

# **BULK CHARGES 2022/23**

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NAV's



## INTRODUCTION

Northumbrian Water Limited (NWL) operates in the North East of England where it trades as Northumbrian Water (NW), and in the South East of England, where it trades as Essex & Suffolk Water (ESW). Northumbrian Water provides both water and wastewater services whereas Essex & Suffolk Water provides water supply services only.

## NEW APPOINTMENTS AND VARIATIONS (NAV)

- (1) New Appointments and Variations were introduced under the Water Industry Act 1991 to provide a mechanism to facilitate new entrants into the water and wastewater sector.

A new appointment is made where a limited company is appointed by Water Services Regulation Authority (Ofwat) to provide water and/or wastewater services for a specific geographic area.

A variation is where an existing appointed company (an appointee) asks Ofwat to vary its appointment so it can extend the areas it provides services to.

A new appointee has the same duties and responsibilities as the previous statutory water company. Currently the level of service that we provide to developers and Self-Lay Providers is measured against a number of quantitative metrics that are reported to Water UK. We offer equivalent levels of service to NAVs with qualitative measures set out by Ofwat in the D-MeX metrics.

- (2) In their consultation of November 2017, 'Bulk Charges for NAVs: a consultation', Ofwat stated that they 'consider that there are benefits from incumbent water companies publishing relevant charging information' for a NAV. In May 2018 Ofwat issued their Bulk Charges for NAVs: final guidance. We have therefore incorporated the final guidance into this document which summarises our bulk charges for NAVs for 2022/23.
- (3) On 26<sup>th</sup> January 2021 Ofwat issued the final guidance 'Bulk charges for new appointees - guidance on our approach and expectations'. We set out our position in relation to the guidance below.
- (4) Over 2021/22, Ofwat ran a working group looking at what best practice might look like for NAV charging. Some of the data template proposals were generated too late for our 2022/23 charges, but we have adjusted our approach to take a bottom-up approach to calculating avoidable costs, with an associated top-down cross check.
- (5) Information Note 21/04 set out Ofwat's expectations for 2022/23 Bulk Charging for NAVs:

## 2.5 Bulk charging for new appointees

In our [revised guidance on bulk charging for new appointees](#) we set expectations that incumbent companies publish charges that were more predictable, consistent and transparent.

We expect incumbents to apply the wholesale minus approach including a starting point accurately reflecting the characteristics of individual sites.

Incumbents should ensure their approaches to cost estimation are cost reflective and only include relevant avoided costs. When estimating their costs, incumbents should carefully consider which costs are relevant.

Incumbents should publish a 'menu' of charges so that new appointees are able to calculate their bulk charges based on the actual mix and quantity of properties supplied on a site.

Published charges should be updated on at least an annual basis, not least to reflect updates to wholesale charges and no later than the confirmation of incumbent wholesale charges.

## NWL position

Guidance requirements	NWL position
Charges that are predictable, consistent and transparent	Our 2022/23 charges are an evolution of our 2021/22 charges, with a consistent overall approach. We retain our simple 'per property' approach to the calculation of avoidable costs to minimise NAV workload and tariff complexity and to maintain incentives for water efficiency.
Applying wholesale minus approach	Our NAV charges are based on a wholesale minus approach: Household tariffs less avoidable costs.  We do not have any NAVs on large user tariffs, and we do not offer these for new NAVs.
Characteristics of individual sites	Our NAV charges are based on a per household property basis, with separate calculations for larger non-household premises based on volumes.  We maintain our bespoke approach to pumping costs where they occur. To date, we have not yet had a NAV application that requires a local pumping station.
Cost reflective charging	We have revised our approach from a top-down approach to a bottom up one based on avoidable network departmental costs.
Environmental incentives – incentivising water efficiency	Our avoided costs are applied on a per property basis and applied to the fixed household charges. Thus, if a NAV is water efficient, these allowances are unaffected and so incentives are maintained.
Publishing bulk charges – menu of charges	We publish our bulk supply charges on a menu basis that allow NAVs to consider their own mix of household and non-household customers.

	For ease of use, we allow NAVs to identify low volume non households (eg SMEs) as being similar to households where appropriate.
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	We now have an online charges calculator for NAVs to use which should improve transparency and ease of use.
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### **Calculation of avoided costs**

- (6) The Ofwat publication: 'Bulk charges for new appointees – conclusions on revising our guidance' states: *'As we have recognised, adopting bottom-up estimates may take time or require further engagement with industry and as such we acknowledge changes may not be fully implemented until future charging years. However, we consider incumbents have sufficient knowledge of their own businesses to avoid unnecessary delays. As a minimum we expect incumbents to have considered how they could incorporate changes to their approaches when they next revise their bulk charges.'*
- (7) Our 2022/23 avoided costs are based on a bottom-up analysis of avoided costs. Our approach is based on network departmental costs, so it ensures that all costs associated with network maintenance are considered.
- (8) In our view, this is a more accurate approach than an assessment of the individual unit cost of each productive network activity as it ensures that the avoided costs include non-productive departmental costs such as travel time, training, annual leave, absence and abortive visits. These costs are unlikely to be picked up in a 'cost per activity' approach that assumes that all working time is productive.
- (9) It further allows for a reconciliation of the avoidable costs to the network costs in the published, assured APR tables. This is important as a reality check of the costs avoided against the costs used by Ofwat in setting wholesale revenue allowances.

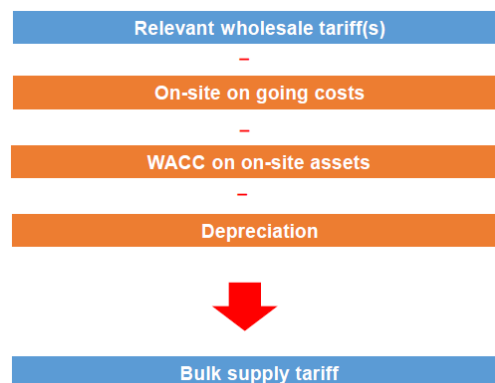
## **PURPOSE**

- (10) Ofwat have clearly stated their aim to 'contribute to the creation of a level playing field in the provision of developer services and the provision of water services to the end-customers in new developments' and the delivery of 'our strategy of ensuring trust and confidence in the sector'. We are committed to supporting a level playing field for developer services and this document is intended for use by NAVs who wish to secure a bulk supply/discharge agreement which involves the trading of water and/or wastewater for any site designated as a NAV under the relevant legislation. Water companies can also contract for bulk services with another incumbent water company, it should be noted that the charges included in this document do not apply to this type of bulk supply.
- (11) As Ofwat note in their guidance, NAVs can be appointed under the following criterion:

- the **unserved** criterion – the site is not connected to the water and/or sewerage infrastructure of an existing water company;
  - the **consent** criterion – an existing water company consents to the application; or
  - the **large user** criterion – the premises comprising the site use at least 50MI in any year in England or 250MI in Wales and the customer(s) consent(s).
- (12) These NAV charges will only apply where there are avoided costs for the incumbent when the NAV is awarded. As such, it will typically apply to new unserved sites. They do not apply under the large user criterion, where the user premises are already supplied by the incumbent and there are no avoided costs.
- (13) We appreciate that the types of services a NAV may need from us can vary depending on the approach being adopted at a particular site along with the local circumstances. We will therefore look at each NAV on a case by case basis before finalising any bulk supply/discharge agreements. However, we believe the information contained within this document can be used by NAVs to estimate their bulk charges. Surface water drainage and highway drainage costs will be calculated on a property type basis.
- (14) The aim of this document is to provide you with clear and transparent information about both our service and our charges relating to NAVs.
- (15) In this document “we” or “us” refers to NW in the North East of England and ESW in the South East. Words in the singular shall include the plural and vice-versa except where the context otherwise requires.
- (16) This document should be read in conjunction with our [Charging Arrangements](#) for 2022/23.

## GENERAL CHARGING PRINCIPLES

- (17) One of the key principles that we have used to build these charges is a ‘wholesale-minus’ approach. The figure below is the Ofwat illustration of the wholesale-minus approach which we have followed to build our charges for NAVs.



- (18) The relevant wholesale tariff will effectively be based on the appropriate weighted average combination of household and non-household standard tariffs, depending upon the specifics of the site.

- (19) For any bulk supply agreement entered in to from 1 April 2018 to 31 March 2020, an income offset will apply (in accordance with our Charging Arrangements). Therefore, the deduction from our wholesale tariffs will be for on-site ongoing costs only, as the income offset will cover the asset value (and thus WACC and depreciation).
- (20) Since 1 April 2020 we no longer offer an income offset for bulk supply agreement charges. This is because, under the new Ofwat charging rules for developer charging, income offsets no longer apply for requisitions.
- (21) The avoided costs used in our calculations are based on the average costs of reported APR data. Components such as leakage and assumed household consumption volumes will be updated at least every 5 years.
- (22) For pre 1 April 2018 NAVs, the additional deductions for Weighted Average Cost of Capital (WACC) and Depreciation will apply.
- (23) For 2022/23 we have mirrored the WACC used by the CMA for the PR19 Final Determination with an uplift in line with Ofwat guidance.
- (24) These charges have also been set within the DEFRA charging guidance of:
- Fairness and affordability;
  - Environmental protection;
  - Stability and predictability; and
  - Transparency and customer-focused service.

## EXPLANATION OF CHARGE DERIVATION FOR NAVs

### General

- (25) Our NAV charges are based on our standard household (HH) and non-household (NHH) wholesale charges from our [Wholesale Charges Schedule](#). This includes both the fixed and variable components. Large user based tariffs are not applicable. From this we then deduct the avoided costs. The calculations are either based on a per property basis for HH properties or per cubic metre basis for NHH properties. This paragraph is provided for explanatory purposes only.

### Calculation of the avoided costs

The following paragraphs summarise our approach to the calculation of avoided costs for our water supply and wastewater services.

#### (26) **Water supply**

- We extracted the 2020/21 full bottom-up departmental costs of network related departments.
- We deducted one-off non avoidable costs such as CMA appeal costs and temporary additional costs due to coronavirus restrictions during lockdown.
- We split those costs between directly attributable to local and trunk mains.

- We allocated the shared departmental costs between local and trunk mains using proportions based on discussions with departmental heads.
- We added general and support costs (company overheads) using a Full Time Equivalent employee cost driver.
- We excluded Cumulo Rates as an avoidable cost as they relate to profitability, which in turn is based on an RCV value. With full cost recovery from developers for requisitions, there is no effect on RCV, so no change in Cumulo rates.
- We excluded any expenditure on water pumping stations. If a NAV believes that a site warrants on site pumping, we will consider an additional avoidable costs allowance.
- We ensured that the total operating costs analysed reconciled to the 2020/21 APR costs. This is important as a reality check of the costs avoided against the costs used by Ofwat in setting wholesale revenue allowances.
- To calculate avoided capital replacement costs, we used the infrastructure maintenance expenditure, thus excluding any expenditure on water pumping stations, which we will make allowances for on a bespoke basis.
- We divided the total avoidable costs by the total numbers of properties in APR Table 4R to arrive at an avoided cost per property.
- We then inflated this to 2022/23 average prices.
- We deducted the avoided cost per property from the household fixed charge to arrive at the adjusted NAV fixed charge per property.

#### Reconciliation of avoidable operating costs to reported network costs for 2020/21.

£m, 2020/21 values	Trunk mains	Local mains	Total	Comments
Directly attributable	4.4	2.9	7.3	Departments that wholly cover either trunk or local mains
Direct, Allocated	2.5	28.5	31.0	Allocated using department head assessments of costs between trunk & local
General and Support allocations	4.2	18.7	22.9	Includes insurance, central costs such as HR, communications, information services, regulation
Not avoidable			4.0	One-off 2020/21 costs: CMA costs, coronavirus lockdown
2020/21 APR	11.1	50.1	65.2	Table 4J lines 6 & 11 – other distribution costs and traffic management act

#### (27) Wastewater service

- We have used the published, assured APR table 4E totex data for network plus sewage collection to derive the relevant avoidable costs. To do this we took the average of the five years 2015-2020 all indexed to 2022/23 prices.
- For the avoided operating costs, we used the total operating expenditure excluding third party services.
- For avoided capital replacement costs, we used the infrastructure maintenance expenditure.



- We excluded any expenditure on wastewater pumping stations. If a NAV believes that a site warrants on site pumping, we will consider an additional allowance.
- To assess the proportion of treated wastewater collection costs attributable to new development, we calculated the avoided cost per metre using the total mains length in our 2020/21 APR Table 4R.
- We deducted the avoided cost per property from the household fixed charge to arrive at the adjusted NAV fixed charge per property.

(28) **Updating the NAV Tariffs**

- For the fixed charge, the starting wholesale tariffs will be updated annually in accordance with the Wholesale Charges Schedule.
- Components such as leakage and household volumes will be updated at least every five years.
- The WACC used for legacy NAVs is in line with the wholesale WACC used by the CMA for the PR19 Final Determination.

**Numeric example of the derivation of NAV tariffs and the associated deductions from standard tariffs**

(29) This paragraph is again an explanatory paragraph provided for information purposes only the actual applicable NAVs tariffs for 2022/23 are detailed below in the Section entitled Bulk Charges for NAVs.

(30) The following deductions will apply against our standard tariffs.

**For NAVs post 1 April 2018**

Water Supply NAV tariff	North	South	North	South
	Household	Household	Non-household	Non-household
	£	£	£	£
Volumetric charge £/m3	1.1707	1.3974	1.1696	1.4772
Fixed Charge £ per property/year	21.10	21.10	Sum of individual NHH Fixed Charges	Sum of individual NHH Fixed Charges
<b>Deduction (£ per connection/year or per m3):</b>	<b>Per conn.</b>	<b>Per conn.</b>	<b>£/m3</b>	<b>£/m3</b>
Avoided operating costs	26.44	26.44	0.1335	0.1335
Avoided capital replacement costs	12.90	12.90	0.0651	0.0651
<b>Deduction for local leakage</b>	<b>£/m3</b>	<b>£/m3</b>	<b>£/m3</b>	<b>£/m3</b>
Leakage allowance of 2.81%	0.0329	0.0393	0.0329	0.0393

Wastewater NAV tariff	North	North
	Household	Non-household
	£	£
Foul only fixed charge £/property/year	20.16	As per banding
Foul and Surface Water Drainage fixed charge £/property/year	73.01	As per banding
Volumetric charge £/m3 (95% returns to sewer)	0.8299	1.1346
<b>Deduction (per connection/year or £/m3):</b>	<b>Per conn.</b>	<b>£/m3</b>
Avoided operating costs - Foul only	8.27	0.0593
- Foul and SWD	13.40	0.0593
Avoided capital replacement costs Foul	7.50	0.0584
Avoided capital replacement costs Foul & SWD	12.97	0.0584
<b>Deduction for local leakage</b>	<b>£/m3</b>	<b>£/m3</b>
Leakage allowance of 2.81%	0.0233	0.0233

### **For NAVs pre 1 April 2018**

- (31) For legacy NAVs that did not receive an income offset payment (those agreements signed pre 1 April 2018), a further deduction for the WACC and depreciation of those assets is made. This results in the following additional deductions. Please note there are no pre 1 April 2018 Wastewater NAVs.

Water Supply NAV tariff	North	South	North	South
	Household	Household	Non-household	Non-household
	Per conn.	Per conn.	£/m3	£/m3
Additional deduction (£ per connection/year or per m3):				
Avoided WACC	13.42	15.52	0.1170	0.1341
Avoided depreciation	3.46	4.00	0.0301	0.0346
Avoided rates	6.20	6.26	0.0541	0.0541
<b>Total additional deduction</b>	<b>23.08</b>	<b>25.78</b>	<b>0.2012</b>	<b>0.2228</b>

## BULK CHARGES FOR NAVs 2022/23

(32) The following tables contain our Bulk Charges for NAVs for 2022/23.

<b>Water NAV tariff</b>	<b>North</b>	<b>South</b>	<b>North</b>	<b>South</b>
	<b>Household</b>	<b>Household</b>	<b>Non-household</b>	<b>Non-household</b>
	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
<b>Water supply</b>				
<b>Post 1 April 18 NAVs</b>				
Volumetric charge £ per m3	1.1378	1.3581	0.9380	1.2393
Fixed charge £/property/year	-18.24	-18.24	Sum of individual NHH Fixed Charges	Sum of individual NHH Fixed Charges
<b>Pre 1 April 18 NAVs</b>				
Volumetric charge £ per m3	1.1378	1.3581	0.7368	1.0165
Fixed charge £/property/per year	-41.32	-44.02	n/a	n/a

<b>Wastewater NAV tariff</b>	<b>North</b>	<b>North</b>	<b>North</b>	<b>North</b>
	<b>Household</b>	<b>Household</b>	<b>Non-household</b>	<b>Non-household</b>
	<b>Foul Only</b>	<b>Foul &amp; SW</b>	<b>Foul Only</b>	<b>Foul &amp; SW</b>
	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
<b>Wastewater service</b>				
Fixed Charge	4.38	46.64	Sum of individual charges for each NHH property	Sum of individual charges for each NHH property
Volumetric charge £ per m <sup>3</sup>	0.8066	0.8066	0.9935	0.9935

### Applicability

- (33) The charges above are for what we consider is a standard or normal site. We would envisage that this approach will cover the majority of sites, however, due to the potential for significant variations to the services required at each site, our bulk NAV charges may need to be negotiated on a case by case basis where bespoke charges will be calculated to reflect the site's specific features. For example, where any NHH premise within a NAV meets the requirement for a large user tariff in its own right. Any bulk charges agreed under such an approach would be integrated into the following year's Wholesale Charges Schedule. It is considered that this would only occur in exceptional circumstances.
- (34) Additional charges may be applied in the event of any overdrawn of 'Maximum Demand' and/or 'Maximum Rate of Flow' specified within a NAV's 'Site' bulk supply agreement.

## EXAMPLE

The example below is provided for guidance purposes.

- (35) The example NAV consists of a site with a bulk supply and bulk discharge agreement in place in the Northumbrian Water region. The site is served by a single bulk supply meter of 50mm diameter. The site consists of 250 domestic properties and 3 NHH premises 2 with 15mm connections and one with a 25mm connection. All properties are connected and active for the full billing period. The bill period is the 1 May 2022 to 31 May 2022. The NAV agreement was entered into on the 5 July 2019. For the Northumbrian example, the three NHH premises have a Surface Water and Highway Drainage Charging Band of 1, 2 and 6 respectively. It is assumed that the bulk discharge agreement is a Foul only service.
- (36) We have also included an example of a water only NAV in the Essex & Suffolk Region with the same customers and demand.

(all readings in m <sup>3</sup> )	30/4/2022	31/5/2022	Consumption
Bulk Supply Meter Reading	1,000	4,547	3,547
NHH Meter 1	100	300	200
NHH Meter 2	100	350	250
NHH Meter 3	100	650	550
Total NHH Consumption			1,000
Total HH Consumption			3,547-1,000=2,547

## Water Charges

### Water Charges: Northumbrian

HH Consumption	Calculation	Charge
HH Water Charges	2,547 x £1.1378 =	£2,897.98
Fixed Charges	250 x 31/365 x -£18.24 =	-£387.34
<b>Total HH Water Charges</b>		<b>£2,510.64</b>
NHH Consumption	200+250+550 =	1,000 m <sup>3</sup>
NHH Water Charges	1,000 x £0.9380 =	£938.00
NHH Fixed Charges	1 x £35.20 + 2 x £21.10 x 31/365 =	£6.57
<b>Total NHH Water Charges</b>		<b>£944.57</b>
<b>Total Water Charges</b>	<b>£2,510.64 + £944.57 =</b>	<b>£3,455.21</b>

## Wastewater Charges: Northumbrian

HH Consumption	Calculation	Charge
HH Foul Wastewater Charges	$2,547 \times \text{£}0.8066 =$	2,054.41
Fixed Foul Charges	$\text{£}4.38 \times 31/365 \times 250 =$	93.00
<b>Total HH Wastewater Charges</b>		<b>2,147.41</b>
NHH Consumption	$200+250+550 =$	1,000 m <sup>3</sup>
NHH Wastewater Charges	$1,000 \times \text{£}0.9935 =$	993.50
Highway Drainage Charge NHH Property No 1	$1 \times \text{£}29.50 \times 31/365 =$	2.51
Highway Drainage Charge NHH Property No 2	$1 \times \text{£}90.90 \times 31/365 =$	7.72
Highway Drainage Charge NHH Property No 3	$1 \times \text{£}189.30 \times 31/365 =$	16.08
<b>Total NHH Wastewater Charges</b>		<b>1,019.81</b>
<b>Total Wastewater Charges</b>	<b><math>\text{£}2,147.41 + \text{£}1,019.81 =</math></b>	<b>3,167.22</b>

## Water Charges: Essex & Suffolk

HH Consumption	Calculation	Charge
HH Water Charges	$2,547 \times \text{£}1.3581 =$	£3,459.08
Fixed Charges	$250 \times 31/365 \times \text{-£}18.24 =$	<b>-£387.29</b>
<b>Total HH Water Charges</b>		<b>£3,071.79</b>
NHH Consumption	$200+250+550 =$	1,000 m <sup>3</sup>
NHH Water Charges	$1,000 \times \text{£}1.2393 =$	1,239.30
NHH Fixed Charges	$1 \times \text{£}35.20 + 2 \times \text{£}21.10 \times 31/365 =$	£6.57
<b>Total NHH Water Charges</b>		<b>£1,245.87</b>
<b>Total Water Charges</b>	<b><math>\text{£}3,071.79 + \text{£}1,245.87 =</math></b>	<b>£4,317.66</b>

## FINANCIAL AND OTHER ASPECTS

- (37) To ensure consistency between household and small non-household properties with similar characteristics, we allow NAVs with non-household SMEs with consumption of less than 200m<sup>3</sup>/yr to identify these as households in the NAV tariff calculations. The household discounts are larger than the non-household ones for properties up to this volume, so there are larger avoidable costs for the NAV in doing this.
- (38) The NAV will be required to provide meter readings for all NHH meters within the NAV area. In the absence of submitted actual meter reads NWL will use its own estimates for NHH consumption. Adjustments will then be made in the next regular invoice to reflect actual reads.

- (39) The NAV will also be required to provide details of actual connected property numbers within the NAV area monthly. In the absence of actual connected property numbers NWL will be unable to provide deductions for avoidable costs, or income offset payments where applicable.
- (40) A bulk supply and/or bulk discharge agreement will be entered into at the start of each NAV. Bills will be raised retrospectively on a monthly basis and payment will fall due 21 days from the date of the invoice. Also, by agreement, an average monthly position can be agreed with each NAV and an annual truing up or adjustment carried out at the end of the charging year.

## **VAT**

- (41) All charges published in this scheme exclude VAT. VAT will be added to the published charge at the appropriate rate where required.

