NORTHUMBRIAN WATER (iving water

UPSTREAM SERVICES STATEMENT 2014-15

Table, Methodology and Commentary

Wholesale water	Network plus								
Business unit		Water resources		Raw water	distribution	Water treatment	Treated water distribution		
Service		Abstraction licence	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Trunk treated waterLocal treated waterdistributiondistribution		
Total operating expenditure £m		30.3	15.7	5.2	0.1	55.4	19.9	32.6	
IRC	£m	-	1.4	0.8	-	-	16.5	14.8	
CCD	£m	-	5.9	0.1	2.5	35.6	20.6	18.6	
Total operating costs	£m	30.3	23.0	6.1	2.6	91.0	57.0	66.0	
Total BU operating cost	£m	53.3		8.7		91.0	123.0		
Cost drivers		MI	ML/day	ML/day	ML/day	ML/day	km	km	
Unit Costs		39	57	15	6	227	12,033	3,152	

Wholesale wastewater

Network plus

Business unit	Sev	vage collectio	'n	Sewage treatment		Sludge disposal			
Service		Foul	Surface water drainage	Highway drainage	Sewage treatment & disposal	Sludge transport	Sludge treatment	Liquor treatment	Sludge disposal
Total operating expenditure £m		7.4	12.7	6.8	40.4	6.1	7.9	1.1	1.4
IRC	£m	4.4	7.1	3.9	0.9	-	-	-	-
CCD	£m	3.5	5.6	3.0	53.7	0.2	17.0	-	0.1
Total operating costs	£m	15.3	25.4	13.7	95.0	6.3	24.9	1.1	1.5
Total BU operating cost	£m		54.4		95.0		1.5		
Cost drivers		km			BOD kg/day	tds	tds	tds	Tds
Unit Costs			3,314		474	90	356	16	21

INTRODUCTION

The operating cost and current cost depreciation (CCD) analysis of upstream services has been produced as an integral part of the process of preparing tables 2 and 3 of Section B to the Northumbrian Water Limited (NWL) Regulatory Accounts 2014-15. The methodology for the production of tables 2 and 3 is set out in the document 'Accounting Separation Methodology 2014-15' available on NWL's website (www.nwl.co.uk).

This upstream services methodology sets out the further analysis carried out to produce the upstream services cost analysis table above. The accounting separation methodology, including changes made from the prior year, is not repeated in this document.

OPERATING EXPENDITURE

Direct costs can usually be identified as belonging to the service for which they are used rather the boundary in which they sit. Where this is not possible the following allocations have been used:

- Water distribution mains costs have been allocated between trunk and local distribution based on the size of mains.
- Water pumping station power costs are allocated on a site by site basis to either local and trunk water distribution.
- Sewer network costs are allocated between foul, surface water drainage and highway drainage using lengths of foul, storm water and combined sewers and their estimated capacities.
- Sludge liquor treatment costs have been calculated using the COD values of the return liquors as a proportion of the total COD entering the sewage treatment works.

The allocation of general and support expenditure costs allocations follow the methodology set out in the 'Accounting Separation Methodology 2014-15'.

INFRASTRUCTURE RENEWALS CHARGE (IRC)

The IRC is taken from note 2 to Section B of the NWL Regulatory Accounts. The water distribution and sewage collection charges are further allocated across the upstream services on a pro-rata basis using CCD.

CCD

Fixed assets directly involved in the activity streams of each business unit have been recorded in that activity stream in line with Regulatory Accounting Guideline 4.04 (RAG4). Where the assets have been used by more than one business unit, CCD has been recorded in the primary business unit, in accordance with RAG4, and partially recharged to other business units based on usage, following the methodology set out in the 'Accounting Separation Methodology 2014-15'.

The following assumptions have been made to allocate CCD over the activity streams where the use of the asset is not clear:

• Treated water distribution - water mains have been allocated between trunk and local water main with the storage reservoirs being allocated to the trunk mains. Pumping stations have been directly allocated to trunk or local distribution as appropriate.

- Sewage collection sewer network has been allocated between foul, surface and highway drainage, reflecting that large parts of the network are combined.
- Sludge treatment sludge transport covers the cost of the sludge vehicles only.
- Liquor treatment NWL does not have any specific liquor treatment plants as all the sludge treatment plants are on sewage treatment works and any liquors are mixed with returns from the treatment process and recirculated back into the works.

CHANGES IN COSTS DURING THE YEAR

Costs in the upstream services analysis for 2014-15 have been compared to the equivalent costs for 2013-14, inflated by the average year RPI of 1.99%. Significant year on year movements of greater than 10% are explained below.

OPERATING COSTS - WATER

Trunk treated water distribution costs have increased due to higher power prices.

OPERATING COSTS - WASTEWATER

Sludge disposal costs have decreased because the 2013-14 costs included some one-off contractor costs relating to start up expenditure.

IRC

The total IRC for water and sewerage charges has reduced, in real terms, by 4% from 2013-14. This reflects capital efficiencies made during AMP5 and planned for AMP6.

Within water, the IRC allocated to water resources and raw water distribution is based on the average infrastructure renewals expenditure (IRE) over the period 2010-2015. The balance is allocated to between trunk and local distribution on a pro-rata basis using CCD.

A similar approach has been taken on sewerage with the charge to sewage treatment based upon the average 2010-2015 spend and the balance charged to sewage collection. The sewage collection charge has been allocated across the foul, surface water and highway drainage services on a pro-rata basis using CCD.

CCD

The change in the methodology for the allocation of shared assets, where assets have been allocated to the principal business unit and then recharged to other business units, has resulted in a number of small changes across the upstream services categories, though the absolute changes are not significant.

COST DRIVERS

The following cost drivers have been applied to calculate the unit costs in the table:

- Abstraction licence licenced volumes in MI;
- Raw water abstraction, raw water distribution and water treatment distribution network input, measured as MI per day;
- Treated water distribution length of the trunk and local water networks, measured in km;

- Sewage collection costs have been aggregated and driver is the total length of the sewerage network, excluding transferred private sewers;
- Sewage treatment loads into sewage treatment works, measured as kg of BOD per day;
- Sludge treatment volume of sludge produced, measured as tonnes of dried solids of sludge.