg/l
Residual Disinfectant - Total	169	0	0.58	0.32	0.07	No Limit	mg/l
Selenium	9	0	1.19	0.81	0.30	10	µg Se/l
Sodium	9	0	14.10	12.39	11.20	200	mg Na/l
Taste - Quantitative	53	0	0.00	0.00	0.00	1	Dil No
Tetrachloroethene	9	0	0.05	0.05	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	9	0	0.00	0.00	0.00	10	µg/l
Total coliforms	169	0	0.00	0.00	0.00	0	mpn/100ml
Total Trihalomethanes	9	0	6.70	5.18	4.00	100	µg/l
Tribromomethane	9	0	2.70	2.23	1.63	100	µg/l

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Trichloroethene	9	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	9	0	0.41	0.33	0.30	100	µg/l
Turbidity	53	0	0.11	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2016.

south east water

GODMERSHAM TREATED SUPPLY POINT

1st January to 31st December

2017

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	9	0	0.01	0.01	0.00	0.03	µg/l
Atrazine	8	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg/l
Boron	8	0	0.05	0.05	0.05	1	mg B/l
Bromate	8	0	0.40	0.40	0.40	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Carbendazim	8	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	8	0	0.01	0.01	0.01	0.1	µg/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dicamba	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	9	0	0.01	0.01	0.01	0.1	µg/l
Dichlorprop	8	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	9	0	0.01	0.01	0.01	0.03	µg/l
Diuron	8	0	0.01	0.01	0.01	0.1	µg/l
Epoxiconazole	8	0	0.01	0.01	0.01	0.1	µg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	9	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	9	0	0.01	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	9	0	0.01	0.01	0.01	0.03	µg/l
Isoproturon	8	0	0.01	0.01	0.01	0.1	µg/l
Linuron	8	0	0.01	0.01	0.01	0.1	µg/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.02	0.02	0.02	1	µg Hg/l
Metaldehyde	8	0	0.01	0.01	0.01	0.1	µg/l
Oxadixyl	8	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	8	0	0.03	0.01	0.00	0.5	µg/l
Prometryn	8	0	0.01	0.01	0.01	0.1	µg/l
Propazine	8	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	9	0	0.01	0.01	0.01	0.1	µg/l
Simazine	8	0	0.01	0.01	0.01	0.1	µg/l
Sulphate	8	0	13.70	12.76	10.50	250	mg SO4/l
Total Organic Carbon	8	0	0.90	0.61	0.50	No Abnormal Change	mg C/l
Tri-allate	9	0	0.01	0.01	0.01	0.1	µg/l
Triclopyr	8	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	8	0	0.01	0.01	0.01	0.1	µg/l
	Sum:	0					

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at Supply Points. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2016.

south east water

WEST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2018

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	9	0	0.18	0.18	0.18	No Limit	µg/l
1,2-Dichloroethane	10	0	0.04	0.04	0.04	3	µg/l
Aluminium	9	0	12.40	7.40	5.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	38	0	0.04	0.04	0.04	0.5	mg NH4/l
Antimony	9	0	0.10	0.10	0.10	5	µg Sb/l
Arsenic	9	0	0.50	0.50	0.50	10	µg As/l
Benzene	9	0	0.01	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	10	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	10	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	10	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	10	0	0.00	0.00	0.00	0.01	µg/l
Bromate	9	0	0.40	0.40	0.40	10	µg BrO3/l
Cadmium	9	0	0.06	0.06	0.06	5	µg Cd/l
Calcium	8	0	118.60	112.48	109.50	No Limit	mg Ca/l
Chloride	9	0	31.60	27.47	22.51	250	mg Cl/l
Chromium	9	0	1.50	0.61	0.30	50	µg Cr/l
Clostridium perfringens (including spore	9	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	55	0	17.00	0.96	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	55	0	3.00	0.44	0.00	No Abnormal Change	cfu/ml
Colour	39	0	5.00	1.10	1.00	20	mg/l Pt/Co
Conductivity	52	0	594.00	545.23	502.00	2,500	µS/cm
Copper	9	0	0.09	0.03	0.01	2	mg Cu/l
Dibromochloromethane	9	0	2.23	1.57	0.89	100	µg/l
Dichlorobromomethane	9	0	1.03	0.69	0.41	100	µg/l
E coli	169	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	9	0	0.00	0.00	0.00	0	cfu/100ml
Fluoride	9	0	0.12	0.10	0.10	1.5	mg F/l
Hydrogen Ion (pH)	52	0	8.10	7.49	7.20	9.5	pH_unit
Indeno(1,2,3-cd)Pyrene	10	0	0.00	0.00	0.00	0.1	µg/l
Iron	39	0	115.20	9.65	3.00	200	µg Fe/l
Lead	9	0	2.30	0.72	0.50	10	µg Pb/l
Magnesium	8	0	3.60	3.20	2.50	No Limit	mg Mg/l
Manganese	10	0	0.90	0.90	0.90	50	µg Mn/l
Nickel	9	0	0.80	0.47	0.30	20	µg Ni/l
Nitrate	9	0	23.00	18.59	16.50	50	mg NO3/l
Nitrite	9	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	9	0	0.46	0.37	0.33	1	
Odour - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Polycyclic Aromatic Hydrocarbons	10	0	0.00	0.00	0.00	0.1	µg/l
Residual Disinfectant - Free	169	0	0.70	0.30	0.05	No Limit	mg/l
Residual Disinfectant - Total	169	0	0.76	0.34	0.07	No Limit	mg/l
Selenium	9	0	1.00	0.58	0.40	10	µg Se/l
Sodium	9	0	14.00	12.23	10.50	200	mg Na/l
Sulphate	1	0	26.70	26.70	26.70	250	mg SO4/l
Taste - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Tetrachloroethene	9	0	0.05	0.05	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	9	0	0.00	0.00	0.00	10	µg/l

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Total coliforms	169	0	0.00	0.00	0.00	0	mpn/100ml
Total Trihalomethanes	9	0	6.20	4.66	3.70	100	µg/l
Tribromomethane	9	0	2.56	2.06	1.70	100	µg/l
Trichloroethene	9	0	0.03	0.03	0.03	10	µg/l
Trichloromethane	9	0	0.48	0.33	0.23	100	µg/l
Turbidity	52	0	0.39	0.11	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water

GODMERSHAM TREATED SUPPLY POINT

1st January to 31st December

2018

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	10	0	0.01	0.01	0.00	0.03	µg/l
Atrazine	8	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg/l
Boron	8	0	0.05	0.05	0.05	1	mg B/l
Bromate	8	0	0.40	0.40	0.40	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Carbendazim	8	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	8	0	0.01	0.01	0.01	0.1	µg/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dicamba	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	10	0	0.01	0.01	0.01	0.1	µg/l
Dichlorprop	8	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	10	0	0.01	0.01	0.01	0.03	µg/l
Diuron	8	0	0.01	0.01	0.01	0.1	µg/l
Epoxiconazole	8	0	0.01	0.01	0.01	0.1	µg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	10	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	10	0	0.01	0.01	0.00	0.03	µg/l
Heptachlor Epoxide	10	0	0.01	0.01	0.01	0.03	µg/l
Isoproturon	8	0	0.01	0.01	0.01	0.1	µg/l
Linuron	8	0	0.01	0.01	0.01	0.1	µg/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.02	0.02	0.02	1	µg Hg/l
Metaldehyde	8	0	0.01	0.01	0.01	0.1	µg/l
Oxadixyl	8	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	10	0	0.02	0.01	0.00	0.5	µg/l
Prometryn	8	0	0.01	0.01	0.01	0.1	µg/l
Propazine	8	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	10	0	0.01	0.01	0.01	0.1	µg/l
Simazine	8	0	0.01	0.01	0.01	0.1	µg/l
Sulphate	8	0	14.40	13.69	13.20	250	mg SO4/l
Total Organic Carbon	8	0	1.40	0.64	0.50	No Abnormal Change	mg C/l
Tri-allate	10	0	0.01	0.01	0.01	0.1	µg/l
Triclopyr	8	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	8	0	0.01	0.01	0.01	0.1	µg/l
	Sum:	0					

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at Supply Points. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water

WEST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2019

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	8	0	0.18	0.18	0.18	No Limit	µg/l
1,2-Dichloroethane	8	0	0.04	0.04	0.04	3	µg/l
Aluminium	8	0	5.00	5.00	5.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	52	0	0.04	0.04	0.04	0.5	mg NH4/l
Antimony	8	0	0.10	0.10	0.10	5	µg Sb/l
Arsenic	8	0	0.50	0.50	0.50	10	µg As/l
Benzene	8	0	0.02	0.01	0.01	1	µg/l
Benzo[11,12]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg/l
Bromate	8	0	0.40	0.40	0.40	10	µg BrO3/l
Cadmium	8	0	0.06	0.06	0.06	5	µg Cd/l
Calcium	8	0	126.40	112.65	107.60	No Limit	mg Ca/l
Chloride	9	0	31.76	27.64	23.07	250	mg Cl/l
Chromium	8	0	1.30	0.58	0.30	50	µg Cr/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	52	0	23.00	0.71	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	52	0	26.00	1.50	0.00	No Abnormal Change	cfu/ml
Colour	52	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	52	0	667.00	559.50	516.00	2,500	µS/cm
Copper	8	0	0.09	0.04	0.01	2	mg Cu/l
Dibromochloromethane	8	0	1.79	0.97	0.15	100	µg/l
Dichlorobromomethane	8	0	0.77	0.35	0.13	100	µg/l
E coli	169	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Fluoride	8	0	0.16	0.11	0.09	1.5	mg F/l
Hydrogen Ion (pH)	52	0	7.80	7.37	7.10	9.5	pH_unit
Indeno(1,2,3-cd)Pyrene	8	0	0.00	0.00	0.00	0.1	µg/l
Iron	52	0	10.60	4.92	3.00	200	µg Fe/l
Lead	8	0	1.60	0.79	0.50	10	µg Pb/l
Magnesium	8	0	4.60	3.03	2.30	No Limit	mg Mg/l
Manganese	8	0	0.90	0.90	0.90	50	µg Mn/l
Nickel	8	0	1.90	0.90	0.30	20	µg Ni/l
Nitrate	9	0	35.40	22.67	15.90	50	mg NO3/l
Nitrite	9	0	0.01	0.01	0.01	0.5	mg NO2/l
Nitrite/Nitrate formula	8	0	0.71	0.45	0.32	1	
Odour - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Polycyclic Aromatic Hydrocarbons	8	0	0.00	0.00	0.00	0.1	µg/l
Residual Disinfectant - Free	168	0	0.69	0.32	0.10	No Limit	mg/l
Residual Disinfectant - Total	168	0	0.72	0.39	0.12	No Limit	mg/l
Selenium	8	0	1.90	0.76	0.40	10	µg Se/l
Sodium	8	0	15.80	12.65	10.70	200	mg Na/l
Taste - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Tetrachloroethene	8	0	0.43	0.10	0.05	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	8	0	0.55	0.07	0.00	10	µg/l
Total coliforms	169	0	0.00	0.00	0.00	0	mpn/100ml

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Total Trihalomethanes	8	0	5.10	2.74	0.20	100	µg/l
Tribromomethane	8	0	2.39	1.27	0.18	100	µg/l
Trichloroethene	8	0	0.12	0.04	0.03	10	µg/l
Trichloromethane	8	0	0.39	0.26	0.15	100	µg/l
Turbidity	52	0	0.19	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water

GODMERSHAM TREATED SUPPLY POINT

1st January to 31st December

2019

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.02	0.01	0.01	0.1	µg/l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Atrazine	8	0	0.01	0.01	0.01	0.1	µg/l
Bentazone	8	0	0.01	0.01	0.01	0.1	µg/l
Boron	8	0	0.05	0.05	0.05	1	mg B/l
Bromate	8	0	0.40	0.40	0.40	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Carbendazim	8	0	0.01	0.01	0.01	0.1	µg/l
Carbetamide	8	0	0.01	0.01	0.01	0.1	µg/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dicamba	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlobenil	8	0	0.01	0.01	0.01	0.1	µg/l
Dichlorprop	8	0	0.01	0.01	0.01	0.1	µg/l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg/l
Diuron	8	0	0.01	0.01	0.01	0.1	µg/l
Epoxiconazole	8	0	0.01	0.01	0.01	0.1	µg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.01	0.01	0.01	0.1	µg/l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.01	0.1	µg/l
Heptachlor	8	0	0.01	0.01	0.01	0.03	µg/l
Heptachlor Epoxide	8	0	0.01	0.01	0.00	0.03	µg/l
Isoproturon	8	0	0.01	0.01	0.01	0.1	µg/l
Linuron	8	0	0.01	0.01	0.01	0.1	µg/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.02	0.02	0.02	1	µg Hg/l
Metaldehyde	8	0	0.01	0.01	0.01	0.1	µg/l
Oxadixyl	8	0	0.01	0.01	0.01	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	8	0	0.02	0.01	0.01	0.5	µg/l
Prometryn	8	0	0.01	0.01	0.01	0.1	µg/l
Propazine	8	0	0.01	0.01	0.01	0.1	µg/l
Propyzamide	8	0	0.01	0.01	0.01	0.1	µg/l
Simazine	8	0	0.01	0.01	0.01	0.1	µg/l
Sulphate	8	0	15.40	13.46	11.70	250	mg SO4/l
Total Organic Carbon	8	0	0.50	0.50	0.50	No Abnormal Change	mg C/l
Tri-allate	8	0	0.01	0.01	0.00	0.1	µg/l
Triclopyr	8	0	0.01	0.01	0.01	0.1	µg/l
Trietazine	8	0	0.01	0.01	0.01	0.1	µg/l
	Sum:	0					

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at Supply Points. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water

WEST ASHFORD WATER SUPPLY ZONE

1st January to 31st December 2020

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,1,1-Trichloroethane	8	0	0.60	0.60	0.60	No Limit	µg/l
1,2-Dichloroethane	8	0	0.12	0.12	0.12	3	µg/l
Aluminium	53	0	18.30	6.62	6.00	200	µg Al/l
Ammonium (Ammonia and Ammonium Ions)	52	0	0.02	0.02	0.02	0.5	mg NH4/l
Antimony	8	0	0.20	0.20	0.20	5	µg Sb/l
Arsenic	8	0	1.00	1.00	1.00	10	µg As/l
Benzene	8	0	0.02	0.02	0.02	1	µg/l
Benzo[11,12]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[1,12]perylene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo[3,4]fluoranthene	8	0	0.00	0.00	0.00	0.1	µg/l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg/l
Bromate	8	0	0.80	0.80	0.80	10	µg BrO3/l
Cadmium	8	0	0.12	0.12	0.12	5	µg Cd/l
Calcium	6	0	111.10	109.90	107.20	No Limit	mg Ca/l
Chloride	9	0	25.55	23.52	22.07	250	mg Cl/l
Chromium	8	0	1.80	1.15	0.50	50	µg Cr/l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3days at 22°C	52	0	3.00	0.17	0.00	No Abnormal Change	cfu/ml
Colony Count 48hrs at 37°C	10	0	1.00	0.10	0.00	No Abnormal Change	cfu/ml
Colour	52	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	52	0	592.00	523.52	430.00	2,500	µS/cm
Copper	8	0	0.50	0.24	0.03	2	mg Cu/l
Dibromochloromethane	8	0	0.50	0.50	0.50	100	µg/l
Dichlorobromomethane	8	0	0.43	0.43	0.43	100	µg/l
E coli	158	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Fluoride	8	0	0.12	0.11	0.10	1.5	mg F/l
Hydrogen Ion (pH)	52	0	7.60	7.24	7.00	9.5	pH_unit
Indeno(1,2,3-cd)Pyrene	8	0	0.00	0.00	0.00	0.1	µg/l
Iron	52	0	81.40	7.97	4.00	200	µg Fe/l
Lead	8	0	4.60	2.18	0.90	10	µg Pb/l
Magnesium	6	0	2.70	2.48	2.30	No Limit	mg Mg/l
Manganese	53	0	1.90	1.70	1.70	50	µg Mn/l
Nickel	8	0	7.60	2.71	0.60	20	µg Ni/l
Nitrate	9	0	27.60	23.19	18.20	50	mg NO3/l
Nitrite	9	0	0.04	0.01	0.00	0.5	mg NO2/l
Nitrite/Nitrate formula	9	0	0.55	0.47	0.38	1	
Odour - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Polycyclic Aromatic Hydrocarbons	8	0	0.00	0.00	0.00	0.1	µg/l
Residual Disinfectant - Free	158	0	0.56	0.36	0.09	No Limit	mg/l
Residual Disinfectant - Total	158	0	0.57	0.40	0.12	No Limit	mg/l
Selenium	8	0	0.80	0.80	0.80	10	µg Se/l
Sodium	8	0	11.70	10.75	10.10	200	mg Na/l
Taste - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Tetrachloroethene	8	0	0.15	0.15	0.15	10	µg/l
Tetrachloroethene/ Trichloroethene - Sum	8	0	0.00	0.00	0.00	10	µg/l
Total coliforms	158	0	0.00	0.00	0.00	0	mpn/100ml

south east water

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
Total Trihalomethanes	8	0	0.00	0.00	0.00	100	µg/l
Tribromomethane	8	0	0.60	0.60	0.60	100	µg/l
Trichloroethene	8	0	0.10	0.10	0.10	10	µg/l
Trichloromethane	8	0	0.50	0.50	0.50	100	µg/l
Turbidity	52	0	0.20	0.10	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water

GODMERSHAM TREATED SUPPLY POINT

1st January to 31st December

2020

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg/l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg/l
Aldrin	11	0	0.01	0.01	0.00	0.03	µg/l
Atrazine	8	0	0.00	0.00	0.00	0.1	µg/l
Bentazone	8	0	0.02	0.01	0.01	0.1	µg/l
Boron	8	0	0.04	0.04	0.04	1	mg B/l
Bromate	8	0	0.80	0.80	0.80	10	µg BrO3/l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg/l
Carbendazim	8	0	0.00	0.00	0.00	0.1	µg/l
Carbetamide	8	0	0.00	0.00	0.00	0.1	µg/l
Cyanide	8	0	2.00	2.00	2.00	50	µg CN/l
Dicamba	8	0	0.02	0.02	0.02	0.1	µg/l
Dichlobenil	10	0	0.01	0.01	0.00	0.1	µg/l
Dichlorprop	8	0	0.00	0.00	0.00	0.1	µg/l
Dieldrin	10	0	0.01	0.01	0.00	0.03	µg/l
Diuron	8	0	0.00	0.00	0.00	0.1	µg/l
Epoxiconazole	8	0	0.00	0.00	0.00	0.1	µg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg/l
Flutriafol	8	0	0.00	0.00	0.00	0.1	µg/l
Gamma-HCH (Lindane)	10	0	0.01	0.00	0.00	0.1	µg/l
Heptachlor	11	0	0.01	0.01	0.00	0.03	µg/l
Heptachlor Epoxide	10	0	0.00	0.00	0.00	0.03	µg/l
Isoproturon	8	0	0.00	0.00	0.00	0.1	µg/l
Linuron	8	0	0.00	0.00	0.00	0.1	µg/l
MCPA	8	0	0.01	0.01	0.01	0.1	µg/l
MCPB	8	0	0.01	0.01	0.01	0.1	µg/l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg/l
Mercury	8	0	0.04	0.04	0.04	1	µg Hg/l
Metaldehyde	8	0	0.01	0.01	0.01	0.1	µg/l
Oxadixyl	8	0	0.00	0.00	0.00	0.1	µg/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg/l
Pesticides - Total Substances	11	0	0.02	0.01	0.00	0.5	µg/l
Prometryn	8	0	0.00	0.00	0.00	0.1	µg/l
Propazine	8	0	0.00	0.00	0.00	0.1	µg/l
Propyzamide	10	0	0.01	0.00	0.00	0.1	µg/l
Simazine	8	0	0.00	0.00	0.00	0.1	µg/l
Sulphate	8	0	14.00	12.69	11.60	250	mg SO4/l
Tecnazene	1	0	0.00	0.00	0.00	0.1	µg/l
Total Organic Carbon	8	0	0.30	0.30	0.30	No Abnormal Change	mg C/l
Tri-allate	10	0	0.01	0.00	0.00	0.1	µg/l
Triclopyr	8	0	0.02	0.02	0.02	0.1	µg/l
Trietazine	8	0	0.00	0.00	0.00	0.1	µg/l
	Sum:	0					

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at Supply Points. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

south east water
scientific services

WEST ASHFORD WATER SUPPLY ZONE

January 1st 2021 to December 31st 2021

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,2-Dichloroethane	9	0	0.12	0.12	0.12	3	µg / l
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg / l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg / l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg / l
Alkalinity	4	0	320.00	275.00	158.00	No PCV	mg/l
Aluminium	52	0	53.40	7.01	6.00	200	µg / l
Ammonium (Ammonia and Ammonium Ions)	8	0	0.02	0.02	0.02	0.5	mg/l
Antimony	8	0	0.20	0.20	0.20	5	µg / l
Arsenic	8	0	1.00	1.00	1.00	10	µg / l
Atrazine	8	0	0.00	0.00	0.00	0.1	µg / l
Bentazone	8	0	0.02	0.01	0.01	0.1	µg / l
Benzene	8	0	0.02	0.02	0.02	1	µg / l
Benzo (a) pyrene	10	0	0.00	0.00	0.00	0.01	µg / l
Boron	8	0	0.04	0.04	0.04	1	mg/l
Bromate	8	0	0.80	0.80	0.80	10	µg / l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg / l
Cadmium	8	0	0.12	0.12	0.12	5	µg / l
Calcium	4	0	115.20	94.43	50.80	No PCV	mg/l
Carbendazim	8	0	0.00	0.00	0.00	0.1	µg / l
Carbetamide	8	0	0.00	0.00	0.00	0.1	µg / l
Chloride	8	0	61.18	32.07	23.14	250	mg/l
Chlortoluron	8	0	0.00	0.00	0.00	0.1	µg / l
Chromium	8	0	1.70	0.90	0.50	50	µg / l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3 Days at 22°C	52	0	6.00	0.40	0.00	No Abnormal Change	cfu/ml
Colour	52	0	1.00	1.00	1.00	20	mg/l Pt/Co
Conductivity	52	0	711.00	556.46	511.00	2500	uS/cm
Dicamba	8	0	0.02	0.02	0.02	0.1	µg / l
Dichlobenil	8	0	0.01	0.01	0.01	0.1	µg / l
Dichlorprop	8	0	0.00	0.00	0.00	0.1	µg / l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg / l
Diuron	8	0	0.01	0.00	0.00	0.1	µg / l
E coli	169	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	8	0	0.00	0.00	0.00	0.1	µg / l
First Draw Copper	10	0	0.77	0.24	0.01	2	mg/l
First Draw Lead	10	0	2.20	1.25	0.90	10	µg / l
First Draw Nickel	10	0	1.30	0.98	0.60	20	µg / l
Fluoride	8	0	0.13	0.11	0.10	1.5	mg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg / l
Flutriafol	8	0	0.00	0.00	0.00	0.1	µg / l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.01	0.1	µg / l
Heptachlor	8	0	0.01	0.01	0.01	0.03	µg / l
Heptachlor Epoxide	8	0	0.00	0.00	0.00	0.03	µg / l
Hydrogen Ion (pH)	52	0	8.00	7.35	7.10	range 6.5-9.5	pH_unit
Iron	52	0	16.90	6.42	4.00	200	µg / l
Isoproturon	8	0	0.00	0.00	0.00	0.1	µg / l
Linuron	8	0	0.00	0.00	0.00	0.1	µg / l
Magnesium	4	0	4.00	3.25	2.30	No PCV	mg/l
Manganese	52	0	1.70	1.70	1.70	50	µg / l
MCPA	8	0	0.01	0.01	0.01	0.1	µg / l
MCPB	8	0	0.01	0.01	0.01	0.1	µg / l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg / l
Mercury	8	0	0.05	0.04	0.04	1	µg / l
Nitrate	8	0	33.20	20.30	1.00	50	mg/l
Nitrite	8	0	0.00	0.00	0.00	0.5	mg/l
Nitrite/Nitrate	8	0	0.66	0.40	0.00	1	mg/l
Odour - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	8	0	0.00	0.00	0.00	0.1	µg / l

south east water
scientific services

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
PAH Total	8	0	0.00	0.00	0.00	0.1	ug/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg / l
Pesticides - Total Substances	8	0	0.03	0.00	0.00	0.5	ug/l
Prometryn	8	0	0.00	0.00	0.00	0.1	µg / l
Propazine	8	0	0.00	0.00	0.00	0.1	µg / l
Propyzamide	8	0	0.01	0.01	0.01	0.1	µg / l
Residual Disinfectant- Free	168	0	1.51	0.30	0.05	No Limit	mg/l
Residual Disinfectant- Total	168	0	1.55	0.36	0.08	No Limit	mg/l
Selenium	8	0	0.80	0.80	0.80	10	µg / l
Simazine	8	0	0.01	0.00	0.00	0.1	µg / l
Sodium	8	0	17.20	11.66	4.80	200	mg/l
Sulphate	8	0	76.40	26.69	13.10	250	mg/l
Taste - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Terbutryn	8	0	0.00	0.00	0.00	0.1	µg / l
Tetrachloroethene/ Trichloroethene- Sum	8	0	0.00	0.00	0.00	10	µg / l
Tetrachloromethane	9	0	0.11	0.11	0.11	100	µg / l
Total Coliforms	169	0	0.00	0.00	0.00	0	mpn/100ml
Total Cyanide	8	0	4.10	3.58	2.00	50	µg / l
Total Hardness	4	0	108.70	92.40	49.80	No PCV	mg/l
Total Organic Carbon	8	0	1.20	0.48	0.30	No Abnormal Change	mg/l
Total Trihalomethanes	8	0	8.22	4.10	0.60	100	µg / l
Tri-allate	8	0	0.01	0.01	0.01	0.1	µg / l
Triclopyr	8	0	0.02	0.02	0.02	0.1	µg / l
Trietazine	8	0	0.00	0.00	0.00	0.1	µg / l
Turbidity	52	0	0.45	0.11	0.10	4	NTU
	Sum:	0					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. All samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

Component Name	mg/l Ca	mg/l CaCO3	Clark Degrees	French Degrees	German Degrees
Total Hardness	92.40	231.00	16.17	23.1	12.94

south east water
scientific services

WEST ASHFORD WATER SUPPLY ZONE

January 1st 2022 to December 31st 2022

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
1,2-Dichloroethane	9	0	0.12	0.12	0.12	3	µg / l
2,4,5-T	8	0	0.01	0.01	0.01	0.1	µg / l
2,4-D	8	0	0.01	0.01	0.01	0.1	µg / l
Aldrin	8	0	0.01	0.01	0.01	0.03	µg / l
Alkalinity	3	0	322.00	316.00	307.00	No PCV	mg/l
Aluminium	52	0	9.30	6.14	6.00	200	µg / l
Ammonium (Ammonia and Ammonium Ions)	8	0	0.02	0.02	0.02	0.5	mg/l
Antimony	8	0	0.20	0.20	0.20	5	µg / l
Arsenic	8	0	1.00	1.00	1.00	10	µg / l
Atrazine	8	0	0.00	0.00	0.00	0.1	µg / l
Bentazone	8	0	0.02	0.01	0.01	0.1	µg / l
Benzene	9	0	0.02	0.02	0.02	1	µg / l
Benzo (a) pyrene	8	0	0.00	0.00	0.00	0.01	µg / l
Boron	8	0	0.04	0.04	0.04	1	mg/l
Bromate	8	0	0.80	0.80	0.80	10	µg / l
Bromoxynil	8	0	0.01	0.01	0.01	0.1	µg / l
Cadmium	8	0	0.12	0.12	0.12	5	µg / l
Calcium	3	0	113.00	110.67	107.30	No PCV	mg/l
Carbendazim	8	0	0.00	0.00	0.00	0.1	µg / l
Carbetamide	8	0	0.00	0.00	0.00	0.1	µg / l
Chloride	8	0	32.42	27.15	23.28	250	mg/l
Chlortoluron	8	0	0.00	0.00	0.00	0.1	µg / l
Chromium	8	0	0.80	0.65	0.50	50	µg / l
Clostridium perfringens (including spore	8	0	0.00	0.00	0.00	0	cfu/100ml
Colony Count 3 Days at 22°C	52	0	55.00	1.58	0.00	No Abnormal Change	cfu/ml
Colour	52	0	2.00	1.56	1.00	20	mg/l Pt/Co
Conductivity	52	0	633.00	554.44	430.00	2500	uS/cm
Dicamba	8	0	0.02	0.02	0.02	0.1	µg / l
Dichlobenil	8	0	0.01	0.01	0.01	0.1	µg / l
Dichlorprop	8	0	0.00	0.00	0.00	0.1	µg / l
Dieldrin	8	0	0.01	0.01	0.01	0.03	µg / l
Diuron	8	0	0.00	0.00	0.00	0.1	µg / l
E coli	180	0	0.00	0.00	0.00	0	mpn/100ml
Enterococci	8	0	0.00	0.00	0.00	0	cfu/100ml
Epoxiconazole	8	0	0.00	0.00	0.00	0.1	µg / l
First Draw Copper	8	0	0.35	0.13	0.01	2	mg/l
First Draw Lead	8	0	3.10	1.34	0.90	10	µg / l
First Draw Nickel	8	0	1.20	0.80	0.60	20	µg / l
Fluoride	8	0	0.12	0.11	0.10	1.5	mg/l
Fluroxypyr	8	0	0.01	0.01	0.01	0.1	µg / l
Flutriafol	8	0	0.00	0.00	0.00	0.1	µg / l
Gamma-HCH (Lindane)	8	0	0.01	0.01	0.01	0.1	µg / l
Heptachlor	8	0	0.01	0.01	0.01	0.03	µg / l
Heptachlor Epoxide	8	0	0.00	0.00	0.00	0.03	µg / l
Hydrogen Ion (pH)	52	0	8.20	7.36	7.10	range 6.5-9.5	pH_unit
Iron	52	0	7.30	7.02	4.40	200	µg / l
Isoproturon	8	0	0.00	0.00	0.00	0.1	µg / l
Linuron	8	0	0.00	0.00	0.00	0.1	µg / l
Magnesium	3	0	3.40	3.00	2.50	No PCV	mg/l
Manganese	52	0	1.70	1.70	1.70	50	µg / l
MCPA	8	0	0.01	0.01	0.01	0.1	µg / l
MCPB	8	0	0.01	0.01	0.01	0.1	µg / l
Mecoprop (MCPP)	8	0	0.01	0.01	0.01	0.1	µg / l
Mercury	8	0	0.04	0.04	0.04	1	µg / l
Nitrate	8	0	33.00	23.24	19.50	50	mg/l
Nitrite	8	0	0.00	0.00	0.00	0.5	mg/l
Nitrite/Nitrate	8	0	0.66	0.46	0.39	1	mg/l
Odour - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Oxadixyl	8	0	0.00	0.00	0.00	0.1	µg / l

Component Name	No of samples taken	Samples Contravening PCV	Maximum	Mean	Minimum	PCV	Units
PAH Total	8	0	0.00	0.00	0.00	0.1	ug/l
Pendimethalin	8	0	0.01	0.01	0.01	0.1	µg / l
Pesticides - Total Substances	8	0	0.05	0.01	0.00	0.5	ug/l
Prometryn	8	0	0.00	0.00	0.00	0.1	µg / l
Propazine	8	0	0.00	0.00	0.00	0.1	µg / l
Propyzamide	8	0	0.01	0.01	0.01	0.1	µg / l
Residual Disinfectant- Free	180	0	0.49	0.24	0.05	No Limit	mg/l
Residual Disinfectant- Total	180	0	0.92	0.30	0.09	No Limit	mg/l
Selenium	8	0	0.80	0.80	0.80	10	µg / l
Simazine	8	0	0.01	0.00	0.00	0.1	µg / l
Sodium	8	0	14.70	12.31	9.30	200	mg/l
Sulphate	8	0	27.50	19.40	12.90	250	mg/l
Taste - Quantitative	52	0	0.00	0.00	0.00	1	Dil No
Terbutryn	8	0	0.00	0.00	0.00	0.1	µg / l
Tetrachloroethene/ Trichloroethene- Sum	8	0	1.59	0.20	0.00	10	µg / l
Tetrachloromethane	9	0	0.11	0.11	0.11	100	µg / l
Total Coliforms	180	2	166.00	1.44	0.00	0	mpn/100ml
Total Cyanide	8	0	4.10	4.10	4.10	50	µg / l
Total Hardness	3	0	113.80	106.00	101.80	No PCV	mg/l
Total Organic Carbon	8	0	0.50	0.38	0.30	No Abnormal Change	mg/l
Total Trihalomethanes	9	0	11.52	4.72	0.00	100	µg / l
Tri-allate	8	0	0.01	0.01	0.01	0.1	µg / l
Triclopyr	8	0	0.02	0.02	0.02	0.1	µg / l
Trietazine	8	0	0.00	0.00	0.00	0.1	µg / l
Turbidity	52	0	0.32	0.12	0.10	4	NTU
	Sum:	2					

Results for Free and Total Chlorine are listed as Residual Disinfectant Free and Total

The data provided is a summary of all the results of regulatory tests that were carried out on samples taken during the given period at customers' taps. The failure(s) reported have been satisfactorily investigated and submitted to the Drinking Water Inspectorate, who regulates the water industry in England and Wales for approval. All other samples taken proved satisfactory and comply with the requirements of the Water Supply (Water Quality) Regulations 2018.

Component Name	mg/l Ca	mg/l CaCO3	Clark Degrees	French Degrees	German Degrees
Total Hardness	106.00	265.00	18.55	26.5	14.84