

# **BULK CHARGES 2021/22**

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NAV<sub>s</sub>



## **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 2021/22.
- (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:

| Guidance requirements                                     | NWL position   |
|---|--|
| Applying wholesale minus approach                         | <p>Our NAV charges are based on a wholesale minus approach: Household tariffs less avoidable costs.</p> <p>We do not have any NAVs on large user tariffs and we do not offer these for new NAVs.</p>   |
| Environmental incentives – incentivising water efficiency | <p>Our avoided cost 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.</p>  |
| Publishing bulk charges                                   | <p>We publish our bulk supply charges on a menu basis that allow NAVs to consider their own mix of household and non-household customers.</p> <p>We now have an online charges calculator for NAVs to use which should improve transparency and ease of use.</p> |

#### **Top down v bottom up estimation of avoided costs**

- (4) The parallel 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.’*
- (5) Our 2021/22 avoided costs are based on a top down analysis of avoided costs. The calculation of bottom up avoided costs is complex and consulting on these will take some time, so we welcome Ofwat’s recognition of this. We have committed to calculating bottom up avoided costs, and will consult with NAVs over these during 2021, with a view to implementing this approach for 2022/23 charges.

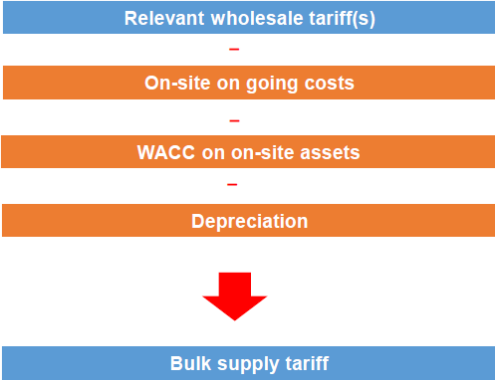
## **PURPOSE**

- (6) 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.

- (7) 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).
- (8) 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.
- (9) 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.
- (10) The aim of this document is to provide you with clear and transparent information about both our service and our charges relating to NAVs.
- (11) 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.
- (12) This document should be read in conjunction with our [Charging Arrangements](#) for 2021/22.

**GENERAL CHARGING PRINCIPLES**

- (13) 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.



- (14) 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.
- (15) 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).
- (16) 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.
- (17) 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.
- (18) For pre 1 April 2018 NAVs, the additional deductions for Weighted Average Cost of Capital (WACC) and Depreciation will apply.
- (19) For 2021/22 we have mirrored the WACC used by Ofwat for the PR19 Final Determination with an uplift in line with Ofwat guidance.
- (20) 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**

- (21) Our NAV charges are based on our standard household (HH) and non-household (NHH) wholesale charges from our [Wholesale Charges scheme](#). 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 (22),(23) and (24) summarise our approach to the calculation of avoided costs for our water supply and wastewater services.

(22) **Water supply**

- We have used the published, assured APR table 4D totex data for treated water distribution to derive the relevant avoidable costs.
- To do this, we took the average of the five years 2015-20 all indexed to 2021/22 prices.
- For the avoided operating costs, we used the total operating expenditure excluding third party services, less Local Authority and Cumulo Rates.
- 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 allowance.
- To calculate avoided capital replacement costs, we used the infrastructure maintenance expenditure.
- To assess the proportion of treated water distribution costs attributable to new development, we calculated the avoided cost per metre using the total mains length in our 2020 APR Table 4P.61.
- We then calculated the metres of main per property we would expect for a new development. To calculate this we used data from the Cost Assessment data model WS1, total length of new mains (BN1208) divided by number of new connections (BP3405 & 3400). We made this calculation an average of fourteen years of data.
- We multiplied the cost per metre by the metres per property to arrive at a cost per property for new development.
- We deducted the avoided cost per property from the household fixed charge to arrive at the adjusted NAV fixed charge per property.

(23) **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 15-20 all indexed to 2021/22 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 APR Table 4R.
- We then calculated the metres of main per property we would expect for a new development. To calculate this, we used data from the Cost Assessment data model WWS1, total length of new sewers (calculated as the average year in

year change in BN13535) divided by number of new connections (BP3410 & 3415). We made this calculation as an average of fourteen years of data.

- We multiplied the cost per metre by the metres per property to arrive at a cost per property for new development.
- We deducted the avoided cost per property from the household fixed charge to arrive at the adjusted NAV fixed charge per property.

(24) **Updating the NAV Tariffs**

- For the fixed charge, the starting wholesale tariffs will be updated annually in accordance with the wholesale charges scheme.
- From 1 April 2020 onwards, the avoided costs will be based on the average of the previous five years of reported APR data. These will be inflated by the CPIH index to bring them to the outturn values.
- Components such as leakage, household volumes and cost per property will be updated at least every five years and will be based on an average of previous years where possible.
- The WACC used for legacy NAVs is in line with the wholesale WACC used by Ofwat for the PR19 Final Determination.

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

(25) This paragraph is again an explanatory paragraph provided for information purposes only the actual applicable NAVs tariffs for 2021/22 are detailed below in the Section entitled Bulk Charges for NAVs (28).

(26) 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 £/m <sup>3</sup>                             | 1.0657                 | 1.2450                 | 1.0614                              | 1.3508                              |
| Fixed Charge £ per property/year                               | 20.20                  | 20.20                  | Sum of individual NHH Fixed Charges | Sum of individual NHH Fixed Charges |
| <b>Deduction (£ per connection/year or per m<sup>3</sup>):</b> | <b>Per conn.</b>       | <b>Per conn.</b>       | <b>£/m<sup>3</sup></b>              | <b>£/m<sup>3</sup></b>              |
| Avoided operating costs  | 19.17                  | 19.17                  | 0.2023                              | 0.1943                              |
| Avoided capital replacement costs                              | 7.18                   | 7.18                   | 0.0758                              | 0.0758                              |
| <b>Deduction for local leakage</b>                             | <b>£/m<sup>3</sup></b> | <b>£/m<sup>3</sup></b> | <b>£/m<sup>3</sup></b>              | <b>£/m<sup>3</sup></b>              |
| Leakage allowance of 2.79%                                     | 0.0296                 | 0.0346                 | 0.0296                              | 0.0346                              |



| Wastewater NAV tariff  | North                  | North                  |
|--|------------------------|------------------------|
|  | Household              | Non-household          |
|  | £                      | £                      |
| Foul only fixed charge £/property/year                       | 17.90                  | As per banding         |
| Foul and Surface Water Drainage fixed charge £/property/year | 64.15                  | As per banding         |
|  |                        |                        |
| Volumetric charge £/m <sup>3</sup> (95% returns to sewer)    | 0.7246                 | 1.0354                 |
|  |                        |                        |
| <b>Deduction (per connection/year or £/m<sup>3</sup>):</b>   | <b>Per conn.</b>       | <b>£/m<sup>3</sup></b> |
| Avoided operating costs - Foul only                          | 2.60                   | 0.0274                 |
| - Foul and SWD   | 4.87                   | 0.0274                 |
| Avoided capital replacement costs                            | 1.30                   | 0.0137                 |
| <b>Deduction for local leakage per m<sup>3</sup></b>         | <b>£/m<sup>3</sup></b> | <b>£/m<sup>3</sup></b> |
| Leakage allowance of 2.79%                                   | 0.0201                 | 0.0287                 |

### For NAVs pre 1 April 2018

- (27) 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          |
| <b>Additional deduction (£ per connection/year or per m<sup>3</sup>):</b> | <b>Per conn.</b> | <b>Per conn.</b> | <b>£/m<sup>3</sup></b> | <b>£/m<sup>3</sup></b> |
| Avoided WACC  | 11.91            | 13.78            | 0.1257                 | 0.1397                 |
| Avoided depreciation  | 3.46             | 4.00             | 0.0365                 | 0.0406                 |
| Avoided rates   | 5.12             | 5.33             | 0.0541                 | 0.0541                 |
| <b>Total additional deduction</b>   | <b>20.49</b>     | <b>23.11</b>     | <b>0.2163</b>          | <b>0.2344</b>          |

## BULK CHARGES FOR NAVs 2021/22

(28) The following tables contain our Bulk Charges for NAVs for 2021/22.

| <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>Water supply</b>                    | <b>£</b>         | <b>£</b>         | <b>£</b>  | <b>£</b>  |
| <b>Post 1 April 18 NAVs</b>            |                  |                  |   |   |
| Volumetric charge £ per m <sup>3</sup> | 1.0361           | 1.2104           | 0.7537  | 1.0491  |
| Fixed charge £/property/year           | -6.15            | -6.15            | Sum of individual Fixed charges for each NHH Property | Sum of individual Fixed charges for each NHH Property |
| <b>Pre 1 April 18 NAVs</b>             |                  |                  |   |   |
| Volumetric charge £ per m <sup>3</sup> | 1.0361           | 1.2104           | 0.5374  | 0.8147  |
| Fixed charge £/property/per year       | -26.64           | -29.26           | 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>Wastewater service</b>              | <b>£</b>         | <b>£</b>             | <b>£</b>  | <b>£</b>  |
| Fixed Charge                           | 14.00            | 57.98                | Sum of individual charges for each NHH property | Sum of individual charges for each NHH property |
| Volumetric charge £ per m <sup>3</sup> | 0.7045           | 0.7045               | 0.9656  | 0.9656  |

### Applicability

(29) 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 scheme. It is considered that this would only occur in exceptional circumstances.

## EXAMPLE

The example below is provided for guidance purposes.

- (30) 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 2021 to 31 May 2021. 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.
- (31) 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> ) | 30/4/2021 | 31/5/2021 | 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 £1.0361 =                  | £2,638.95            |
| Fixed Charges                  | 250 x 31/365 x -£6.15 =            | -£130.58             |
| <b>Total HH Water Charges</b>  |                                    | <b>£2,508.37</b>     |
| NHH Consumption                | 200+250+550 =                      | 1,000 m <sup>3</sup> |
| NHH Water Charges              | 1,000 x £0.7537 =                  | £753.70              |
| NHH Fixed Charges              | 1 x £33.70 + 2 x £20.20 x 31/365 = | £6.29                |
| <b>Total NHH Water Charges</b> |                                    | <b>£759.99</b>       |
|                                |                                    |                      |
| <b>Total Water Charges</b>     | <b>£2,508.37 + £759.99 =</b>       | <b>£3,268.36</b>     |

## Wastewater Charges: Northumbrian

| HH Consumption                            | Calculation                                | Charge               |
|---|--|----------------------|
| HH Foul Wastewater Charges                | $2,547 \times \text{£}0.7045 =$            | £1,794.36            |
| Fixed Foul Charges                        | $\text{£}14.00 \times 31/365 \times 250 =$ | £297.26              |
| <b>Total HH Wastewater Charges</b>        |  | <b>£2,091.62</b>     |
| NHH Consumption                           | $200+250+550 =$                            | 1,000 m <sup>3</sup> |
| NHH Wastewater Charges                    | $1,000 \times \text{£}0.9656 =$            | £965.60              |
| Highway Drainage Charge NHH Property No 1 | $1 \times \text{£}26.20 \times 31/365 =$   | £2.23                |
| Highway Drainage Charge NHH Property No 2 | $1 \times \text{£}80.80 \times 31/365 =$   | £6.86                |
| Highway Drainage Charge NHH Property No 3 | $1 \times \text{£}168.20 \times 31/365 =$  | £14.29               |
| <b>Total NHH Wastewater Charges</b>       |  | <b>£988.98</b>       |
|   |  |                      |
| <b>Total Wastewater Charges</b>           | <b>£2,091.62 + £988.98 =</b>               | <b>£3,080.60</b>     |

## Water Charges: Essex & Suffolk

| HH Consumption                 | Calculation   | Charge               |
|--------------------------------|---|----------------------|
| HH Water Charges               | $2,547 \times \text{£}1.2104 =$                                   | £3,082.89            |
| Fixed Charges                  | $250 \times 31/365 \times \text{-£}6.15 =$                        | <b>-£130.58</b>      |
| <b>Total HH Water Charges</b>  |   | <b>£2,952.31</b>     |
| NHH Consumption                | $200+250+550 =$   | 1,000 m <sup>3</sup> |
| NHH Water Charges              | $1,000 \times \text{£}1.0491 =$                                   | £1,049.10            |
| NHH Fixed Charges              | $1 \times \text{£}33.70 + 2 \times \text{£}20.20 \times 31/365 =$ | £6.29                |
| <b>Total NHH Water Charges</b> |   | <b>£1,055.39</b>     |
|                                |   |                      |
| <b>Total Water Charges</b>     | <b>£2,952.31 + £1,055.39 =</b>                                    | <b>£4,007.70</b>     |

## FINANCIAL AND OTHER ASPECTS

- (32) 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.
- (33) The NAV will also be required to provide details of actual connected property numbers within the NAV area quarterly. In the absence of actual connected property numbers NWL will be unable to provide deductions for avoidable costs, or income offset payments where applicable.
- (34) 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 quarterly basis and payment will fall due 21 days from the date of the invoice. NWL reserves the right to

impose a more frequent billing arrangement dependent upon the individual characteristics of the site. 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**

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

