New Appointments and Variations (NAVs)

Bulk Charging Arrangements for 2024-25 Summary of Charges

January 2024



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1. Summary of NAV bulk charges

Yorkshire Water as a major regional incumbent water and sewerage company provides key wholesale services for New Appointees and Variations organisations (NAVs) who operate in the wider Yorkshire Water area.

These wholesale services, in the form of providing bulk supplies of potable water and receiving bulk discharges of wastewater, are charged for under formal bulk supply and discharge agreements. The setting of prices (tariffs) for these services is a key activity in support of the competitive market for network operations and retail services (to household consumers).

For the 2024-25 charging year, Yorkshire Water has updated its bulk tariffs for NAVs and also made some key changes to how these tariffs are structured and presented to NAVs, in order to improve transparency and simplicity in charging.

Yorkshire Water is changing how it sets bulk charges for the 2024/25 period from being set on a site-by-site basis to being set using a fixed menu of standard 'typical' NAV sites.

We will transition existing bulk supply arrangements for current NAV appointed sites within our incumbent region over to this new menu-based charging approach for 2024-25

Some larger sites that are beyond the menu structure will continue to have bulk tariffs set on a bespoke basis.

1.1. Summary of our bulk tariffs and key changes made.

We continue to use the 'wholesale-minus' approach to price setting as recommended by Ofwat in its guidance to incumbent water companies.

Ofwat has led an industry working group, the Bulk Charging Working Group (BCWG) looking at how charges for the bulk supply of services to NAVs are set by incumbents and seeking ways to improve transparency and identify best practice. The BCWG has looked at a range of areas such as consistency in the coverage of

cost types to be considered in the wholesale minus approach, the basis for the wholesale tariff starting point, and also transparency in how information on charges, is effectively shared with NAVs.

The BCWG produced a paper in August 2021 that outlined how the relevant starting point tariff could be set and some principles for setting bulk tariffs. These principles are:

- 1. Bulk tariffs should be simple, clear, and not onerous to calculate / apply.
- 2. Tariffs should be structured using a menu-based approach.
- 3. Bespoke tariffs should be the exception.

Yorkshire Water has responded to this views of best practice moving to a menubased approach to setting bulk tariffs for NAVs.

Firstly, the mix of property types and their expected water and wastewater demands will determine the wholesale 'starting' tariff for each NAV site based on the following **wholesale tariff menu** in **Table 1.1**, below.

The wholesale tariffs are also published on the Yorkshire Water website under our webpages for Business customers and Retailers. The link to the Wholesale Charges webpage is: https://www.yorkshirewater.com/business/wholesale-charges/

When we charge the NAV for water and wastewater volumetric charges measured at the boundary via a bulk meter, we will adjust the weighted wholesale starting tariff for the site by the **leakage allowance**. See below more details on how the leakage allowance is set and applied.

Table 1.1. Menu of Wholesale tariffs for use as 'starting' tariffs for NAV sites

Charge	Unit	Water	Wastewater
Yorkshire Water area			
Households			
Volumetric	p/m3	179.57	207.77
Fixed	£/prop	12.79	-
Non-Households			
Consumption <50Mla	p/m3	176.45	199.38
Consumption <250Mla	p/m3	112.68	161.16
Consumption >250Mla	p/m3	95.10	147.10
Fixed	£/prop	-	-

Charge	Unit	Water							
York Waterworks area									
Households									
Volumetric	p/m3	101.72							
Fixed	£/prop	12.79							
Non-Households									
Consumption <50Mla	p/m3	97.77							
Consumption <250Mla	p/m3	85.89							
Consumption >250Mla	p/m3	85.89							
Fixed	£/prop	_							

We have made a key change for 2024-25 in providing NAVs with **a menu-based approach to setting of the avoided costs** component of the wholesale-minus methodology. For NAV sites that are of a size of between 1 to 350 properties, bulk tariffs will be determined by a combination of wholesale 'starting' tariff derived for the site based on values in the wholesale tariff menu, in Table 1.1, and the avoided costs within the **avoided costs menu**, as detailed in **Table 1.2** over the page.

We publish this 'priced menu based' tariff, moving away from our entirely site-specific charging. In order to develop the menu below, we reviewed all existing NAV sites in Yorkshire (ones built out, ones under construction, and ones with bulk supply agreements in progress) to consider where there were close correlations between site characteristics that are drivers for variable avoided costs.

The number of properties closely correlate with network length across the majority of NAV sites in our sample. We were able to define three typical sites thresholds based on grouping around an average site property density for each grouping. By having more than one menu typical site standard this protected sites currently paying for bulk supply or discharge services under site specific arrangements from facing high price variances as we cutover to a fixed price menu-based approach.

Where a NAV site is, or will be, serving more than 350 properties, we will provide a **site-specific bespoke tariff** based on the wholesale 'starting' tariff from our wholesale tariff menu and a site-specific assessment of the avoided costs component.

Table 1.2 Menu of Water and Wastewater Avoided Costs for 'typical' sites based on number of properties.

Water

Water		Menu A	Menu B	Menu C	Bespoke avoided cost
Avoided costs	Unit	Sites up to 100 properties	Sites between 101 and 200 properties	Sites between 201 and 350 properties	Sites above 350 properties
Scientific services	£/prop pa	1.28	1.28	1.28	1.28
Emergency water	£/prop pa	0.36	0.36	0.36	0.36
Water operational costs	£/prop pa	0.64	0.62	0.56	Site specific
Leakage management	£/prop pa	11.47	11.16	10.01	Site specific
Business overheads	£/prop pa	1.86	1.82	1.65	Site specific
Asset replacement	£/prop pa	27.87	27.60	26.62	Site specific
Total avoided costs	£/prop pa	43.48	42.83	40.48	ТВС

Sewerage

Sewerage		Menu A	Menu B	Menu C	Bespoke avoided cost
Avoided costs	Avoided costs Unit		Sites between 101 and 200 properties	0 and 350 gropert	
Wastewater operational costs	£/prop pa	9.67	8.60	7.73	Site specific
Business overheads £/prop pa		1.91	1.70	1.53	Site specific
Asset £/prop pa		10.19	9.06	8.15	Site specific
Total avoided costs	Total avoided £/prop pa		19.37	17.41	ТВС

Other key features we have made to improve simplicity and aid transparency are:

Leakage Allowance: A fixed allowance for leakage losses between the site boundary, where we supply water to, and the NAV end-customers property boundary where the NAV meters water use. For 2024-25 we have fixed this **leakage** allowance for all NAV sites at 6.1%

Two-part tariff structure: For 2023-24 we introduced a two-part tariff structure, with a volumetric tariff for water and wastewater demand (set at a p/m3 price) and a per property avoided cost discount (set as a \pounds /property per annum price).

This removes any perverse incentive on NAVs to not promote water efficiency and good water use by their end consumers, whether they be domestic or business customers.

For the 2024-25 charging year we have maintained this structure and the new menu-based tariffs are laid out and will be billed in this way. Site specific tariffs that are outside the menu-based range would also be presented and billed in this way.

Updated wholesale tariffs and avoided costs: Again this year, we have updated our NAV bulk tariffs to incorporate our 2024025 published Wholesale Charges and our avoided costs using bottom-up three year averaging where possible. Detailed explanations for how we assess these costs and what they cover is provided later in this document. For information our 2024-25 Wholesale tariffs for water have increased by 11.7% compared to 2023-24 and for wastewater have increased by 5.6% compared to 2023-24.

Avoided costs checklist: Published in parallel to this document is a checklist of cost categories that the BCWG identified as having the potential for being in some way avoided by the incumbent where NAVs adopt new networks in the incumbents' place.

This avoided cost checklist details whether Yorkshire Water does include this cost type within the avoided cost stage of our NAV charges methodology or if not the rationale for it not being relevant to the setting of bulk charges.

Should NAVs or other stakeholders have any questions about how we set these charges, please contact Yorkshire Water. Our contact details in relation to the NAV market and charges in at the end of this document.

2. Our charging arrangements

Over the following sections we present our charging arrangements based on the 'wholesale-minus' approach including the treatment of avoided on site costs and other allowances updated for 2024-25.

2.1. Tariff structure

Our bulk charges tariff structure is shown in Figure 2. with the tariff output for the NAV site being in two parts.

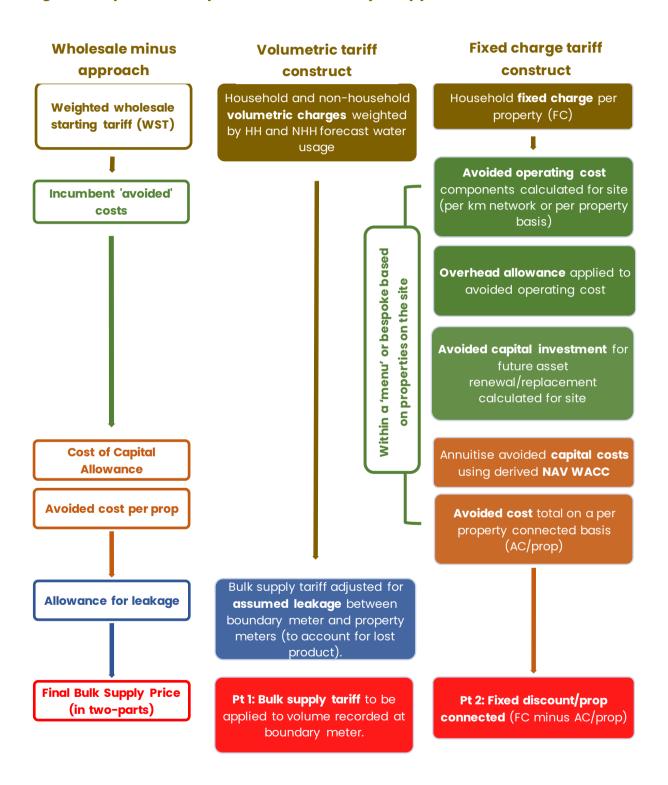
- Part 1 is the **volumetric tariff** that will be applied to water usage values (from the boundary meter or other meter data as relevant),
- Part 2 is applied as a **fixed charge** (typically negative) for each property connected at the NAV site. It is important to consider when the site is in its build phase this charge element will apply to those properties connected at that point and not the future completed site property count. Only when the site has been completed and all properties are connected will the full value of the fixed discount element apply.

To apply this approach we will use meter readings from the boundary meter to bill the volumetric component of the tariff and use the latest information from the NAV on connected properties at the relevant site for the per property charge component. We will bill NAVs on a monthly frequency under the two-part bulk tariff approach.

It should be noted that there may be infrequent circumstances where this two-part tariff approach could result in a credit to the NAV where the volumetric related charge is smaller than the net avoided cost charge – for example, where some properties on a site during the build phase have been connected but are not fully occupied and the legitimate water demand via the bulk supply is very low. Please note we will limit our invoices for bulk supplies in these circumstances at zero.

We require the NAV to provide regular updates on the counts of connected properties during the site build phases. Where such information was not made available in a timely manner, Yorkshire Water would estimate the number of connected properties based upon an assumed build and connection rate and by cross-checking with water demand to the site.

Fig 2. Site specific two-part tariff – summary of approach



2.2. Wholesale weighted starting tariff

We calculate the wholesale tariff 'starting point' for the setting of bulk charges through a 'weighted' approach based on the mix of properties (household and non-household) to be built and served at the site and their relative forecast water consumption. This method remains consistent with Ofwat's latest guidance.

Our wholesale household measured water tariffs for 2024-25 are 11.7% higher than for 2023-24. For wastewater the increase is around 5.6%. These increases are a combination of CPIH at 4.2% and a positive K-factor set by Ofwat for 2024-25 due to reduced forecasts for household water consumption compared for our PR19 Final Determination.

The formula for the weighted wholesale starting tariff is shown in Figure 2.1.

We assume all household and non-household properties at the site will be **metered** and therefore we use wholesale tariffs for metered properties in our published tariffs.

Figure 2.1. Calculating the weighted wholesale tariff starting point.



The formula is used to calculate the weighted starting tariff for both water and wastewater services. For wastewater, we apply a standard 95% 'return to sewer' rate to the household and non-household annual water demand as a default.

Finally a factor is applied to the wholesale starting volumetric tariff (from part 2.1.1) to account for the expected **loss of water through leakage** on the NAVs network between the boundary meter (measuring volumes for the whole site) and the meters at the on-site premises (measuring volumes at individual premises).

We have set this level of allowance using our historical leakage performance data from our more modern DMAs, as we explain further in part 2.6.

The leakage allowance is applied to both water and sewerage bulk volumetric tariffs, where relevant.

Where we do not use meter read data from a bulk meter at the NAV site boundary, but instead use the reads from meters at end customers premises, no leakage allowance is applicable.

Where the new development site to be adopted by the NAV sits within the defined geographical area for **York Waterworks**, then the starting point will be derived from our published York Waterworks wholesale tariffs (water services only). Our published tariffs detail what these charges would be within the York Waterworks area. In **Appendix A** of this paper we provide details of the local parishes which make up the historical York Waterworks territory. Should you be unsure whether the site is within this territory, please contact Yorkshire Water with full details of the site address and plot locations and we can advise accordingly.

2.3. Leakage allowance (bulk metered site)

Where water supplied to the NAV site is measured at the boundary by a bulk meter, we need to account for the difference in the billed volume at the bulk meter compared to the billable volume at the premise's meters in aggregate (the volume applicable to wholesale tariffs) due to leakage losses.

The difference is evaluated as a percentage discount and applied to the starting volumetric tariff to reflect the volumes recorded at the premises meters that the NAV will use for billing its customers.

For 2024-25 bulk charging, we have moved to a **fixed leakage percentage value** for all bulk supply agreements at **6.1%**. We apply this automatically within the bulk supply charges menu into the wholesale starting volumetric tariff.

We have assessed leakage losses on more modern DMAs (up to 20 years in age) within our water network across our region. We will continue to track our leakage performance and model future leakage to reflect a fair level of leakage attributable to modern metered networks and new-build features.

This does not impact the ongoing and long-run avoided costs that are captured in the fixed charge tariff part.

The leakage allowance is applied to both water and sewerage bulk tariffs, where relevant. Where we do not use meter read data from a bulk meter at the NAV site boundary, but instead use the reads from meters at end customers premises, no leakage allowance % discount is applicable¹.

2.4. Surface water drainage fixed charges

Where a NAV connects the development site to our sewerage network for drainage of surface water, we will levy our standard wholesale surface water drainage fixed charges in full on a per property per annum basis but billed monthly against connected properties at that time. For non-household premises we will use the business banded charges published within our annual Wholesale Charges scheme.

This approach is consistent with our bulk supply charges for last year.

2.5. Sewer pumping stations

Our bulk supply charges menu does not currently give a fixed discount for sites where a NAV may have a sewer pumping station. The treatment of the incumbents avoided costs associated with sewer pumping stations (SPS) at NAV sites will continue to be determined outside our core NAV bulk pricing.

¹ The exclusion of a leakage allowance adjustment may also apply where premises on site are not individually metered – we would need to assess this in consultation with the NAV.

We do model these avoided operational and maintenance costs separately on behalf of NAVs when they enquire about the additional features of their wastewater on-site networks.

NAVs should continue to make enquires to Yorkshire Water at the earliest opportunity should it know the details of a planned SPS at its site.

2.6. VAT chargeable

All charges are subject to the addition of any Value Added Tax chargeable.

3. Worked example

To illustrate our approach to setting bulk charges, we provide a worked example.

We consider a NAV site with **300 household properties** and **2 non-household properties**. Both bulk water and wastewater services are required by the NAV. The annual water demand has been estimated by the NAV at 130m3/yr. for each household property and 4,000m3/yr. for each non-household property. A rate of return to sewers of 95% of water demand is used to estimate the wastewater demand. We have assumed there is no connection for surface water to the site.

The total length of water mains on the example site is 3.0km and the total length of sewers is 2.5km. As the number of properties at the site is between 201 and 350, this site would sit into Menu C in our published menu of avoided costs. If the site was beyond the 350 properties range, we would need to know the planned lengths of the onsite water and wastewater networks as relevant ahead of Yorkshire Water confirming final tariffs into a bulk supply and/or discharge agreement.

In Table 4.3. below we have shown as a comparison the equivalent Wholesale large user tariff (based on the assumed total annual demand of the site) as a comparable benchmark.

Table 4.1. List of key NAV customer and site characteristics

NAV characteristics	Values
Total length of mains (km)	3.0
Total length of sewers (km)	2.5
Nr of HH properties	300
Nr of NHH properties	2
Annual HH water demand (m3/yr./prop)	130
Annual NHH water demand (m3/yr./prop)	4,000
Annual HH wastewater demand (m3/yr./prop)	123.5
at 95% return-to-sewer	
Annual NHH wastewater demand (m3/yr./prop)	3,800
at 95% return-to-sewer	

Table 4.2. Wholesale charges for water and wastewater based on the NAV characteristics

2024-25 Wholesale charges	Values		
Water:			
Fixed HH charge	£12.79 /prop pa		
Volumetric HH charge	179.57 p/m3		
Volumetric NHH charge (0-50Ml)	176.45 p/m3		
Volumetric NHH charge (>50-250Ml)	112.68 p/m ³		
Wastewater:			
Fixed HH charge	£-/prop pa		
Volumetric HH charge	207.77 p/m3		
Volumetric NHH charge (0-50Ml)	199.38 p/m3		
Volumetric NHH charge (>50-250Ml)	161.16 p/m3		

Table 4.3. Starting weighted tariff, total avoidable costs, leakage allowance and final tariffs

Name	NAV site			
Weighted starting water vol rate (p/m3)	179.04			
Weighted starting sewerage vol rate (p/m3)	206.34			
Starting water fixed charge per HH prop	£12.79			
Water avoidable costs (£/proppa)	-£40.48 (from Menu C)			
Sewerage avoidable costs (£/proppa)	-£17.41 (from Menu C)			
Leakage allowance (%)	6.1% (fixed)			
Water bulk supply vol tariff (p/m3)	168.12			
Water bulk supply fixed tariff (£/proppa)	-£27.69 (or -£2.31 per month)			
Sewerage bulk supply vol tariff (p/m3)	193.76			
Sewerage bulk supply fixed tariff (£/prop pa)	-£17.41 (or -£1.45 per month)			
Equiv. water bulk supply vol tariff (p/m3)	161.19			
Equiv. sewerage bulk supply vol tariff	184.91			
(p/m3)				
Equiv. NHH LUT water (p/m3)	For 47.0MI = 176.45			
Equiv. NHH LUT sewerage (p/m3)	For 44.65MI = 199.38			

In Table 4.4, we present how for a range of typical NAV sites our water and wastewater bulk supply and discharge tariffs would change between 2023-24 and

2024-25. Note the underlying wholesale tariffs have increased by around 12% for water and 6% for wastewater between 2023-24 and 2024-24 charges.

Although as we now follow a mix of menu-based approach and site-by-site approach where more than 350 properties will be on the site, each example generates a unique two-part tariff and variance between 2023-24 and 2024-25 rates, it is noteworthy that all examples show water tariffs increasing from last year by a greater percentage that the change in the underlying wholesale water tariffs.

For these example scenarios, we have assumed household water demand is 130 m3/yr/prop and commercial demand is 2000 m3/yr/prop, with a 95% return to sewer (and no surface water drainage connection).

Table 4.4. Example sites showing change in bulk supply and discharge tariffs from 2022-23 to 2023-24

					FY 2023/24		FY 2024/25					
	Site scenario	Service	HH props	NHH props	Network length (km)	BSP vol tariff (p/m3)	Net fixed/prop charge (incl. avoided costs) (£/prop pa)	BSP vol tariff (p/m3)	Net fixed/prop charge (incl. avoided costs) (£/prop pa)	Leakage allowance	% Change in tariff	NAV Wholesale margin
1	Small low density water site	Water	80	-	1.0	147.95	-38.23	168.62	-30.69	6.1%	18.7%	17.7%
	Medium	Water	200	-	1.8	150.36	-32.14	168.62	-30.04	6.1%	13.4%	17.4%
2	dual service site	Sewerage	200	-	1.8	183.91	-16.87	195.10	-19.37	6.1%	-0.3%	7.5%
	Medium	Water	200	5	1.8	152.35	-32.14	167.80	-27.69	6.1%	13.6%	12.4%
3	dual service site	Sewerage	200	5	1.8	185.15	-16.45	192.91	-17.41	6.1%	0.5%	5.0%
	Large dual	Water	500	5	4.5	151.29	-29.49	168.23	-28.84	6.1%	13.6%	14.9%
4	service site	Sewerage	500	5	4.5	184.48	-16.70	194.05	-18.84	6.1%	0.0%	6.4%
_	Very large	Water	2000	-	15.0	151.97	-26.06	168.62	-25.42	6.1%	13.7%	15.5%
5	dual service site	Sewerage	2000	ı	15	185.87	-14.05	195.10	-15.86	6.1%	-0.1%	6.2%

Note - For scenarios 1, 2 and 3 they come into avoided cost menus 'Menu A', 'Menu B' and 'Menu C' respectively. Both scenarios 4 and 5 are for sites with over 350 properties and would thus are provided with bespoke tariffs and avoided costs based on property mix and network lengths of the on-site NAV networks.

4. Future changes to our charges

We will update our bulk supply charges as our Wholesale charges change annually to recover the allowed revenue as determined through the regulatory price review process. Should we need to make revisions or interventions to our charges approach due to material changes in Ofwat's guidance or the introduction of relevant charging rules we will inform NAVs in advance.

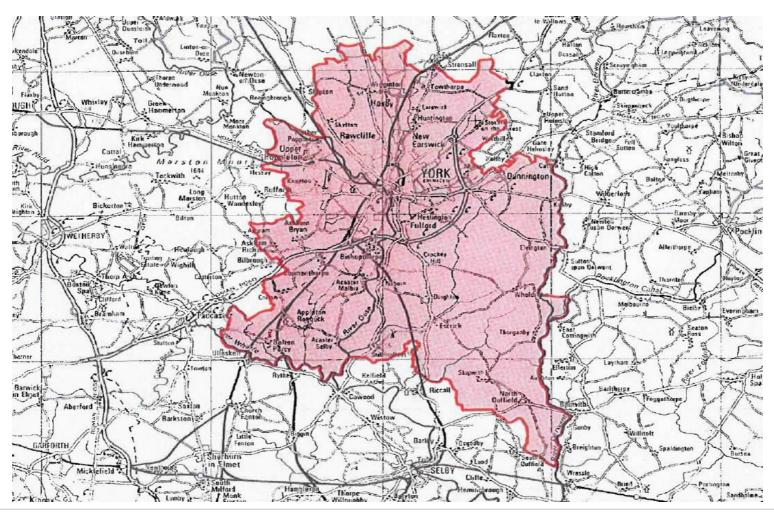
Should a NAV have any questions about how we set our NAV bulk tariffs or anything in this charge's publication, please get in contact with Yorkshire Water in the first instance via our email:

Network.access@yorkshirewater.co.uk

We aim to continue to make our charges for bulk services for NAVs transparent and straightforward. We would welcome feedback on the usability of this publication so that we can continue to keep the provision of bulk supply charge information as easy as possible for NAV users to understand and self-serve.

5. Appendix A. – York Waterworks area

NAVs serving sites within the York Waterworks area will be subject to different wholesale water 'starting' tariffs from Yorkshire Water for bulk supply charges.



York Waterworks Map (extract from licence)

York Waterworks territory is detailed by the parishes that make up the area. If the NAV site resides within one of these parishes Yorkshire Water will use our published York Waterworks tariffs for setting the wholesale starting tariff:

Parish Name

Haxby Acomb Heworth Acaster Malbis

Heworth without Acaster Selby

Heslington Askham Bryan Holgate Askham Richard Huntington Appleton Roebuck Kexby

Bishopthorpe Knavesmire **Bolton Percy** Micklegate

Bootham Monk

Castlegate Murton (Flaxton) Clifton Osbaldwick Clifton Without Rawcliffe Colton Scarcroft Skipwith Companthorpe Stillingfleet Deighton

Skelton Dunnington

Stockton-on-Forest Earswick

Thorganby Elvington Towthorpe Escrick Walmgate **Fulford** Wheldrake Fishergate Wiggington Guildhall

York



Get in touch with us

We would welcome your comments or questions on this document.

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