

# **IPART**

## **Review of Hunter Water's miscellaneous and trade waste charges**

### **Final Report**

**15 December 2008**

Ms Amanda Chadwick  
Program Manager  
Independent Pricing and Regulatory Tribunal  
Level 8, 1 Market Street  
SYDNEY NSW 2000

15 December 2008

Dear Ms Chadwick

**Re: Review of Hunter Water's miscellaneous and trade waste charges**

Please find attached Deloitte's final report on miscellaneous and trade waste charges proposed by Hunter Water to IPART in its submission dated 12 September 2008.

This final report incorporates comments from Hunter Water and IPART on our draft report, as well as comments on a preliminary final report on the trade waste components of the review.

Please contact myself on 03 9208 6584 or Paul Liggins on 03 9208 6648 if you have any queries regarding the report.

Yours sincerely



**Robert Southern**  
Partner  
Economics  
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# 1 Executive Summary

## 1.1 Scope and content of report

The Independent Pricing and Regulatory Tribunal (IPART) has requested Deloitte and Halcrow to review the prices for miscellaneous and trade waste services proposed by Hunter Water in its recent pricing submission. In relation to miscellaneous services we have been requested to:

- conduct a detailed investigation of a sample of 20 ancillary and miscellaneous service charges
- compare ancillary and miscellaneous charges for the same services across similar agencies and identify and comment on any clear differences.

In relation to trade waste charges IPART has requested that the review:

- assess the proposed alterations to trade waste service prices with reference to Hunter Water's existing trade waste prices and policies, other similar agencies' prices for the same services, and the general principles for appropriate trade waste charging
- make specific reference to the impact of Hunter Water's proposals on trade waste customers, where customers are classified by commercial processes, substance and location/catchment
- consider and assess the start up and ongoing costs of the proposed alterations.

Staff from Deloitte were responsible for preparing the analysis of miscellaneous service charges. Halcrow was responsible for preparing the analysis of trade waste charges. This final report presents our views and recommendations on the charges.

In the case of miscellaneous services we have undertaken a detailed review of information provided by Hunter Water and sought additional information in a number of areas. As a result of our enquiries, and following the recent awarding of contracts with third parties, Hunter Water has proposed revisions to a number of its charges since its original submission.

The final report also incorporates comments from IPART and Hunter Water in response to a draft report with respect to miscellaneous services and in response to a preliminary final report with respect to trade waste services.

## 1.2 Findings and recommendations – miscellaneous service charges

### 1.2.1 Overview

In general, and taking into account the materiality and magnitude of the miscellaneous services costs and revenues to Hunter Water's business, we found that Hunter Water's approach to calculating miscellaneous service charges was sound. The information to support the charges appears to be reliable and drawn from appropriate sources, checks on data consistency appear to have been made, and calculations appear to be supported by spreadsheets where appropriate.

## 1.2.2 General approach

The IPART formula for determining miscellaneous service charges is as follows:

Miscellaneous charge = base cost + direct material cost

where

Base cost = [direct cost of labour (including on-costs) + transport + equipment] x [business unit overheads] and

Direct material cost = cost of materials used in the service

Hunter Water's approach to calculating charges varies slightly from the IPART formula to the extent that:

- the Hunter Water approach incorporates general transport and equipment costs (that are not specific to the miscellaneous service charge) in the business unit overhead cost rather than separately identifying them
- Hunter Water's business unit overhead cost is expressed in dollars per hour rather than as a percentage.

These minor differences aside, the Hunter Water approach generally complies with the IPART formula. Indeed, we consider that the Hunter Water approach may in fact be superior to the IPART approach in that under the Hunter Water approach business unit overheads are expressed in terms of a cost per hour rather than being a percentage of the base unit cost of labour. The Hunter Water approach is preferable because the relevant overheads for a particular service should not vary according to the wage rate of the person providing the service.

## 1.2.3 Time to complete tasks

For many miscellaneous services, the estimated time to complete the task provides the foundation for the charge.

Our overall observation is that the approach taken by Hunter Water to determine the time taken to undertake tasks is generally thorough and well-considered, and based on reliable data from its TRIM time capture system.

## 1.2.4 Hourly rates and overheads

The hourly rates, on-costs and overheads used by Hunter Water in determining prices for individual miscellaneous services appear reasonable on the following basis:

- base wage rates appear to be consistent with Hunter Water's legislative requirements
- the on-cost rate of 44 per cent is built up from evidence of actual costs faced by Hunter Water
- the overhead rates applied to each business unit have been built up from actual indirect costs faced by each business unit including a share of business-wide indirect costs. Increases in overheads compared to 2006/07 appear reasonable given the introduction of Hunter Water's Customer Information System (CIS). While the CIS has increased overheads it has reduced the direct cost of undertaking many of the miscellaneous services.

### 1.2.5 Comparison with charges levied by other agencies

There are a number of difficulties in making direct comparisons between charges for miscellaneous services provided by Hunter Water and other New South Wales agencies. The terms of reference for this review contain a particular focus on new and amended charges, for which there are often not corresponding services provided by other New South Wales agencies.

For those services that appear broadly similar, in most cases there are no significant price differences between Hunter Water and the other New South Wales agencies. Where differences in charges do exist, they are generally due to:

- differences in the provision of the service
- differences in approach to cost recovery (for example, cross-subsidisation of plumbing inspections)
- differences in approach to recovery of overhead rates.

For the 2005 review of Hunter Water's prices RSM Bird Cameron found that the agencies had typically taken a conservative approach to determining costs, and had reduced charges to below estimated costs in some instances. For the current review, Wyong Shire Council and Gosford City Council propose to adopt CPI increases for their miscellaneous charges, as did Sydney Water Corporation for its 2008 review. This suggests that some under-recovery of costs may still exist for certain charges for these agencies and hence comparisons between Hunter Water and these agencies may be slightly misleading.

### 1.2.6 Demand for services

For many existing miscellaneous services Hunter Water has forecast a reduction in the number of services to be provided compared to recent figures.

For some services demand will reflect the size of the customer base. For most services demand will reflect activity in the housing market. We note that:

- recent building activity in the Hunter region has been weak
- independent forecasts suggest housing activity will continue to be weak in 2008/09 and 2009/10 but an increase in new starts and financing is expected in 2009/10 as a result of pent up demand and lower interest rates.

Given that Hunter Water has forecast the number of services to be provided will be significantly less than the current already depressed levels, our view is that Hunter Water's forecasts for many of its activity related miscellaneous services are conservative and should be increased. The annualised number of services provided from November 2006 to September 2008 is likely to provide a more realistic view of likely future demand. While using current numbers may slightly overestimate demand in 2008/09 and 2009/10, it is likely to underestimate demand in the latter years of the regulatory period.

### 1.2.7 Efficiency of charges

Hunter Water has a large number of existing miscellaneous services and it has proposed a number of additional miscellaneous service charges, additional sub-categories of existing miscellaneous service charges, or other amendments to existing charges. The implicit assumption in doing so is that the benefits of a greater number of charges will exceed the costs.

The benefits of establishing separate miscellaneous services will include:

- improved equity and reduced cross-subsidisation by those customers who do not use the miscellaneous services
- increased transparency and understanding of the cost of providing various services
- the ability to influence customers' behaviour by providing signals to encourage certain behaviour or reduce Hunter Water's risk or costs.

On the other hand there are costs to both Hunter Water and customers associated with establishing separate miscellaneous services:

- the costs of administration and implementation
- increased complexity and reduced ability for customers (and even Hunter Water staff) to understand the charges for which they may be liable
- the introduction of new miscellaneous services may have particular financial impacts on some customer groups
- the existence of a fee for a service may discourage the customer to seek the service, which may increase risk to Hunter Water or other customers.

In general the costs to Hunter Water of establishing a new miscellaneous service will be relatively low. Hunter Water has sound cost capture systems and once in place the costs of maintaining a separate service and charge are low. The key issue is whether the benefits of increased compliance, cost reflectivity and altered customer behaviour will outweigh the added and potential discouragement to the customer to seek the service.

Having considered each of the proposed new and amended services, we strongly support those new and amended charges which will strengthen the inspection regime, encourage higher levels of first-time compliance by developers and their agents, and encourage altered customer behaviour. These represent the majority of the new services. In general we also support the additional and amended charges which are primarily proposed to improve cost reflectivity and customer equity. However, we have identified a small number of charges that may be amalgamated, including:

- a common charge for the tanker inspection and re-inspection service
- a common charge for standard and recycled plumbing inspections

In order to ensure that those new and amended charges designed to improve customer behaviour and reduce risk to Hunter Water do in fact achieve their aim, Hunter Water should ensure that developers, plumbers and other relevant stakeholders are provided with information that outlines the new services, charges and their rationale.

### 1.2.8 Analysis of individual charges

We have undertaken a detailed review of 20 miscellaneous services proposed by Hunter Water. Noting that Hunter Water has proposed changes in prices for several of its services since its original submission, in general we are satisfied that the charges proposed for the services accurately reflect the IPART pricing principles. We have recommended:

- a minor reduction to the charge for provision of conveyancing certificate (no. 1)
- a minor reduction to the charge for provision of electronic service location diagram (no. 3(b))
- that a specific price per drawing be provided for service 34(c) hydraulic design assessment.

We also note that the proposed price for service no. 22 (application to connect or disconnect water and sewerage services) seems low given an identical price for charge no. 10 (application for water service connection).

## 1.3 Findings and recommendations – trade waste charges

### 1.3.1 Overview

We have reviewed Hunter Water’s proposed charges for trade waste and we have found that, overall, the charges reflect IPART’s trade waste pricing principles in relation to the reflection of actual costs, the reflection of differences in costs at particular locations, and that the charges appear to have been set in a manner that is transparent.

We have reviewed information supplied by Hunter Water outlining the potential impacts of the proposed charges and providing examples of estimated impacts for various customers. The information supplied by Hunter Water does not generally provide a sufficient level of detail to identify specific impacts on individual customers based on their commercial process or location/catchment.

The information supplied included costs related to ongoing administration of the proposed charges, and Hunter Water indicated that the costs of implementing the new/adjusted charges were included in the proposed fees and charges.

### 1.3.2 Customer categorisation and fees adjustment

We support the full re-evaluation of fees and charges, from a zero-base, in order to ensure that current costs are reflected.

We support the introduction of the moderate trade waste category as it should improve the cost-reflectivity of tariffs and ensure more appropriate price signals are provided

We support the introduction of the transition phase to defer some of the impact of customers changing from the minor to the major agreements and vice versa.

We note that the 12 month transition period will act as a buffer measure for both the customers and Hunter Water reducing the financial impact on customers and acting as a risk management measure for Hunter Water.

We also note and support Hunter Water’s process whereby customers may be able to shorten their transition period and realise savings.

### 1.3.3 Biochemical Oxygen Demand/Non-Filterable Residue charges

We are satisfied that the proposed reductions in fees are recovered through the sewer periodic charges paid by trade waste customers; and are therefore consistent with the cost reflectivity and user-pays trade waste pricing principles.

We support the intention of the proposed “incentive” charge to reflect the respective risks of accepting trade waste at specific locations. This is clearly consistent with IPART’s principles for trade waste prices.

We would suggest, however, that Hunter Water consider describing the “incentive” charge as a risk factor charge to reflect its stated purpose.

### 1.3.4 Phosphorus charges

We have reviewed Hunter Water's proposed phosphorous charges and the reasons for the changes related to the return of/on capital and we are satisfied that the methodology used is appropriate and reflects the trade waste pricing principles, particularly in relation to cost reflectivity and customer equity.

### 1.3.5 Sulphate charge

We have reviewed Hunter Water's sulphate fees and charges and believe that they appropriately reflect the trade waste pricing principles.

### 1.3.6 Tankering charges

Hunter Water has introduced proposed tankering charges that appear to better reflect the actual costs of accepting and treating the tankered waste. We support this proposal.

# 2 Introduction

## 2.1 Background to the review

IPART was established in 1992 to provide independent oversight of the prices charged by monopoly service providers. IPART is currently conducting a review of Hunter Water Corporation's (Hunter Water's) regulated services from 1 July 2009, with charges to be determined for a period of up to five years.

As part of the review IPART is required to examine proposed tariff levels and structures for Hunter Water's services. These services include not only Hunter Water's 'core' water supply and wastewater responsibilities, but also the provision of miscellaneous and trade waste services.

Hunter Water's miscellaneous services fall into two broad categories. Customer service miscellaneous charges relate to one-off services provided to individual properties such as special meter readings and the provision of sewer location diagrams. Commercial development miscellaneous charges primarily relate to administration and application processing costs associated with new developments.

Trade waste services relate to the administration and treatment and tankering of wastewater that is of higher strength and volume than residential and commercial wastewater.

Hunter Water's proposals for miscellaneous and trade waste charges are set out in a submission provided to IPART on 12 September 2008.

This final report has been prepared by Deloitte and Halcrow for IPART and will form an input to IPART's draft decision, expected to be released in February 2009.

## 2.2 Terms of reference and approach

### 2.2.1 Miscellaneous services

In relation to miscellaneous service charges IPART has requested Deloitte and Halcrow to:

- conduct a detailed investigation of a sample of 20 ancillary and miscellaneous service charges. The sample of 20 must include any charges that Hunter Water propose to restructure (i.e., any alteration to the level or structure of a charge) or increase in price significantly (excluding a mere CPI adjustment), and any new charge that is proposed by Hunter Water
- compare ancillary and miscellaneous charges for the same services across similar agencies and identify and comment on any clear differences. The consultant must investigate and explain the reasons for these differences.

In assessing and reporting on Hunter Water's ancillary and miscellaneous service charge proposals, Deloitte and Halcrow were asked to:

- review and assess the approach used by Hunter Water to formulate its ancillary and miscellaneous service charge proposals and comment on the reasonableness of this approach
- consider any previous IPART decisions in relation to ancillary and miscellaneous service charges

- assess and review Hunter Water’s approach and comment on its efficiency (i.e., the degree of cost reflectivity and removal of cross subsidy), equity, transparency and simplicity
- make specific reference to the customer impact of these proposals. The impact assessment would be based on information made available by Hunter Water
- comment on the cost of administration and implementation in each case. The costs incurred should be commensurate to the quantum of the charge and the number of customers affected.

### 2.2.2 Trade waste

In relation to the trade waste service prices component, Deloitte and Halcrow were requested to:

- review and assess the proposed alterations to trade waste service prices with reference to Hunter Water’s existing trade waste prices and policies, other similar agencies’ prices for the same services, and the general principles for appropriate trade waste charging as set out in Box 1 of Schedule 1 of the RFT
- make specific reference to the impact of Hunter Water’s proposals on trade waste customers, where customers are classified by commercial processes, substance and location/catchment. The impact assessment would be based on information made available by HWC
- consider and assess the start up and ongoing costs of the proposed alterations. The costs incurred should be commensurate to the quantum of the charge and the number of customers affected.

### 2.2.3 Approach

This review has primarily been a desktop exercise and has relied on information provided by Hunter Water:

- in its submission to IPART dated September 2008
- in response to requests for additional information and explanation on certain matters
- in response to the draft report with respect to miscellaneous services and the preliminary final report with respect to trade waste services.

In addition, Deloitte and Halcrow attended Hunter Water’s premises on 8 October 2008 in order to hold discussions with relevant staff and to view at first hand some of Hunter Water’s systems and the process requirements for certain miscellaneous charges.

Note that while this review was carried out in a rigorous and thorough manner, it does not comprise a formal ‘audit’ or ‘agreed upon procedures’ review in accordance with Australian Accounting Standards. In preparing this report Deloitte and Halcrow have relied to a large extent on the accuracy and completeness of information provided to us by Hunter Water.

## 2.3 Structure of this Report

The introductory chapters 1 and 2 provide a summary of findings and information on the background to this report. The remainder of the report is separated into two parts.

Part A focuses on the miscellaneous service charges. Chapter 3 provides some background on miscellaneous service charges and previous work by IPART on the topic. Chapter 4 provides a comparison of Hunter Water’s proposed approach and charges with those adopted by other water authorities. Chapter 5 then discusses and provides recommendations on

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Hunter Water's proposed charges. In doing so it examines issues that are generic to all of Hunter Water's charges – including hourly rates, overheads and likely demand for services – as well as providing comments on individual charges.

Part B considers Hunter Water's proposed trade waste charges. It is structured similarly to Part A.

## 2.4 Acknowledgements

Deloitte and Halcrow wish to thank staff from Hunter Water and IPART for their assistance with this assignment, and in particular:

- Emma Turner, Andrew Amos and Mark Gebhard from Hunter Water
- Amanda Chadwick and Sheridan Rapmund from IPART.

# Part A – Miscellaneous service charges

# 3 Overview of miscellaneous service charges

## 3.1 Miscellaneous service charges

Hunter Water's miscellaneous charges can be allocated into two separate categories:

- customer service miscellaneous charges which relate to one-off services provided to individual properties. These include special meter readings and the provision of sewer location diagrams
- commercial development miscellaneous charges which primarily relate to administration and other costs associated with new developments. These charges, which are separate from 'developer charges', include a range of fees relating to such things as the provision of information and recovery of the cost of inspections.

Miscellaneous charges only represent a small percentage of Hunter Water's total revenue. However, they can be significant for those customers who are required to pay them.

Hunter Water proposes to reset its miscellaneous charges in 2009/10 and then to escalate the charges annually by the CPI.<sup>1</sup>

## 3.2 Previous IPART work

### 3.2.1 Service definition

Prior to making its 2000 price determination IPART worked with Sydney Water, Hunter Water, and Gosford and Wyong councils to introduce a higher level of commonality between the agencies for miscellaneous charges and services. This process continued for the 2003 determination. Aside from a common set of principles for trade waste charging, the agencies now use a numbering and definitional system that maximizes comparability of indicators across businesses.

### 3.2.2 Pricing principles for miscellaneous charges

As part of its 2000 and 2003 price determinations IPART established a number of pricing principles, as shown in Box 1.

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<sup>1</sup> Unless stated otherwise all prices, costs and revenues cited in this report are in 2008/09 dollars.

### Box 3.1 IPART principles for miscellaneous service charges

#### 1. Charges shall be cost-reflective

The maximum charge should be set to reflect the full cost of service delivery to customers in accordance with the formula:

$$\text{Miscellaneous charge} = \text{base cost} + \text{direct material cost}$$

where

$$\text{Base cost} = [\text{direct cost of labour (including on-costs)} + \text{transport} + \text{equipment}] \times [\text{business unit overheads}] \text{ and}$$

$$\text{Direct material cost} = \text{cost of materials used in the service}$$

Adjustments for inflation are included through any inflationary impacts on the base cost and direct material cost

#### 2. Changes to charges

On request the business should be able to provide IPART with an estimate for the expected net revenue impact of a proposed price change. If the estimated revenue impact is positive, evidence must be available showing that either:

- costs have increased for supplying that particular service, and that cost increases are reasonable
- existing services did not cover the reasonable costs associated with that particular service.

#### 3. Efficiency

The business should continue to pursue efficiency gains in service provision. The business should be continuously assessing the manner of service delivery to ensure it is least cost, and that it meets the needs of customers.

#### 4. Customer Impacts

When the business proposes significant price changes and/or new charges, the business should undertake a customer impact analysis. A customer impact analysis should detail at least:

- the current cost of the service
- the proposed cost of the service
- the number of customers who use the service on average each year
- the type of customer who will be affected e.g. residential, industrial, commercial customers

Changes in the cost of service provision can be passed through to customers; however the level and allocation of costs across customers may be monitored by IPART to avoid price shocks. The business should have regard to the impact of any changes on vulnerable customer groups, for example low income families, and ensure that customer impacts are not unreasonable.

#### 5. Consultation

The business has the option to consult with IPART on the application of pricing principles for any proposed changes to minor and miscellaneous charges.

This report has had strong regard to these principles when considering Hunter Water's proposed charges.

### 3.2.3 2005 review of miscellaneous charges

As part of its 2005 review of prices for Sydney Water, Hunter Water, Gosford Shire and Wyong Shire, IPART conducted a comprehensive review of miscellaneous charges. The

review considered charges against the pricing principles outlined above. A report by RSM Bird Cameron<sup>2</sup> analysed the businesses' proposals and made a number of recommendations regarding Hunter Water's miscellaneous services charges. In general RSM Bird Cameron concluded that:

*HWC's approach to determining the cost of miscellaneous services has been methodical and well thought out. There are limitations with the availability of data which does result in some uncertainty. The process adopted by HWC has been conservative and it is likely that proposed cha[r]ges for miscellaneous changes will be below actual cost.*<sup>3</sup>

### 3.2.4 Sydney Water price review

As part of its final determination on Sydney Water's charges for 2008/09 to 2012/13 IPART accepted Sydney Water's proposal that existing miscellaneous charges should increase by CPI across the regulatory period. An in-depth analysis of existing charges was not carried out, primarily because a full review of miscellaneous charges was undertaken in 2005. However, IPART proposed and Sydney Water has agreed that a full review of miscellaneous services (including the methodology of charging, costs and service levels) will be carried out in preparation for the next price determination.

In the final determination IPART also:

- did not support a proposal by Sydney Water to introduce late payment fees or credit card fees
- agreed that price controls could be removed on certain charges following evidence that there is a contestable market for these services.

## 3.3 Charges to be reviewed

The terms of reference require 20 of Hunter Water's miscellaneous service charges to be reviewed in detail. Deloitte and IPART agreed that the selection of these miscellaneous service charges should focus on those services:

- where a large number were expected to be provided
- which generated the largest amount of revenue
- for which Hunter Water had proposed price increases
- which were new or amended services
- which had an inter-relationship with other services.

Accordingly, the 20 miscellaneous services set out in the table below were identified for detailed examination. Note that as a result of discussions with Hunter Water changes have been proposed to prices and/or demand forecasts for a number of services. These services are marked with an asterisk. The table below shows the revised proposals for these services.

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<sup>2</sup> A copy of this report is available on the IPART web site at:

<http://www.ipart.nsw.gov.au/water/water.asp>

<sup>3</sup> RSM Bird Cameron 2005, *Miscellaneous charges pricing proposals by NSW metropolitan water agencies*, 13 April, p.39.

**Table 3.1 Miscellaneous services for detailed review**

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
<b>CUSTOMER SERVICE CHARGES</b>						
7	Water reconnection after restriction					
	(a) during business hours	59.55	3%		1,200	71,460
	(b) outside business hours	160.00	-8%		62	9,920
9	Application for disconnection					
	(a) water - all sizes	94.95	215%		150	14,242
	(b) recycled water	123.00		Yes	30	3,690
10	Application for water service connection - up to and including 25mm	101.00	190%		250	25,250
66	Application for recycled water connection - domestic					
	(a) pre-laid connections	287.00		Yes	400	114,800
	(b) redevelopment	366.00		Yes	50	18,300
22	Application to connect/disconnect water and sewer services (combined application)	101.00	148%		1,500	151,500
29	Meter affixtures/handling fee					
	(a) up to 50 mm light duty*	22.95	5%		1,630	37,409
	(c) meter delivered*	17.55		Yes	11	193
60	Inaccessible meter - reading agreement	45.70		Yes	300	13,710
63	Affix a separate meter to a unit*	30.05		Yes	1,200	36,060
1	Conveyancing certificate					
	(a) over the counter	30.10	44%		1,010	30,401
	(b) electronic	8.40	2%		9,070	76,188
3	Service location diagram					
	(a) over the counter	22.65	50%		887	20,091
	(b) electronic	14.25	63%		7,985	113,786
4	Meter reading - special read and by appointment (previously special meter reading statement)					
	(a) during business hours*	23.35	Yes		85	1,985
	(b) outside business hours*	42.90	Yes		5	215
26	Building plan stamping	11.60		Yes	12,500	145,000
31	Standard plumbing inspection (prev. special inspection)					
	(a) general*	94.15	42%		1980	186,417
	(b) recycled water*	97.00		Yes	80	7,760
	(c) hourly rate*	68.85		Yes	330	22,721

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
18	Backflow prevention device					
	(a) Annual administration fee	15.25	9%		4,000	61,000
	(b) Device test*	242.00		Yes	350	84,700
23	Irregular and dishonoured payments					
	(a) Bank - declined cheque*	21.95	-2%		37	1,182
	(b) Bank - direct debit declined*	24.45	71%		560	19,805
	(c) Australia Post - cheque declined	36.95	32%		50	1,847
65	Plumbing non-compliance follow-up inspections	81.40		Yes	640	52,096
<b>DEVELOPER SERVICE CHARGES</b>						
19	Major works inspection fee					
	(a) water mains	6.89/m	0%		30,000	206,700
	(b) gravity sewer mains	10.38/m	0%		33,000	342,540
	(c) rising sewer mains or LPSS	6.89/m	0%		2,000	13,780
34	Hydraulic design assessment (previously Hydraulic design assessment application - less than 80mm)					
	(a) up to 10 drawings	258		Yes	329	84,882
	(b) 11-50 drawings	258 + 23/draw		Yes	1,678	38,592
	(c) >50 drawings	1178 + quote		Yes	-	
44	Major works design					
	(a) Major works design review and contract preparation (prev. assessment of major works)	2109	-1%		181	381,757
	(b) Major works design re-assessment	278		Yes	13	3,616
57	Recycled water inspection & WAE (work as executed) fee	9.45/m		Yes	4,100	38,745

\* Volumes and/or prices have changed since original submission

Price = Hunter Water proposed price in 2009/10 (expressed in 2008/09 dollars)

% change = real change in price compared to 2008/09

New or amend? = whether the service is either new or amended service

Qty = annual forecast number of services provided

Rev = revenue

# 4 Comparison of miscellaneous service charges

## 4.1 Approach to comparison

We have attempted to compare the 20 miscellaneous charges selected for review with similar charges levied by other metropolitan service providers in New South Wales and Victoria, including:

- Sydney Water Corporation, Wyong Shire Council and Gosford City Council in New South Wales
- Yarra Valley Water and Barwon Water in Victoria.

For the 2003 price determination, IPART established a working group of representatives from each of the New South Wales water agencies and IPART's Secretariat to establish a list of the 20 main miscellaneous services provided by the metropolitan water agencies.

As a result, there is a significant degree of commonality between the key miscellaneous services provided by the New South Wales agencies. However, for new or amended charges introduced by Hunter Water, which comprise a substantial proportion of the 20 charges being examined, there are often not directly corresponding or comparable charges or services offered by the other agencies. As discussed below, this has limited the comparability of charges.

## 4.2 Comparison

### 4.2.1 RSM Bird Cameron report on benchmarking

RSM Bird Cameron completed a comprehensive review of miscellaneous pricing proposals for 20 common miscellaneous services provided by the New South Wales agencies for the purposes of IPART's 2005 review. The main findings of the RSM Bird Cameron report with respect to benchmarking between the agencies included:

- although each agency had applied a methodology that was consistent with IPART's pricing methodology, differences in the tasks required by each agency to provide the 20 common miscellaneous services meant the charges were not necessarily comparable
- there are significant differences in the calculation of overheads between the agencies
- the agencies had typically taken a conservative approach to determining costs, and had reduced charges to below estimated costs in some instances.<sup>4</sup>

In relation to overheads, RSM Bird Cameron made the following observations:

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<sup>4</sup> RSM Bird Cameron (2005), *Miscellaneous charges pricing proposals by NSW metropolitan water agencies*, 13 April

- Hunter Water and Sydney Water Corporation had applied overheads at around 100 per cent of the wage rate
- Gosford City Council applied overheads at around 50 per cent of the wage rate
- Wyong Shire Council applied overheads at a rate of \$5 per hour
- Gosford City Council and Wyong Shire Council had reduced some charges upon consideration of customer impacts.

RSM Bird Cameron noted that the different rates reflected different cost structures between the businesses, but also “a less aggressive approach by [Gosford City Council] and [Wyong Shire Council] to recover overheads.”<sup>5</sup>

#### 4.2.2 Comparison with New South Wales Agencies

For a number of seemingly similar charges, there is a substantial degree of variation between prices charged by the metropolitan New South Wales retail agencies. The following table below sets out similar miscellaneous charges provided by the New South Wales agencies for which a comparison can be made.

In making comparisons it should be noted that Sydney Water did not undertake a thorough review of miscellaneous charges pricing for the purposes of its recent price review. We also understand that the majority of miscellaneous service charges proposed by both Gosford and Wyong councils for 2009/10 simply represent a CPI increase over 2008/09 prices. Therefore miscellaneous service charges for these agencies are more likely to reflect 2004 costs and assumptions rather than the more recent information on input costs and other relevant factors that have been taken into account by Hunter Water.

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<sup>5</sup> Op. cit., p. 5.

Table 4.1 Comparison of charges with NSW agencies

Hunter Water Corporation		Sydney Water Corporation		Wyong Shire Council		Gosford City Council		
No.	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)
7	Water reconnection after restriction							
	(a) during business hours	59.55		33.00		33.78		60.00
	(b) outside business hours	160.00		146.50		139.46		138.00
9	Application for disconnection							
	(a) water - all sizes	94.95		79.00	Administration fee	28.32	Administration fee	44.00
	(b) recycled water	123.00			Physical disconnection	110.55	Physical disconnection	174.00
10	Application for water service connection - up to and including 25mm	101.00	Administration fee only	38.00	Administration fee only	28.32	Administration fee only	44.00
					Provision of water service (20mm)	95.88	Water service connection fee	331.00
1	Conveyancing certificate							
	(a) over the counter	30.10		19.10		16.34		30.00
	(b) electronic	8.40		7.65		N/A		N/A
3	Service location diagram							
	(a) over the counter	22.65		22.00		16.34		16.00
	(b) electronic	14.25		11.00		N/A		N/A

Hunter Water Corporation			Sydney Water Corporation		Wyong Shire Council		Gosford City Council	
No.	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)
4	Meter reading - special read and by appointment (previously special meter reading statement)		Special meter reading statement	28.50	Special meter reading statement	50.12	Special meter reading statement	58.00
	(a) during business hours*	23.35						
	(b) outside business hours*	42.90						
26	Building plan stamping	11.60	Building plan approval	25.00		N/A		N/A
31	Standard plumbing inspection (prev. special inspection)		Plumbing and drainage		Plumbing and drainage inspection			N/A
	(a) general	94.15	Inspection application	64.50	Residential	148.61		
	(b) recycled water	97.00	Inspection fee	79.00	Alterations, caravans	74.90		
	(c) hourly rate	68.85			Commercial and industrial	148.61 (+43.14/WC)		
					Additional inspections	55.13		
18	Backflow prevention device			N/A		N/A		
	(a) Annual administration fee	15.25						27

Hunter Water Corporation			Sydney Water Corporation		Wyong Shire Council		Gosford City Council	
No.	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)
	(b) Device test	242.00						
23	Irregular and dishonoured payments		Dishonoured or declined payment fee	20.00		N/A		N/A
	(a) Bank - declined cheque*	21.95						
	(b) Bank - direct debit declined*	24.45						
	(c) Australia Post - cheque declined	36.95						
65	Plumbing non-compliance follow-up inspections	81.40	Plumbing and drainage re-inspection fee	79.00		N/A		N/A
19	Major works Inspection fee			N/A				
	(a) water mains	6.89/m				5.01/m	water mains	11.00/m
	(b) gravity sewer mains	10.38/m				6.69/m	sewer mains	11.00/m
	(c) rising sewer mains or LPSS	6.89/m				5.01/m	reinspection	125.00
34	Hydraulic design assessment (previously Hydraulic design assessment application - less than 80mm)		Review of hydraulic plans			N/A		N/A

Hunter Water Corporation			Sydney Water Corporation		Wyong Shire Council		Gosford City Council	
No.	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)
	(a) up to 10 drawings	258	fixed charge	47.00				
	(b) 11-50 drawings	258 + 23 per drawing	hourly charge	115.00				
	(c) >50 drawings	1178 + quote						

\* Volumes and/or prices have changed since original submission

For seven of the 20 charges that were the subject of this review, there were no obviously comparable charges among the other NSW agencies. This is typically because the charges were either new charges being introduced by Hunter Water for this regulatory period, or charges outside the 20 common charges that were determined previously between the agencies and IPART. These charges include:

- application for recycled water connection – domestic (no. 66)
- application to connect/disconnect water and sewer services (combined application) (no. 22)
- meter affixtures/handling fee (no. 29)
- inaccessible meter - reading agreement (no. 60)
- affix a separate meter to a unit (no. 63)
- major works design (a) review and contract preparation and (b) re-assessment (no. 44)
- recycled water inspection & WAE (work as executed) fee. (no. 57)

For most services, Hunter Water's prices were reasonably aligned with charges levied by the other New South Wales agencies. Only for a small number of charges do Hunter Water's prices stand out as being significantly above the rates of other agencies. These charges include:

- water reconnection after restriction (no. 7)
- application for water disconnection (no. 9)
- application for water service connection (no.10)
- over the counter conveyancing certificates (no. 1(a))
- irregular and dishonoured payments (no. 23)
- hydraulic design assessments (no. 34)

With regard to connection related services (charges 7, 9 and 10), Hunter Water has indicated that the cost of the plumbing inspections was previously cross-subsidised by general water and wastewater charges. It is possible that the other agencies still take this cross-subsidisation approach, given their proposals for CPI increases in the latest price review(s). In particular, RSM Bird Cameron noted that Wyong Shire Council and Gosford City Council charged significantly below cost for water reconnection after restriction.

With regard to applications for water service connections, the other New South Wales agencies charge only an administration fee which does not cover the costs of the actual connection.

Hunter Water has advised that its increased costs for conveyancing certificates are related to more accurate costing of providing the service. This is discussed in section 5.7 below.

In relation to irregular and dishonoured payments, the structure of Hunter Water's charge suggests that it takes a more direct approach to recovering costs than Sydney Water Corporation. The cost build-up for this charge is discussed in more detail in section 5.7.

Hunter Water's charge for hydraulic design assessments appears to be significantly higher than the charge levied by Sydney Water Corporation. However, the different structure of the charge and the likely differences in provision of service mean a direct comparison of price is not necessarily informative.

#### 4.2.3 Comparison with Victorian authorities

Hunter Water's charges were also compared with two Victorian water authorities, Barwon Water and Yarra Valley Water. As set out in the table below, the Victorian water businesses provide some services which are broadly comparable with those offered by Hunter Water.

As set out in the table below, Hunter Water's prices for similar services are typically on-par with charges levied by the Victorian water authorities. However, due to differences in the delivery of services and fee structures, that these charges provide a rough comparison only.

Prices shown for Yarra Valley Water are for 2008/09, as 2009/10 charges are currently under review by the Essential Services Commission.

**Table 4.2 Comparison of charges with Victorian agencies**

Hunter Water Corporation		Yarra Valley Water		Barwon Water		
No.	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)	Name	Price 2009/10 (\$08/09)
29	Meter affixtures/ handling fee					
	(a) up to 50 mm light duty	22.95	First meter (supply and installation)	153.78**	Meter Connection (per installation)	63.5
	(c) meter delivered	17.55	Each additional meter (supply and installation)	107.53**		
63	Affix a separate meter to a unit	30.05	First meter (supply and installation)	153.78**	Meter Connection (per installation)	63.5
			Each additional meter (supply and installation)	101.64**		
1	Conveyancing certificate		Information statement fees			
	(a) over the counter	30.10	Standard application (within 3 business days)	29.34	Information statement	56
	(b) electronic	8.40	Urgent application (within 30 minutes)	44.10		

3	Service location diagram				
	(a) over the counter	22.65	Property service plan	17.65	Information statement
	(b) electronic	14.25			56
4	Meter reading - special read and by appointment (previously special meter reading statement)				Meter reading (per reading)
	(a) during business hours*	23.35			Special meter read
	(b) outside business hours*	41.90			Tenant meter read
					21.60
					35.50

\* Volumes and/or prices have changed since original submission

\*\*Includes cost of meter

#### 4.2.4 Conclusion

There are a number of difficulties in making direct comparisons between charges for miscellaneous services provided by Hunter Water and other New South Wales agencies. The terms of reference for this review contain a particular focus on new and amended charges, for which there are often not corresponding services provided by other New South Wales agencies.

For those services that appear broadly similar, in most cases there are no significant price differences between Hunter Water and the other New South Wales agencies. Where differences in charges do exist, they are generally due to:

- differences in the provision of the service
- differences in approach to cost recovery (for example, cross-subsidisation of plumbing inspections)
- differences in approach to recovery of overhead rates.

As noted above, for the 2005 IPART review RSM Bird Cameron found that the agencies had typically taken a conservative approach to determining costs, and had reduced charges to below estimated costs in some instances. For the current review, Wyong Shire Council and Gosford City Council are proposing to adopt CPI increases for their miscellaneous charges, as did Sydney Water Corporation for its 2008 review. This suggests that some under-recovery of costs may still exist for certain charges for these agencies.

# 5 Assessment of Hunter Water's proposed charges

## 5.1 General Approach

As noted in section 3.1, Hunter Water's miscellaneous services fall broadly into two areas, being Customer Service charges and Commercial Development charges.

The general approach taken by Hunter Water to determining the charge for miscellaneous services is the following:

Step 1. Identify the time (in minutes) required to provide the service

Step 2. Multiply this time by an hourly wage rate which reflects a base pay rate (in dollars per hour) for the person providing the service, including on-costs of 44%, plus business unit overheads (expressed in dollars per hour).

Step 3. Add materials or other external (typically contractor) costs

The IPART formula for determining miscellaneous service charges is as follows:

Miscellaneous charge = base cost + direct material cost

where

Base cost = [direct cost of labour (including on-costs) + transport + equipment] x [business unit overheads] and

Direct material cost = cost of materials used in the service

The Hunter approach therefore varies slightly from the IPART formula to the extent that:

- the Hunter Water approach incorporates general transport and equipment costs (that are not specific to the miscellaneous service charge) in the business unit overhead cost rather than separately identifying them
- Hunter Water's business unit overhead cost is expressed in dollars per hour rather than as a percentage.

These minor differences aside, the Hunter Water approach generally complies with the IPART formula. Indeed, we consider that the Hunter Water approach may in fact be superior to the IPART approach in that under the Hunter Water approach business unit overheads are expressed in terms of a cost per hour rather than being a percentage of the base unit cost of labour. The Hunter Water approach is preferable because the relevant overheads for a

particular service should not vary according to the wage rate of the person providing the service.

## 5.2 Time to complete tasks

For many miscellaneous services, the estimated time to complete the task provides the foundation for the charge.

For most miscellaneous charges the steps involved in providing each service are listed in detail.

Hunter Water has detailed records to determine the average amount of time required to complete the tasks required for delivery. These steps, and the total amount of time to provide a particular service are reconciled with Hunter Water's TRIM workflow system which captures time for a range of Customer Service charges, and records when tasks are begun and completed. These timeframes are also reconciled with total available work hours for staff members to ensure that there is a higher-level matching of time and number of services provided.

During our site visit we observed a staff member process an application for a water/sewerage connection (charge number 22). The timeframe to undertake the task was generally consistent with the assumed timeframes. In the case of this service we noted that the timeframes reflected the large number of different software systems required to be accessed to provide the service.

Our general view is also that the time assumed to undertake each task is based on the assumption that the provision of the service occurs in a 'smooth' manner. Where there is a difficulty in providing the service (eg the customer has provided incorrect information) it is likely that the time taken will exceed the assumed time. On average it may be that the time taken to provide the service slightly exceeds Hunter Water's forecast.

Our overall observation is that the approach taken by Hunter Water to determine the time taken to undertake tasks is generally thorough and well-considered, and based on reliable data.

## 5.3 Hourly rates and overheads

The costs for each miscellaneous service are determined by multiplying the times for activities to be completed to provide the service by an hourly rate.

Hunter Water's hourly rates comprise:

- a base rate of pay for the person(s) undertaking the services
- plus on-costs of 44%
- plus business unit overheads (expressed on an hourly basis).

### 5.3.1 Base rates of pay

Base rates of pay are actual hourly pay rates that differ between staff levels, and are determined in accordance with the *Hunter Water Corporation Employees' Enterprise Agreement 2006* and *APESMA (Hunter Water Corporation) Agreement 2006*.

In the case of the Customer Service miscellaneous charges, the assumed staff member is usually a Customer Service Officer Level 2. We understand that the majority of Customer Service staff are at this level. In the case of Commercial Development charges the assumed staff member is usually a technical officer, plumber or Customer Service Officer Level 2. We are generally satisfied that the staff level identified for providing the services is

appropriate and that charges do not, for example, assume that more senior management is undertaking tasks.

We understand that for the 2005 price determination, Hunter Water used 2004 labour rates and overheads (rather than the 2005 rates). IPART noted that for this reason many charges were likely to be below cost for the 2005 determination period. Labour rates for the 2009 determination are based on the 2008-09 budget, reflecting the increase in both nominal and real wage rates over this time.

Because Hunter Water has based its charges on 2008/09 wages, and has proposed that charges increase by the CPI each year, in order for charges to continue to reflect costs over time future wages will need to broadly increase in line with the CPI. With recent changes in economic circumstances this is more likely to be the case in coming years than in the recent past.

### 5.3.2 On-costs

Hunter Water advised that it applies an on-cost rate of 44% of the base wage rate. This rate is used universally across Hunter Water and comprises allowances for items including payroll tax, superannuation, annual leave and long-service leave.

An on-cost rate of 44% is generally higher than we would expect, given that such charges are generally in the range of 20-35% depending on the industry. In its 2005 report RSM Bird Cameron did not comment on the level of on-costs, either for Hunter Water or across the NSW water utilities.

In response to our queries Hunter Water provided the following breakdown of the calculation of on-costs:

**Table 5.1 Breakdown of Hunter Water on-costs**

Item	Rate (%)
Superannuation	13.87
Payroll tax	7.76
Annual leave	8.84
Long-service leave	5.07
Public holidays	5.31
Workers compensation	1.60
Annual leave loading	1.55
<b>Total</b>	<b>44.00</b>

Hunter Water's superannuation charges are higher than the standard 9% due to the combination of both defined benefits and contributory funds.

Based on this information we are satisfied that the 44% on-cost figure used is reasonable.

### 5.3.3 Overheads

For each miscellaneous service, there is a business unit with primary responsibility, although other business units may be involved in the provision of some services. The following list outlines the business unit with primary responsibility for the miscellaneous services that are the subject of detailed review:

- Customer Services (charges 1, 3, 4, 7, 9, 10, 22, 23 and 26)
- Retail Operations (charge 29)
- Treatment Operations (charges 18, 31, 65 and 66)
- Contracts (charges 19 and 57)

- Sales and Business Development (charges 34 and 44).

Hunter Water noted in providing this information that it is currently undertaking an organisational restructure, and that these classifications may not remain accurate throughout the price review. However, as they are the basis upon which its miscellaneous charges have been calculated, we have referred to them in our assessment of prices.

Hunter Water determines overheads on the basis of specific business unit costs and a share of overall corporate overheads which are not directly attributable to specific activities or services. Specific business unit costs differ but may include rent, stationery, training, OH&S costs and IT, while corporate overheads include items such as stationery, postage, motor vehicle and fleet management, advertising, legal fees and some labour costs (management and secretarial).

Overheads vary significantly between business units, ranging from \$7.22 for the Sales and Business Development business unit to \$40.75 for the Customer Services and Retail Operations business units, as set out in the table below. Reasons for the variation between business units are largely due to:

- the different type of overhead running costs that each business unit is subject to
- the number of employees and hours worked in each business unit that overhead running costs may be spread over.

As shown in the table below, there has been an increase in overheads in 2007/08 compared to 2006/07, particularly for the Customer Services business unit:

**Table 5.2 Hunter Water overhead charges (per hour)**

Business unit	Previous overhead (2006/07)	Current overhead (2007/08)
Customer Services and Retail Operations	\$30.47	\$40.75
Treatment Operations	\$16.99	\$18.48
Contracts	\$23.43	\$25.05
Sales and Business Development	N/A	\$7.22

Source: Hunter Water

We have investigated the reason for the increase in overhead rates in 2007/08 compared to 2006/07, particularly for the Customer Services and Retail operations group. In response to our questions Hunter Water advised that:

*The increased overhead for Customer Services and Retail Operations groups is mainly due to the apportionment of IT support charges. IT charges have increased by \$899,547 between 2006/07 and 2007/08. Spread over the total available working hours, this is about \$11.40, offset by some minor savings e.g. lower property management charges and savings from outsourcing fleet. The IT charges relate to a range of functions provided by our Information Services group such as software licences, computer resources and labour. The main reason for the increase between 2006/07 and 2007/08 was the replacement of our Customer Information System. The new system is much more sophisticated than the one it replaced but it also consumes a higher proportion of computer resources.*

The overhead rates used by Hunter Water can be traced to the specific costs of each business unit involved in providing the miscellaneous service. Noting Hunter Water's comments above in relation to the increases due to the new Customer Information System, we are generally satisfied that the overhead rates used are reasonable, and not inconsistent with the costs of providing the services. While the price of certain inputs, such as fuel and raw

materials prices have fallen in recent months, including over the period of this review, given the nature of the inputs to miscellaneous services charges we do not consider it likely that costs will have changed in such a significant manner as to warrant a review of overhead figures.

### 5.3.4 Conclusions

The hourly rates, on-costs and overheads used by Hunter Water in determining prices for individual miscellaneous services appear reasonable on the following basis:

- base wage rates are consistent with Hunter Water's legislative requirements
- the on-cost rate of 44 per cent is built up from evidence of actual costs faced by Hunter Water
- the overhead rates applied to each business unit have been built up from actual indirect costs faced by each business unit including a share of business-wide indirect costs.

## 5.4 Plumbing inspections

Under the *Hunter Water Act 1991* (the Act) and the New South Wales Code of Practice for Plumbing and Drainage (the Code), Hunter Water is the plumbing industry regulator for the cities of Cessnock, Newcastle, Maitland, the Shire of Port Stephens and certain parts of the Shire of Singleton.

Under the Code, Hunter Water decides upon what inspection of work is required and tests it needs to witness. Plumbing and drainage work carried out in Hunter Water's area of operations must comply with the Code and Australia Standard AS/NZS 3500.

Hunter Water conducts random inspections of water main connections, external drains, rainwater tank installations, fringe area sewer connections, water and sewer disconnections. A risk assessment is conducted on each plumbing activity to determine the potential impact on Hunter Water. This risk assessment provides a prioritisation for inspections of the plumbing activity.

Plumbing inspection costs comprise a significant proportion of costs for a number of miscellaneous services provided by Hunter Water. Increased charges in relation to plumbing inspections generally fall into one of the following two categories:

- new plumbing related services
- existing services that include plumbing inspections, but did not previously recover these costs.

Where plumbing inspections are carried out by Hunter Water staff, the cost attributable to the plumbing inspection component of each miscellaneous service is determined in the same way as other labour costs, by multiplying the on-costed labour rate for plumbing inspection by the time required for each task (as set out above).

New services with plumbing inspection components include:

- standard plumbing inspections (no. 31, previously special inspections)
- application for recycled water disconnection (no. 9b)
- plumbing non-compliance follow up inspection (no. 65)
- backflow device test (no. 18b)
- application for recycled water connection (no. 66).

Existing services that now recover plumbing inspection costs include:

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- application for water disconnection (no. 9a)
- application for water service connection (no. 10)
- application to connect/disconnect water & sewer services (no. 22).

Specific cost impacts for the services listed above are discussed in the individual analysis below.

## 5.5 Demand forecasts

The number of miscellaneous services to be provided is important as it has implications for prices and revenue.

Hunter Water has assumed the same number of services will be provided in each year of the forthcoming regulatory period for all its miscellaneous services.

As discussed below, several of Hunter Water's miscellaneous services are related to activity in the construction industry (primarily the housing market) and the number provided will fluctuate from year to year. For the remaining miscellaneous services the number provided is related to the size of the customer base and can be expected to be more stable from year to year.

For its existing miscellaneous services Hunter Water has provided with information on historic levels of the number of services provided for the majority of its miscellaneous services. In the case of new miscellaneous services Hunter Water has provided information on the way the forecasts were prepared.

### 5.5.1 Activity in the housing market

Of the 20 miscellaneous services we have examined in detail, a number are related to activity in the building industry, including:

- application for water service connection up to 25mm (no. 10)
- application for recycled water connection (no. 66)
- application to connect/disconnect water and sewer services (no. 22)
- meter affixtures/handling fee (no. 29)
- affix a separate meter to a unit (no. 63)
- service location diagram (no. 3)
- building plan stamping (no. 26)
- standard plumbing inspection (no. 31)
- plumbing non-compliance follow up inspection (no. 65)
- major works inspection fee (no. 19)
- hydraulic design assessment (no. 34)
- major works design (no. 44)
- recycled water inspections and work as executed (no. 57)

A number of other miscellaneous service charges outside of the 20 being examined in detail will also be related to building activity.

For the majority of these miscellaneous services Hunter Water has forecast that there will be a sharp reduction in the number provided compared to recent levels. For example, the

number of service location diagram applications is predicted to fall by 30% from an annual average of 12,776<sup>6</sup> to 8,972. Similarly the number of applications for water service connections is predicted to fall 20%.

Future activity in the housing market is difficult to predict at the current time. New dwelling approvals and commencements have fallen sharply since the start of 2008 and this situation is unlikely to be aided by the current turmoil in financial markets. On the other hand recent reductions in interest rates and the Federal Government's tripling in the first homeowners grant of \$7,000 to \$21,000 for a newly constructed home is expected to boost activity. Current forecasts of building industry activity include the following:

**Table 5.3 Forecasts of activity in the building industry**

Forecaster	Date of Forecast	05/06 (act)	06/07 (act)	07/08 (act)	08/09 (fore)	09/10 (fore)	10/11 (fore)
HIA – no. of housing starts (NSW) % change on previous year	Oct 2008	-16%	-10%	+3%	-3%	8%	10%
ANZ – dwelling investment annual % change (calendar year)	17 Oct 2008		+3.1%	-0.1%	-0.3%	+12.7%	na
Commonwealth Bank - dwelling investment annual % change	24 Oct 2008	-4.3%	+2.4%	+1.5%	+1.4%	+6.9%	na

The HIA has forecast that new starts in NSW in 2010/11 will be 35,600 compared to 30,780 in 2007/08.

In its November 2008 Statement on Monetary Policy the Reserve Bank of Australia noted that:

*Forward-looking indicators and the Bank's liaison point to ongoing softness in construction, particularly in New South Wales and Queensland.*

and

*The Bank's liaison suggests that housing construction is being constrained by reduced access to finance and subdued consumer confidence, although the recent falls in interest rates and the fiscal stimulus package – which includes an increase in the First Homeowner Grant for purchases of existing and new dwellings – are expected to boost conditions in this sector in the coming year.<sup>7</sup>*

Local conditions in the Hunter region may be different from these averages and are likely to be influenced by the decisions of a few large builders. Hunter Water has provided a document from the Hunter Valley Research Foundation which notes that:

*Residential building in the Hunter is still in the doldrums... The real ... value of residential approvals over the seven quarters to June 2008 averaged 38% below the value in September 2006 and 39% below the previous peak in June 2004... Nevertheless the slowdown has been less severe in the Hunter because: the availability of residential land is less constrained than in other areas: the Region is less exposed to investment stick and therefore investment demand... and affordability is less of a constraint on activity in the Hunter.*

<sup>6</sup> Calculated by Hunter Water over the period November 2006 to September 2008.

<sup>7</sup> Reserve Bank of Australia, *Statement on Monetary Policy*, 10 November 2008, p. 36.

Taking all the above into account, the general trends appear to be that:

- recent building activity in the Hunter region has been weak
- housing activity will continue to be weak in 2008/09 and 2009/10 but an increase in new starts and financing is expected in 2009/10 as a result of pent up demand and lower interest rates.

Our discussions with Hunter Water staff also suggests that in several cases latest information shows demand for these services is somewhere between recent history and the forecasts.

Therefore, given that Hunter Water has forecast the number of services to be provided will be significantly less than the current already depressed levels, our view is that Hunter Water's forecasts for its housing activity related miscellaneous services are conservative and should be increased. The annualised number of services provided from November 2006 to September 2008 is likely to provide a more realistic view of likely future demand. While using current numbers may slightly overestimate demand in 2008/09 and 2009/10, it is likely to underestimate demand in the latter years of the regulatory period.

### 5.5.2 Demand for other services

For the following existing miscellaneous services the number of services provided is likely to vary with the size of the customer base:

- water reconnection after restriction (no. 7)
- application for disconnection (no. 9)
- conveyancing certificate (no. 1)
- meter reading – special and by appointment (no. 4)

For services numbers 1, 4 and 9 Hunter Water has forecast an 11 to 31% fall in the number of services provided however for water reconnection after restrictions a 13% increase has been forecast.

Hunter Water's own forecasts (as set out in table 4.1 of its submission) show customer numbers, as measured by water-meter equivalents, increasing at around 1.7% per annum.

Our view is therefore that a reasonable forecasting methodology for these services is to use the recent historic average number of services provided as a base, and increase this by 1.7% per annum for each year of the regulatory period.

Demand for the other services is discussed in the individual analysis below.

## 5.6 Efficiency of charges

One of the issues with miscellaneous services charges surrounds whether the benefits of establishing and charging for separate miscellaneous services exceeds the costs of doing so. The alternative is to effectively 'smear' costs across the entire customer base through general water and wastewater charges:

The benefits of establishing separate miscellaneous services will include:

- improved equity and reduced cross-subsidisation by those customers who do not use the miscellaneous services
- increased transparency and understanding of the cost of providing various services
- the ability to influence customers' behaviour by providing signals to encourage certain behaviour or reduce Hunter Water's risk or costs.

On the other hand there are costs to both Hunter Water and customers associated with establishing separate miscellaneous services:

- the costs of administration and implementation
- increased complexity and reduced ability for customers (and even Hunter Water staff) to understand the charges for which they may be liable
- the introduction of new miscellaneous services may have particular financial impacts on some customer groups
- the existence of a fee for a service may discourage the customer to seek the service, which may increase risk to Hunter Water or other customers.

In general the lower the total cost, revenue or number of customers impacted by a particular miscellaneous service, the more likely it is that the benefits of the charge are unlikely to outweigh the cost. However, in some cases, even though a low number of charges may be being levied, the mere existence of the charge may have significant compliance and risk benefits to Hunter Water and its customers.

Hunter Water has a large number of existing miscellaneous services and it has proposed a number of additional miscellaneous service charges, additional sub-categories of existing miscellaneous service charges, or other amendments to existing charges. The implicit assumption in doing so is that the benefits of a greater number of charges will exceed the costs.

A large number of both existing and new charges are likely to raise relatively low amounts of revenue. Those charges which, under Hunter Water's demand forecast, will generate less than \$10,000 in revenue are:

- water reconnection after restriction outside business hours (no. 7(b))
- application for recycled water disconnection (no. 9(b))
- meter affixtures/handling fee for meter delivered (no. 29(c))
- special meter reading (no. 4)
- irregular and dishonoured payments bank cheque declined and Australia Post declined (no. 23(a) and (c))
- major works design reassessment (no. 44(b))
- unauthorised connections (no. 25)
- inspection of non-compliant meters (no. 30)
- application for build over stormwater channel (no. 32)
- charge for breach of meter reading agreement for inaccessible meter (no. 61)
- damaged meter replacement (no. 62)
- billing record search statement up to 5 years (no. 5(a))
- build over /adjacent to sewer advice (no. 6)
- application to hire metered standpipe (no. 28(a))
- inspection of water cart tanker (no. 59(a))
- reinspection of water tanker due to non compliance (no. 59(b))
- stormwater channel connection (no. 33)

- indicative developer charge application (no. 37)
- bond variation (no. 40)
- connection to existing water system – major works non valve shutdown (no. 45(b))
- application for additional sewer connection (no. 47)
- application to encroach on Hunter Water land (no. 51).

The table below lists the new and amended miscellaneous service charge and our understanding of the rationale for the new or amended charge.

**Table 5.4 New and amended miscellaneous services**

<b>Charge</b>	<b>Reason for new or amended service</b>
4b Special meter reading outside business hours	Improved cost reflectivity
5b Billing record search statement for multiple properties	Improved cost reflectivity
9b Application for recycled water connection	Improved cost reflectivity, increasing number of recycled water services to be provided. Risk issue
18b Backflow device test	Risk issue. Also incentive for customers to arrange their own tests
25 Charge for unauthorised connections	Incentive to ensure connections authorised. Risk issue
26 Building plan stamping	Improved cost reflectivity
28b Breach of standpipe hire conditions	Compliance issue
29 Meter affixtures/handling fee	Improved cost reflectivity
31b and 31c recycled water inspections and commercial and industrial plumbing inspections	Improved cost reflectivity
34 Hydraulic design assessment	Improved cost reflectivity
44b Major works design reassessment	Improved cost reflectivity and encourage improved quality of major works design
50c Inspection of recycled water pump stations	Improved cost reflectivity and reflecting increased use of recycled water
56c Environment assessment report review	Improved cost reflectivity and to encourage improved quality of reports
57 Recycled water inspection	Improved cost reflectivity and risk issue
58 Reservoir construction inspection	Improved cost reflectivity
59a Inspection of water cart tanker	Risk issue
59b Reinspection of water cart tanker due to non compliance	Risk issue
60 Inaccessible meter reading agreement	Encourage customers to provide access
61 Inaccessible meter – imputed charge for breach of agreement	Encourage customer to provide reading
62 Damaged meter replacement	Cost reflectivity
63 Affix separate meter to a unit	Cost reflectivity

64 Recycled water meter affix fee	Cost reflectivity
65 Plumbing non compliance inspection fee	Cost reflectivity and encourage first time compliance
66 Application for recycled water service connection - domestic	Cost reflectivity and reflecting increase use of recycled water

In general the costs to Hunter Water of establishing a new miscellaneous service will be relatively low. Hunter Water has sound cost capture systems and once in place the costs of maintaining a separate service and charge are low. The key issue is whether the benefits of increased compliance, cost reflectivity and altered customer behaviour will outweigh the added and potential discouragement the customer to seek the service.

Having considered each of the proposed new and amended services, we strongly support those new and amended charges which will strengthen the inspection regime, encourage higher levels of first-time compliance by developers and their agents, and encourage altered customer behaviour. These represent the majority of the new services. In general we also support the additional and amended charges which are primarily proposed to improve cost reflectivity and customer equity.

In our draft report, we made the following observations in relation to charges which there may be benefits from amalgamating:

- only 5 special meter reading services outside business hours (no. 4(b)) are likely to be sought. Given this there may be little benefit from distinguishing between ‘within’ and ‘outside’ business hours services
- there may be benefit in combining proposed new services 59(a) and (b) - inspection and reinspection of water cart tanker, given that the difference in the proposed charge is only \$14 and only 10 reinspections are forecast per annum
- there may be benefit in combining the general inspection and recycled water charges (31(a) and (b)) given that the difference in price differential is less than \$3.

In response to the draft report, Hunter Water advised:

- in relation to special meter reading services, contractor rates for appointments outside business hours are significantly greater than for during business hours. Therefore, the separation of the charge provides a valuable price signal to customers
- in relation to reinspection of a water tanker, the reinspection fee is important in promoting first-time compliance. If the level of charge is to be made consistent, the preference of Hunter Water would be to retain two separate descriptions that clearly indicate when each charge is to apply, to motivate behavioural change by water tankers
- in relation to plumbing inspections, Hunter Water is not opposed to amalgamating the charge for recycled inspections and general inspections, and has proposed a combined charge of \$94.25.

Having considered Hunter Water’s comments we agree that the separation of the business hours and outside business hours charges is important in terms of sending appropriate price signals, despite the relative low number of outside business hours readings. We also agree that in the case of water tanker inspections, two separate charge descriptions should be maintained, although there may still be benefits in making the charges consistent.

In order to ensure that those new and amended charges designed to improve customer behaviour and reduce risk to Hunter Water do in fact achieve their aim, we suggest that

Hunter Water ensures that developers, plumbers and other relevant stakeholders are provided with information that outlines the new services, charges and their rationale.

## 5.7 Analysis of individual charges

### 5.7.1 Water connection after restriction

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
7	Water reconnection after restriction					
	(a) during business hours	59.55	3%		1,200	71,460
	(b) outside business hours	160.00	-8%		62	9,920

#### 5.7.1.1 Description, cost build up and general discussion

This service involves restoration of the water supply during business hours to a property restricted for non-payment of accounts when payment has been received, during normal business hours (8am to 3pm), and outside of those hours. The cost of the service comprises Hunter Water's administration costs and contractor costs for actually restoring the service (including travel to and from the site, removing the inhibiting device and notifying Hunter Water).

Hunter Water has advised that the reduction in costs for reconnection outside business hours is due to improvements in processing times derived from the introduction of Hunter Water's Customer Information System (CIS). The table below sets out the activities and times for each service.

7(a) during business hours		7(b) outside business hours	
Process	Time	Process	Time
Customer advises Customer Service staff of payment or pay plan is emailed to Credit Management – Fulfilment Team	15 minutes	Customer advises Fulfilment Team of payment of account and agrees to pay after hours fee	8 minutes
Email noted and a Field Activity issued and phoned through to contractor	10 minutes	Field activity issued and phoned through to contractor	3 minutes
Field activity is finalised	5 minutes	Field activity is finalised	2 minutes
<b>Total</b>	<b>30 minutes</b>	<b>Total</b>	<b>13 minutes</b>

There is a significant time difference for apparently similar tasks undertaken by Hunter Water in the provision of these services. However, Hunter Water has advised that the administrative requirements for reconnection during business hours are substantially different to those for reconnection outside business hours, due to the fact that a business hours processing also involves agreement to a payment plan.

The majority of costs for reconnection outside business hours are due to contractor costs for restoring the water service. The schedule of rates provided by Hunter Water indicates that the contractor costs used are slightly below those quoted by the contractor. In their submission to IPART, Hunter Water indicated contractor costs of \$20.82 and \$143.00 for reconnection during business hours and reconnection outside business hours respectively, while the schedule of rates in the contractor's tender document indicates costs of \$25.85 and \$155.10 (both rates are inclusive of GST).

As shown in section 4.2, charges for reconnection after restriction outside business hours are reasonably consistent between the New South Wales metropolitan retail water agencies. However, for reconnection during business hours Hunter Water's charge is significantly higher than for other agencies. Hunter Water has advised that only it and Wyong Shire Council charge for the original disconnection for this service, but the Wyong Shire Council fee for disconnection is charged as part of charge no. 9 (application for disconnection) at \$110.55.

### 5.7.1.2 Customer impact

This charge will only affect customers who have been disconnected. However, given that disconnection is applied for non-payment of an account, the charge will typically be levied upon low income customers with less ability to pay than the general customer base.

The reduction in price for reconnection outside business hours is significant, but is only expected to have an impact for a very small number of customers given that most will seek reconnection during business hours.

We note that in Victoria water authorities are not authorised to levy a charge to reconnect customers who have been disconnected. The rationale for this is that (a) customers who are disconnected are generally least able to pay and (b) requiring payment may discourage them from reconnecting, thus potentially raising health issues.

### 5.7.1.3 Demand forecast

Hunter Water's demand forecasts for reconnection during business hours and reconnection outside business hours are 14 per cent above, and 5 per cent below recent historical averages respectively.<sup>8</sup>

As noted in section 5.5, demand for this service is likely to vary with the size of the customer base. Our view is therefore that a reasonable forecasting methodology for these services is to use the recent historic average number of services provided as a base, and increase this by 1.7% per annum for each year of the regulatory period in accordance with Hunter Water's forecast of customer number growth. On the basis of this methodology, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
7(a) Reconnection during business hours	1,067	1,085	1,103	1,122
7(b) Reconnection outside business hours	66	67	68	70

### 5.7.1.4 Conclusions and recommendation

- the cost build-up and proposed charge for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided should be increased as shown in the table above.

## 5.7.2 Application for disconnection

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
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<sup>8</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
9	Application for disconnection					
	(a) water - all sizes	94.95	215%		150	14,242
	(b) recycled water	123.00		Yes	30	3,690

### 5.7.2.1 Description, cost build up and general discussion

This service involves processing applications to disconnect existing water or recycled water services. The costs of the service comprise Hunter Water's administrative costs in processing the application, and the costs for a plumbing inspection of the property connection. Hunter Water inspects disconnections to ensure they are correctly capped off and comply with the New South Wales Plumbing Guidelines and Standards.

Hunter Water has advised that the substantial increase in price for water disconnections reflects the introduction of a new web based system for processing applications and the recovery of costs for plumbing inspections. Demonstrations by Hunter Water staff confirmed the estimated time requirements for Hunter Water staff to provide this service are reasonable. While plumbing inspections have historically been carried out for around 75 per cent of applications for disconnection, these costs were not previously recovered. Contractor costs provided by Hunter Water suggest it is slightly under-recovering costs on these inspections, but not by a significant amount.

Hunter Water has advised that the higher charge for recycled water disconnections reflects the requirement to conduct a plumbing inspection for 100 per cent of applications and the more complex nature of those inspections (due to more stringent health and safety requirements).

### 5.7.2.2 Customer impact

While only applicable to a small number of customers, the price increase for this service represents a significant impact for those customers requiring the service.

### 5.7.2.3 Demand forecast

Hunter Water's demand forecast for applications for water disconnections are 26 per cent (or 53) below recent average demand.<sup>9</sup>

Demand for this service is likely to vary with the size of the customer base (forecast by Hunter Water to increase by 1.7 per cent per annum in terms of water-meter equivalents). Our view is that a reasonable forecasting methodology for this service is to use recent historic demand as a base, and increase this by 1.7 per cent per annum in accordance with Hunter Water's forecast of customer growth. On this basis, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
9 Application for disconnection (a) water – all sizes	224	227	231	235

Given that there is no historical data available for recycled water disconnections, we consider Hunter Water's forecast for this service is reasonable or if anything slightly overstated.

<sup>9</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

#### 5.7.2.4 Conclusions and recommendation

- the cost build-up and proposed charge for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided should be increased as shown in the table above.

#### 5.7.3 Application for water service connection

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
10	Application for water service connection - up to and including 25mm	101.00	190%		250	25,250

##### 5.7.3.1 Description, cost build up and general discussion

This service involves processing applications to connect water services. The charge comprises Hunter Water's administrative costs in processing the application, and the costs for a plumbing inspection of the property connection. Hunter Water inspects connections to ensure they are correctly capped off and comply with the New South Wales Plumbing Guidelines and Standards.

Hunter Water has advised that the substantial increase in price reflects the introduction of a new web based system for processing applications and the recovery of costs for plumbing inspections. Demonstrations by Hunter Water staff confirmed the time requirements for Hunter Water staff to provide this service. While plumbing inspections have historically been carried out for around 75 per cent of applications for connection, these costs were not formerly recovered. Contractor costs provided by Hunter Water suggest it is slightly under-recovering costs on these inspections, but not by a significant amount.

##### 5.7.3.2 Customer impact

While only applicable to a very small number of customers, the price increase for this service represents a significant impact for those customers requesting the service.

##### 5.7.3.3 Demand forecast

Hunter Water's forecast demand for applications for water service connections is 19 per cent (or 59) below recent average demand.<sup>10</sup>

As noted above, demand for new connections is related to activity in the building industry. Discussions with Hunter Water staff indicated that in several cases the latest information shows demand for these services is somewhere between recent history and the forecasts provided.

Our view is that Hunter Water's forecasts are conservative and should be increased to match the annualised number of services provided from November 2006 to September 2008. While use of this figure may slightly overestimate demand in 2008/09 and 2009/10, it is likely to underestimate demand in the latter years of the regulatory period. On this basis, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
10 Application for water service connection	309	309	309	309

<sup>10</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

#### 5.7.3.4 Conclusions and recommendation

- the cost build-up and proposed charge for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided should be increased as shown in the table above.

#### 5.7.4 Application for recycled water connection

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
66	Application for recycled water connection - domestic					
	(a) pre-laid connections	287.00		Yes	400	114,800
	(b) redevelopment	366.00		Yes	50	18,300

##### 5.7.4.1 Description, cost build up and general discussion

This service involves processing applications and mandatory plumbing inspections for recycled water connections. The administrative requirements for processing the applications are identical to those for water service connections, the higher charge is related to more stringent requirement regarding plumbing inspections.

Pre-laid connections relate to applications to connect to a new recycled water service. The inspection component involves inspection of the service between the meter and the house, inspection of the completion of the internal house plumbing and final inspection of the service.

Redevelopment applications are related to redevelop of existing services, and require an additional inspection of the new drilling into the recycled water main and the recycled water connection.

##### 5.7.4.2 Customer impact

This charge will impact only a small number of customers, typically either new property owners or people wishing to retrofit recycled water services to their existing homes.

##### 5.7.4.3 Demand forecast

Demand for this service is likely to be related to activity in the building industry. Given it is a new service, Hunter Water has advised that volumes are difficult to forecast, and has based its estimate on developer views about the uptake of housing in dual pipe developments and redevelopment rates in other areas.

Given the uncertainty around potential demand, we consider that Hunter Water's methodology and forecast demand for this service is reasonable.

##### 5.7.4.4 Conclusions and recommendation

- the cost build-up and proposed charge for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided is appropriate.

### 5.7.5 Application to connect/disconnect water and sewer services connection

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
22	Application to connect/disconnect water and sewer services	101.00	148%		1,500	151,500

#### 5.7.5.1 Description, cost build up and general discussion

This service involves processing applications to connect and disconnect water and sewer services. The charge comprises Hunter Water’s administrative costs in processing the application, and the costs for a plumbing inspection of the property connection.

Hunter Water has advised that the substantial increase in price reflects the introduction of a new web based system for processing applications and the recovery of costs for plumbing inspections. Demonstrations by Hunter Water staff confirmed the time requirements for Hunter Water staff to provide this service. While plumbing inspections have historically been carried out for around 75 per cent of applications for connection, these costs were not formerly recovered. Contractor costs provided by Hunter Water suggest it is slightly under-recovering costs on these inspections, but not by a significant amount.

We note that this charge is the same as for service no. 10 which only involves a connection of a water services. Given that we are satisfied with the charge for service no. 10, and while it is likely there will be some economies of scale in processing and inspecting water and wastewater applications at the same time, it seems surprising that there is not an incremental charge for a combined application compared to a simple water application.

#### 5.7.5.2 Customer impact

The price increase for this service represents a significant impact for those customers requesting the service.

#### 5.7.5.3 Demand forecast

Hunter Water’s forecast demand for applications for water service connections is consistent with recent demand.

#### 5.7.5.4 Conclusions and recommendation

- the broad approach cost build-up and proposed charge for this service is appropriate and consistent with the IPART pricing principles. However we consider it likely that the charge will be less than the cost of providing the service.
- the forecast of the number of services to be provided is appropriate

### 5.7.6 Meter affixtures/handling fee

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
29	Meter affixtures/handling fee					
	(a) up to 50 mm light duty*	22.95	5%		1,630	37,409
	(c) meter delivered >50mm*	17.55		Yes	11	193

### 5.7.6.1 Description, cost build up and general discussion

This service involves installation of a water meter to the water connection framework. The charge comprises Hunter Water's administrative costs and contractor costs. For up to 50 mm connections, Hunter Water arranges a contractor to attend the customer's property and affix the meter, for 50 mm and above, Hunter Water can arrange for delivery of the meter and the customer then pays a private plumber for the installation.

There is some overlap between the administrative tasks required for this service and the application for connection service, therefore Hunter Water applies a 55 per cent discount to the administrative costs of the charge.

This charge has been amended to allow Hunter Water to recover costs for affixture of meters over 50 mm. The lesser charge for greater than 50 mm meters reflects the fact that the meter is not affixed by Hunter Water's contractor, and must be affixed by a private plumber engaged by the customer.

The charge has been reduced since Hunter Water's original submission, due to recent renegotiation of the contract to affix or deliver the meter. Hunter Water has also proposed to remove part (b) of the service relating to collection of over 50mm meters.

### 5.7.6.2 Customer impact

Hunter Water has proposed a relatively small increase for affixture of meters up to 50 mm (of \$1.10). This is not expected to have significant customer impacts.

The introduction of the new charge for meter delivery for meters over 50 mm is only expected to apply to 11 customers, given the limited number of connections of this size.

### 5.7.6.3 Demand forecast

Hunter Water is forecasting a substantial reduction in demand for meter affixtures, at 26 per cent (or 589) below recent average demand.<sup>11</sup>

Demand for meter affixtures is likely to be related to activity in the building industry. Discussions with Hunter Water staff indicated that in several cases the latest information shows demand for these services is somewhere between recent history and the forecasts provided.

Our view is that Hunter Water's forecasts are conservative and should be increased to match the annualised number of services provided from November 2006 to September 2008. While use of this figure may slightly overestimate demand in 2008/09 and 2009/10, it is likely to underestimate demand in the latter years of the regulatory period. On this basis, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
29 Meter affixtures/handling fee (a) up to 50 mm light duty*	2,230	2,230	2,230	2,230

Given that there is no historical data available for meter delivery of meters over 50 mm, we consider Hunter Water's forecast for this service is reasonable.

<sup>11</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

#### 5.7.6.4 Conclusions and recommendation

- the revised cost build-up and proposed charge for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services for 29(a) to be provided should be increased as shown in the table above.

#### 5.7.7 Inaccessible meter – reading agreement

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
60	Inaccessible meter - reading agreement	45.70		Yes	300	13,710

##### 5.7.7.1 Description, cost build up and general discussion

This is a once-off fee to negotiate and prepare an agreement with a customer where the customer provides Hunter Water with a meter reading because Hunter Water staff are unable to access the meter.

This is a new charge and agreements have not been prepared before. Section 10.4 of Hunter Water's Customer Contract currently outlines the customer's responsibility to ensure the meter is reasonably accessible. However, Hunter Water has advised that most customers are not familiar with the Customer Contract, and will have varying interpretations as to what constitutes 'reasonably accessible'.

Hunter believes that the proposed charge is necessary to ensure compliance with requirements for reading, testing, inspection, maintenance and replacement of meters where necessary, and to recover internal costs where Hunter Water and customers are not able to agree on an alternative arrangement for access to meters.

Approximately 35 minutes of time has been allowed for this procedure. In our view this is likely to be a relatively conservative estimate and actual times could be longer.

##### 5.7.7.2 Customer impact

This is a new charge and affected customers will incur a once-off charge of \$45.70. Hunter Water has advised that in most cases alternative arrangements are able to be made with customers, and that the charge is typically avoidable if customers are co-operative in developing a workable solution.

##### 5.7.7.3 Demand forecast

This is a once-off fee and it is unlikely 300 new customers will come on line each year for whom Hunter Water cannot access the meter. The annual figure represents the fact that there will be a backlog of agreements that need preparing and these will only be cleared over time. Nothing has come to our attention to suggest that the forecast is not reasonable.

##### 5.7.7.4 Conclusions and recommendation

- the cost build-up and proposed price for this service is appropriate and consistent with the IPART pricing principles, although if anything the time estimate may be below that actually incurred
- the forecast of the number of services to be provided is appropriate

## 5.7.8 Affix a separate meter to a unit

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
63	Affix a separate meter to a unit*	30.05		Yes	1,200	36,060

### 5.7.8.1 Description, cost build up and general discussion

This service involves affixing a meter to a unit within a registered strata plan where the meter frame is compliant with requirements. A separate charge is applied for the meter itself. The charge comprises Hunter Water's administrative costs and contractor costs for affixing the meter.

This is a new charge. Previously, meter affixtures for strata developments were charged in accordance with charge number 29 – meter affixtures/handling fee. The separate charge is required to reflect the administrative cost of providing the service, in particular, amending the meter and service agreement on Hunter Water's customer information system (CIS). This charge is also covered by a separate contractual arrangement to that for charge 29.

Since the submission to IPART, Hunter Water has revised downward the estimate of time required to provide the service from 31 to 16 minutes, as the process on CIS is slightly easier than that for charge 29. A new agreement with the contractor has also significantly reduced the initially proposed charge from \$74.35 to \$30.05.

### 5.7.8.2 Customer impact

Previously this service was covered under charge number 29 – meter affixtures/handling fee. While the proposed charge is higher than the previous charge for the meter affixtures/handling fee (previously \$21.85), the associated charge number 24 – request for separate metering of units has been reduced significantly.<sup>12</sup>

Therefore, the overall cost for customers requiring separate metering of a strata plan has reduced substantially.

### 5.7.8.3 Demand forecast

This charge is likely to be related to activity in the building sector. Hunter Water has advised that the forecast demand is based on the last 12 months of growth in multi-unit developments, and the average number of units in each development.

Given the limited historical data available, we consider Hunter Water's forecast demand for this service is reasonable.

### 5.7.8.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided should be increased as shown in the table above.

## 5.7.9 Conveyancing certificate

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
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<sup>12</sup> The previous charge for a request for separate metering of units was between \$72.85 (for 1-4 units) and \$119.05 (for more than 10 units), the proposed charge is \$34.10 per strata plan.

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
1	Conveyancing certificate					
	(a) over the counter	30.1	44%		1,010	30,401
	(b) electronic	8.4	2%		9,070	76,188

### 5.7.9.1 Description, cost build up and general discussion

This service involves provision of a statement of outstanding rates and charges at a specific date which is issued to solicitors, conveyancing companies and individuals as a requirement for buying and selling property, either over the counter or electronically. Hunter Water indicated in discussions with Deloitte that the proposed increase in costs for conveyancing certificates is due to a more accurate costing of providing the service.

The over the counter charge comprises Hunter Water's administrative costs of \$29.10 (22.5 minutes at \$77.52 per hour for a Customer Service Level 2 staff member) and Australia Post costs of \$1.00 for an A4 envelope.

The electronic charge comprises administrative costs and, plus an estimated transaction charge to cover the Land and Property Information (LPI) Brokers fee charged by the Department of Land. The administrative time required for electronic statements reflects the estimated 10 per cent of times that Hunter Water needs to manually intervene to provide the service.

We note that time requirements estimated by Hunter Water for identifying the property and mailing procedures are both one minute greater than times for identical activities for the provision of service location diagrams (No. 3).

Therefore, it is suggested that Hunter Water amend the charge for over the counter certificates to reflect a 2 minute reduction in administrative times to provide the service.<sup>13</sup>

This amendment would also reduce the costs related to administration time for electronic statements.

### 5.7.9.2 Customer impact

Customers opting for over the counter service face a significant price increase. However, Hunter Water has advised that it expects the majority of certificates to be issued electronically.

### 5.7.9.3 Demand forecast

Hunter Water's demand forecast for conveyancing certificates is 21 per cent (or 2,682) below recent average demand.<sup>14</sup>

As noted in section 5.4, demand for this service is likely to vary with the size of the customer base. Our view is therefore that a reasonable forecasting methodology for these services is to use the recent historic average number of services provided as a base, and increase this by 1.7% per annum for each year of the regulatory period.

We see no reason to alter Hunter Water's estimate of the relative demand for over the counter and electronic certificates. On the basis of this methodology, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
1(a) over the counter	1,300	1,323	1,345	1,368

<sup>13</sup> Based on a 2 minute reduction in time for Customer Service Level 2 staff (\$77.52 per hour), being \$2.58 and a \$1.00 reduction in Australia Post costs.

<sup>14</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

conveyancing certificates				
1(b) electronic conveyancing certificates	11,678	11,877	12,079	12,284

#### 5.7.9.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles with the exception that the cost build-up should be amended to reduce the processing time by 2 minutes
- the forecast of the number of services should be increased as shown in the table above.

#### 5.7.10 Service location diagram

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
3	Service location diagram					
	(a) over the counter	22.65	50%		887	20,091
	(b) electronic	14.25	63%		7,985	113,786

##### 5.7.10.1 Description, cost build up and general discussion

This service involves provision of a plan of Hunter Water's services and connection points in relation to a property's boundaries or a statement that no sewer main is available, either over the counter or electronically.

The electronic charge comprises administrative costs and an estimated transaction charge to cover the Land and Property Information (LPI) Brokers fee charged by the Department of Land. The administrative costs reflect the estimated 10 per cent of times that Hunter Water needs to manually intervene to provide the service, and a charge related to Hunter Water's sewer Geographic Imaging System (GIS). Discussions with Hunter Water staff indicated that the cost build-up comprised:

- \$5.45 for sewer GIS costs
- \$3.30 for manual interventions
- \$5.50 for transactions costs related to the LPI Brokers charge.

We note that if manual intervention is required 10 per cent of the time, this fee would be \$2.25 (i.e. 10% of the over the counter fee, rounded to the nearest 5 cents), rather than \$3.30. Therefore it is suggested that Hunter Water amend the charge for electronic service location diagrams by \$1.25.

##### 5.7.10.2 Customer impact

Customers requiring over the counter or electronic service location diagrams face significant increases in costs.

##### 5.7.10.3 Demand forecast

Hunter Water's demand forecast for service location diagrams is 31 per cent (or 3,904) below recent average demand.<sup>15</sup>

Demand for service location diagrams is likely to be related to activity in the building industry. Discussions with Hunter Water staff indicated that in several cases the latest

<sup>15</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

information shows demand for these services is somewhere between recent history and the forecasts provided.

Our view is that Hunter Water's forecasts are conservative and should be increased to match the annualised number of services provided from November 2006 to September 2008. While use of this figure may slightly overestimate demand in 2008/09 and 2009/10, it is likely to underestimate demand in the latter years of the regulatory period. We see no reason to alter Hunter Water's estimate of the relative demand for over the counter and electronic certificates. On the basis of this methodology, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
3(a) over the counter service location diagram	1,280	1,280	1,280	1,280
3(b) electronic service location diagram	11,496	11,496	11,496	11,496

#### 5.7.10.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles with the exception that the cost build-up should be amended to reduce the charge by \$1.05
- the forecast of the number of services should be increased as shown in the table above.

#### 5.7.11 Meter reading

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
4	Meter reading - special read and by appointment (previously special meter reading statement)					
	(a) during business hrs*	23.35		Yes	85	1,985
	(b) outside business hrs*	42.90		Yes	5	215

##### 5.7.11.1 Description, cost build up and general discussion

This service involves arranging for a meter reader to attend customers property for the purpose of obtaining a special reading outside of the existing meter read schedule (inside business hours) or alternatively by appointment with the customer after business hours.

Previously covered by the charge for a special meter reading statement (\$64.30), the charge has been restructured to recover costs of performing meter readings outside normal business hours.

The charge covers Hunter Water's administrative costs and contractor costs for reading the meter. There is a reduction from the previous charge is due to savings in administrative times from the introduction of CIS and outsourcing the meter reading function. The proposed charges are different from those originally proposed by Hunter Water (and substantially lower in the case of outside business hours) due to the renegotiation of prices with contractors.

##### 5.7.11.2 Customer impact

Customers requiring special meter readings by appointment during business hours will face a substantial decrease in costs, with a one off charge of \$23.35, while the small number of

customers forecast to require meter readings outside business hours will experience a significant increase in costs, with a one off charge of \$42.90.

### 5.7.11.3 Demand forecast

In comparison with historical demand for special meter reading statements, Hunter Water's forecast demand for meter readings is 31 per cent (or 41) lower.<sup>16</sup>

As noted in section 5.4, demand for this service is likely to vary with the size of the customer base. Our view is therefore that a reasonable forecasting methodology for these services is to use the recent historic average number of services provided as a base, and increase this by 1.7% per annum for each year of the regulatory period.

We see no reason to alter Hunter Water's estimate of the relative demand for meter readings during business hours and outside business hours. On the basis of this methodology, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
4(a) Meter reading during business hours	126	128	130	132
4(b) Meter reading outside business hours	7	8	8	8

### 5.7.11.4 Recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided should be increased as shown in the table above.

## 5.7.12 Building plan stamping

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
26	Building plan stamping	11.6		Yes	12,500	145,000

### 5.7.12.1 Description, cost build up and general discussion

All new building and development plans require revision and stamping by Hunter Water staff to certify the proposed construction does not adversely impact on Hunter Water's assets. This function has always been performed by Hunter Water however there has not previously been a charge to customers for this service.

Given the significant number of building plans processed, Hunter Water is proposing to introduce a charge to recover its associated administrative costs.

### 5.7.12.2 Customer impact

This is a new charge and affected customers will incur a once-off charge of \$11.60.

### 5.7.12.3 Demand forecast

Demand for building plan stamping is related to activity in the building industry and private building works such as home additions, swimming pools, and anything that requires approval from local government.

<sup>16</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

Hunter Water’s forecast of 12,500 per annum suggests that there is the equivalent of approximately 1 FTE devoted to stamping building plans. Discussions with Hunter Water have confirmed that this is indeed the case. Given that there is no historical data available for this charge, we consider that Hunter Water’s forecast is reasonable.

#### 5.7.12.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided should be increased as shown in the table above.

#### 5.7.13 Standard plumbing inspection

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
31	Standard plumbing inspection (prev. special inspection)					
	(a) general*	94.15	42%		1980	186,417
	(b) recycled water*	97.00		Yes	80	7,760
	(c) hourly rate*	68.85		Yes	330	22,721

##### 5.7.13.1 Description, cost build up and general discussion

There are three different types of plumbing inspections with each type attracting its own fee:

- the general plumbing inspection charge covers all general inspections and technical support on various plumbing inspections required by Hunter Water to ensure compliance with the New South Wales Code of Practice for Plumbing and Drainage
- the recycled water inspections is for circumstances where additional inspections are required due to non-compliance, alterations, property sales or the type of development (three mandatory inspections are already included in the Application to Connect to Recycled Water – Domestic charge).
- the hourly rate for commercial and industrial plumbing inspections reflects the additional time involved in inspection of all connection points at commercial and industrial properties. It is proposed an hourly rate be charged after the initial inspection has been completed.

The three different charges cover Hunter Water’s administration costs for work undertaken by customer service staff and time and travel costs for plumbing inspections staff. The higher charge for recycled water inspections reflects the more complex nature of inspections and also the greater travel times due to the more sporadic nature of demand.

As discussed in section 5.6, there may be benefits from combining the general and recycled water inspection charge given the small difference between charges. Hunter Water has advised that the revenue neutral charge is \$94.25

##### 5.7.13.2 Customer impact

Customers requiring plumbing inspections face significant increases in costs.

##### 5.7.13.3 Demand forecast

Hunter Water has advised that while many general plumbing inspections are related to activity in the building industry, those related to inspections of rainwater tanks are often for

existing dwellings installing a rainwater tank, which is more likely to be related to economic conditions.

Since its original submission Hunter water has provided revised information regarding its forecast of the number of services to be provided. We are satisfied that the revised forecasts are appropriate.

#### 5.7.13.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided is appropriate.

#### 5.7.14 Backflow prevention device

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
18	Backflow prevention device					
	(a) Annual administration fee	15.25	9%		4,000	61,000
	(b) Device test*	242		Yes	350	84,700

##### 5.7.14.1 Description, cost build up and general discussion

Under Australian plumbing standards, owners are responsible for annual maintenance of backflow prevention devices.

The annual administration fee comprises Hunter Water's administration costs, stationery costs for order sheets (\$0.50) and Australia Post costs for envelopes (\$0.50). Hunter Water's administration fee is for the administration costs associated with maintenance which may require a range of tasks including review of test reports, consultation with plumbing inspectors, and sending failure notices and reminder notices for testing.

Not all jobs will require all tasks, so Hunter Water has simply divided the total costs attributable to the relevant staff resources in relation to the task by the number of backflow prevention devices in operation.

Given that Hunter Water's labour rate overheads also include stationery and postage costs, the inclusion of a direct charge for these items may lead to double counting. The removal of these costs would reduce the annual administration fee to \$14.25.

The charge for backflow prevention device testing covers Hunter Water's administration costs and the contractor costs for performing the test of the backflow prevention device, where a customer fails to arrange for testing of their device. The costs of administering the arrangement of a backflow test through an external provider had not previously been recovered. The test fee proposed is an average of three quotes provided to Hunter Water prior to the review.

##### 5.7.14.2 Customer impact

Customers with backflow prevention devices face an increase in their annual administration charges of 9 per cent, or \$1.30.

The inclusion of Hunter Water's administration cost for testing of backflow prevention devices represents a significant cost to impacted customers. However, this is an avoidable charge, as customers arranging for their own device testing will not be subject to it.

### 5.7.14.3 Demand forecast

The demand forecast for annual administration fees is based on the total number of devices in operation.

The demand for device tests was revised from 10 in Hunter Water's original submission to 350.

We consider that Hunter Water's forecasts of demand for these services are reasonable.

### 5.7.14.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided is appropriate.

### 5.7.15 Irregular and dishonoured payments

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
23	Irregular and dishonoured payments					
	(a) Bank - declined cheque*	21.95	-2%		37	1,182
	(b) Bank - direct debit declined*	24.45	71%		560	19,805
	(c) Australia Post - cheque declined	36.95	32%		50	1,847

#### 5.7.15.1 Description, cost build up and general discussion

These charges are to recover the costs of functions relating to cheques returned by banking authorities as irregular or dishonoured, credit card payment declines and direct debit payment declines.

Each charge reflects administration costs to Hunter Water (17 minutes), the fees imposed on Hunter Water by the Commonwealth Bank and Australia Post.

We requested evidence from Hunter Water that the costs reflected charges from the financial institutions. Based on Hunter Water's investigations it has reduced the charge for declined bank cheques by \$10.00 to reflect that fact that the Commonwealth Bank no longer levies a charge for this.

#### 5.7.15.2 Customer impact

While only a very small number of these charges are forecast, these costs will tend to fall upon low income customers with difficulty in paying their accounts.

#### 5.7.15.3 Demand forecast

Hunter Water's demand forecasts for these services vary somewhat from recent historical averages:<sup>17</sup>

- declined bank cheques are 48 per cent (or 12) above average
- direct debit declines are 31 per cent (or 250) below average
- declined Australia Post cheques are 32 per cent (or 24) below average.

<sup>17</sup> Based on the 23 months from 1 November 2006 to 30 September 2008.

Anecdotally, Hunter Water noted that more customers were paying by direct debit. This would tend to increase the number of direct debit declines. We consider that based on the information available, the most appropriate basis for forecast volumes is the recent historical average, as provided by Hunter Water. On this basis, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
Bank - declined cheque	25	25	25	25
Bank - direct debit declined	810	810	810	810
Australia Post - cheque declined	74	74	74	74

#### 5.7.15.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided is appropriate.

#### 5.7.16 Plumbing non-compliance follow-up inspections

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
65	Plumbing non-compliance follow-up inspections	81.40		Yes	640	52,096

##### 5.7.16.1 Description, cost build up and general discussion

Upon initial inspection, plumbing works occasionally fail to comply with the NSW State Code of Practice for Plumbing and Drainage. In this situation, Hunter Water provides the plumber with a notice to rectify the defective works. Once informed by the plumber that the works have been rectified, Hunter Water undertakes a second inspection (currently at its own expense).

This charge is intended to recover the costs associated with the additional inspection and provide an incentive for plumbers to ensure future compliance. The Victorian Plumbers Association and Sydney Water both charge plumbers this fee and have seen a decrease in non-compliant works from 30 % to 11.5 %. Hunter Water advises that the Victorian Plumbing Association (that have a 5% audit regime on plumbing works) largely attribute this improvement to the existence of penalties.<sup>18</sup>

The charge comprises the general plumbing inspection fee plus Hunter Water's administrative costs for a range of activities (not all of which are required for each inspection).

By way of comparison, Sydney Water levies a plumbing and drainage re-inspection fee of \$79.00.

##### 5.7.16.2 Customer impact

This charge will fall on licensed plumbers performing work that does not comply with NSW State Code of Practice for Plumbing and Drainage.

<sup>18</sup> Hunter Water Corporation (2008), *Price Submission to IPART*, September, p.I.82

### 5.7.16.3 Demand forecast

As noted in section 5.4, volumes for this charge are likely to be related to activity in the building sector. However, volumes will also be related to compliance rates by plumbers, and as noted above, Hunter Water expects that non-compliance rates will fall following the introduction of this charge.

We consider that Hunter Water's forecast volumes are reasonable.

### 5.7.16.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided is appropriate.

### 5.7.17 Major works inspection fee

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
19	Major works inspection fee					
	(a) water mains	6.89/m	0%		30,000	206,700
	(b) gravity sewer mains	10.38/m	0%		33,000	342,540
	(c) rising sewer mains or LPSS	6.89/m	0%		2,000	13,780

#### 5.7.17.1 Description, cost build up and general discussion

This service entails inspection of developer funded works that are longer than 25 metres and/or greater than 2 metres in depth by Hunter Water for the purpose of approval

The charge comprises Hunter Water's inspection and administration costs and also includes work as executed (WAE) diagrams.

#### 5.7.17.2 Customer impact

Hunter Water proposes constant prices (in real terms) for these charges.

#### 5.7.17.3 Demand forecast

Hunter Water advised that for the previous price review, construction of water mains, sewer mains and rising mains was expected to continue on an upward trend. However, actual pipes laid fell substantially short of expectations, with an approximate 25 per cent decrease from the estimated volumes.

Based on data provided by Hunter Water, forecast volumes for major works inspections are somewhat below the four year average from 2004/05 to 2007/08:

- water mains are 15 per cent (or 5,262) below the four year average
- gravity sewer mains are 14 per cent (or 5,588) below the four year average
- rising sewer mains or LPSS are 44 per cent (or 1,564) below the four year average.

Our view is that the four year average of historical demand from 2003/04 to 2007/08 provides a reasonable basis for volumes for the next regulatory period, and Hunter Water's forecasts should be revised upwards to reflect this. On this basis, a revised demand forecast would be as follows:

Service	2009/10	2010/11	2011/12	2012/13
Water mains inspections	35,262	35,262	35,262	35,262

Gravity sewer mains inspections	38,588	38,588	38,588	38,588
Rising sewer mains or LPSS inspections	3,564	3,564	3,564	3,564

#### 5.7.17.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided should be increased as shown in the table above.

#### 5.7.18 Hydraulic design assessment

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
34	Hydraulic design assessment (previously Hydraulic design assessment application - less than 80mm)					
	(a) up to 10 drawings	258		Yes	329	84,882
	(b) 11-50 drawings	258 + 23/draw		Yes	1678	38,592
	(c) >50 drawings	1178 + quote		Yes	-	

##### 5.7.18.1 Description, cost build up and general discussion

Hunter Water assesses hydraulic designs to ensure that infrastructure is not adversely impacted by the customer upon connection. Designs are required to comply with service connection requirements, the Plumbing and Drainage Code and applicable Australian Standards.

Previously, Hunter Water had a separate charge for hydraulic assessments for less than 80mm (\$268) and for hydraulic assessments for 80mm services and above (\$357).

The new price structure proposed by Hunter Water is intended to more accurately reflect the costs of assessment, and also to minimise cross-subsidies between customers with few drawings and customers with large numbers of drawings for assessment. A sample of 50 hydraulic design assessments over 2007/08 provided by Hunter Water shows that the majority of hydraulic design assessments contain fewer than 10 drawings, with only 5 per cent with over 50 drawings. Under the previous price structure customers with a small number of drawings were effectively providing a price subsidy to customers with much larger numbers of drawings.

Hunter Water has used detailed records of the times required by staff to complete an 'average' hydraulic design assessment to determine a base charge, and also a charge per plan.

In response to our draft report, Hunter Water noted that:

- a set fee per drawing for greater than 50 drawings would provide certainty for customers, and that \$20 per drawing was a reasonable price

- around 16 of the 329 assessments each year contain more than 50 drawings, with the average amount of drawings being around 60.

#### 5.7.18.2 Customer impact

The majority of impacted customers, being those with 10 or fewer design drawings, will incur a decrease in price ranging from \$10 to \$99. Customers with a large amount of drawings may experience significant increases in price.

#### 5.7.18.3 Demand forecast

Hunter Water’s forecast demand for up to 10 and 10 to 50 drawings appears reasonable. However we note that no forecast of demand was provided for more than 50 drawings. A figure needs to be included in the revenue forecast.

#### 5.7.18.4 Recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- a specified price per drawing of \$20 should be provided for more than 50 drawings, which would provide revenue of \$22,048 for hydraulic design assessments for greater than 50 drawings  $((1178 + (10 \text{ drawings} \times \$20)) \times 16)$ . Revenue from the less than 50 drawings categories should be reduced commensurately.

### 5.7.19 Major works design

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
44	Major works design					
	(a) Major works design review and contract preparation (prev. assessment of major works)	2109	-1%		181	381,757
	(b) Major works design re-assessment	278		Yes	13	3,616

#### 5.7.19.1 Description, cost build up and general discussion

This service covers assessments of major works designs, principally large subdivisions or greenfield sites. Applicants are required to engage consultants to prepare the designs. Following approval, construction is supervised by Hunter Water.

When the quality of a major works design is poor, resubmission of the design by the developer’s consultant is required, this necessitates Hunter Water applying an additional round of design assessment. This is a new charge introduced by Hunter Water to recover additional costs imposed on Hunter Water and provide an incentive for customers to provide high quality designs.

The charge for design review and contract preparation has been built-up by allocating the times for each function required by the labour rates of the staff members involved.

#### 5.7.19.2 Customer impact

There will be a small reduction in costs for major works design review and contract preparation. The major works design re-assessment will impose a cost of \$278 to developers.

requiring re-assessment of designs, but is expected to impact only a very small number of developers.

### 5.7.19.3 Demand forecast

Hunter Water’s forecast of demand for major works design is consistent with the average demand from the four years from 2003/04 to 2007/08.

There is no historical demand information available for major works design re-assessments. The forecast quantity of 13 re-assessments suggests a ‘failure’ rate of around 7 per cent. This rate has been determined by Hunter Water by subtracting the estimate for major works design reviews from the estimate for final works plan approvals. There is nothing to suggest Hunter Water’s forecast of demand is unreasonable.

### 5.7.19.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services to be provided is appropriate.

## 5.7.20 Recycled water inspection & WAE

No.	Name	Price (\$)	% Change	New or Amend?	Qty	Rev (\$)
57	Recycled water inspection & WAE (work as executed) fee	9.45/m		Yes	4,100	38,745

### 5.7.20.1 Description, cost build up and general discussion

This charge is for inspections for the purpose of approval of recycled water mains constructed by developers that are longer than 25 metres and/or greater than 2 metres in depth. The charge is in addition to charge 19 – major works inspection fee.

The per meter cost of the charge is based on the expected number of inspections required and field inspector costs. The higher cost than for water mains inspections reflects the more rigorous inspection regime required for recycled water inspections.

### 5.7.20.2 Customer impact

This is a new charge that will impose costs of \$9.45 per meter on new developments connecting to recycled water.

### 5.7.20.3 Demand forecast

Demand for this service is likely to be related to activity in the building industry. Hunter Water has advised that it is difficult to estimate the quantity of main laid per lot or the development rate with a high degree of accuracy. Development rates are affected by financial conditions and the ability for developers to achieve required approvals within scheduled timeframes.

Hunter Water’s estimated quantity of recycled water inspections is based on the expected development rate in lots per year from development servicing plans for dual reticulation projects in the Morpeth and Farley recycled water headworks systems.

The estimated development rate for recycled water lots provided by Hunter Water is 434 per annum for the four years of the regulatory period. Based on a requirement of 11 metres of works per lot, the total estimate is 4,774 metres. Hunter Water’s estimate of 4,100 metres is based on this total estimate with a downward adjustment for expected delays in

development. At the time the quantity of recycled water mains to be inspected was estimated there had been a delay in a dual pipe residential development at Thornton North (to be supplied from Morpeth).<sup>19</sup>

Hunter Water has indicated that in previous recycled water inspections, the average pipe length per lot has been 18 metres, with a range between 11 and 81 metres per lot. Given that basing expected lot uptake on 11 metres per lot is a conservative estimate, we consider that a downwards adjustment in the expected rate of development is not necessary.

Therefore, we suggest that Hunter Water's forecast demand be revised upward to 4,774 metres.

#### 5.7.20.4 Conclusions and recommendation

- the cost build-up and proposed for this service is appropriate and consistent with the IPART pricing principles
- the forecast of the number of services should be increased to 4,774.

#### 5.7.21 Comment on other charges

We wish to make the following observations on those charges which were not in the 20 to be reviewed in detail:

- the new charge for reservoir construction inspection and WAE fee (no. 58) is proposed to be based on a 'quote'. It needs to be made clear that this quote should be based on a defined hourly rate. We also note that the proposed hourly rate in the charge is cited as the technical services hourly rate of \$120 – however the rate is quoted in charge no. 52 and used in the determination of other charges is \$99.

## 5.8 Summary of findings and recommendations

### 5.8.1 Overview

In general, and taking into account the materiality and magnitude of the miscellaneous services costs and revenues to Hunter Water's business, Hunter Water's approach to calculating miscellaneous service charges is sound. The information to support the charges appears to be reliable and drawn from appropriate sources, checks on data consistency appear to have been made, and calculations are supported by spreadsheets where appropriate.

### 5.8.2 General approach

The Hunter Water approach generally complies with the IPART formula for establishing miscellaneous service charges. Indeed, we consider that the Hunter Water approach may in fact be superior to the IPART approach in that under the Hunter Water approach business unit overheads are expressed in terms of a cost per hour rather than being a percentage of the base unit cost of labour. The Hunter Water approach is preferable because the relevant overheads for a particular service should not vary according to the wage rate of the person providing the service.

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<sup>19</sup> Supplementary information provided by Hunter Water to Deloitte

### 5.8.3 Time to complete tasks

Our overall observation is that the approach taken by Hunter Water to determine the time taken to undertake tasks is generally thorough and well-considered, and based on reliable data.

### 5.8.4 Hourly rates and overheads

The hourly rates, on-costs and overheads used by Hunter Water in determining prices for individual miscellaneous services appear reasonable on the following basis:

- base wage rates are consistent with Hunter Water's legislative requirements
- the on-cost rate of 44 per cent is built up from evidence of actual costs faced by Hunter Water
- the overhead rates applied to each business unit have been built up from actual indirect costs faced by each business unit including a share of business-wide indirect costs. Increases in overheads compared to 2006/07 appear reasonable given the introduction of Hunter Water's Customer Information System (CIS). While the CIS has increased overheads it has reduced the direct cost of undertaking many of the miscellaneous services.

### 5.8.5 Demand for services

Our view is that Hunter Water's forecasts for many of its activity related miscellaneous services are conservative and should be increased. The annualised number of services provided from November 2006 to September 2008 is likely to provide a more realistic view of likely future demand. While using current numbers may slightly overestimate demand in 2008/09 and 2009/10, it is likely to underestimate demand in the latter years of the regulatory period.

### 5.8.6 Efficiency of charges

Having considered each of the proposed new and amended services, we strongly support those new and amended charges which will strengthen the inspection regime, encourage higher levels of first-time compliance by developers and their agents, and encourage altered customer behaviour. These represent the majority of the new services. In general we also support the additional and amended charges which are primarily proposed to improve cost reflectivity and customer equity. However, we have identified a small number of charges that may be amalgamated, including:

- a common charge for the tanker inspection and re-inspection service
- a common charge for standard and recycled plumbing inspections.

In order to ensure that those new and amended charges designed to improve customer behaviour and reduce risk to Hunter Water do in fact achieve their aim, Hunter Water should ensure that developers, plumbers and other relevant stakeholders are provided with information that outlines the new services, charges and their rationale.

### 5.8.7 Analysis of individual charges

We have undertaken a detailed review of 20 miscellaneous services proposed by Hunter Water. Noting that Hunter Water has proposed changes in prices for several of its services since its original submission, in general we are satisfied that the charges proposed for the services accurately reflect the IPART pricing principles. We have recommended:

- a minor reduction to the charge for provision of conveyancing certificate (no. 1)

- a minor reduction to the charge for provision of electronic service location diagram (no. 3(b))
- that a specific price per drawing be provided for service 34(c) hydraulic design assessment

We also note that the proposed price for service no. 22 (application to connect or disconnect water and sewerage services) seems low given an identical price for charge no. 10 (application for water service connection).

# Part B – Trade waste charges

# 6 Overview of trade waste charges

## 6.1 Trade waste charges

Trade waste charges are specific fees levied on customers to account for the incremental cost of accepting and treating waste of a higher strength than residential waste. The acceptance of trade waste at a wastewater treatment facility represents a proportionally higher cost for wastewater treatment, customer administration and discharge monitoring to ensure Hunter Water complies with its regulatory obligations.

## 6.2 Previous IPART work

Trade waste charges were last reviewed in 2003 as part of the review of metropolitan water prices and this included Sydney Water, Hunter Water, Gosford City Council and Wyong Shire Council.<sup>20</sup> The scope of the review was limited to:

- assessing whether the base trade waste charges proposed by the four agencies listed above, were in the right order of magnitude
- assessing the reasonableness of the proposed changes in the pricing structure and the prices themselves.

Overall the review found that:

- the policies and charges proposed by the agencies were reasonable
- the base charges were set at an appropriate level
- the policies are consistent with other similar agencies from around Australia, but
- there are some minor areas where further information could be sought to justify some increased charges or where greater clarity can be achieved in the pricing structure.

For Hunter Water, the key findings identified were:

- the trade waste policy reflects the concepts of “cost recovery” and “reflecting differences in cost of treating wastes in particular locations”
- trade waste charges vary significantly depending on the discharge location to the extent it may be perceived that the charges are inequitable
- differences in charges for each location were supported by comprehensive analysis
- the charging structure is comparable to other agencies (although in some cases may be on the high end of the averages)
- new charges for sulphides were introduced however these were based on Sydney Water’s pricing structure

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<sup>20</sup> IPART 2003, Hunter Water Corporation: Prices of Water Supply, Wastewater and Stormwater Services, Determination No. 3.

- overall increases in charges amount to 7.5% in real terms reflecting an estimated increase in wastewater treatment costs of around 11.3%.

Key recommendations identified for Hunter Water were:

- IPART should seek additional information on the level of price increases for tankered wastes
- to achieve greater transparency, Hunter Water should publish set rates for monitoring costs.

It is not known to what extent IPART or Hunter Water have responded to these recommendations; however a direct review of progress is potentially not relevant as Hunter Water is proposing modifications to their trade waste pricing structure for this current review including adjustments to the structure of the tankered waste charges.

Further details on Hunter Water's proposed changes to their pricing structure are presented in the following sections.

## 6.3 IPART trade waste pricing principles

IPART defined a set of principles for trade waste charges as part of the 2003 review of trade waste pricing. These are:

*The application of appropriate pricing principles to trade waste requires that:*

- *standards for acceptance should be set on the basis of the capacity of current systems to transport, treat and dispose of the wastes, having regard to the health and safety of wastewater workers*
- *trade waste charges should at least cover the costs to the water supplier of handling these wastes*
- *charges should vary to reflect differences in the cost of treating waste to the required standards at particular locations*
- *water suppliers should set charges and standards in a manner that is transparent and accurate. The method of measurement should be reliable and the basis for setting charges should reflect costs incurred as far as possible.*

*Where environmental reasons are made for variations from the pricing principles detailed above then sufficient evidence needs to be available to justify these variations. The basis for calculating greater than cost charges where environmental justifications exist should also be justified.<sup>21</sup>*

Hunter Water's proposed trade waste charges have been assessed against these principles.

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<sup>21</sup> IPART (2003), Hunter Water Corporation: Prices of Water Supply, Wastewater and Stormwater Services, Determination No. 3, Independent Pricing and Regulatory Tribunal of NSW (IPART), Sydney, Schedule 1, page 14.

# 7 Hunter Water's proposed trade waste charges

## 7.1 General approach

Hunter Water has advised that it is continuing to develop and refine its approach to charging for trade waste services to reflect the following principles:

- cost reflectivity and equity
- accounting for the differential costs of wastewater treatment at particular discharge locations
- reduction of cross subsidies between particular charges
- creation of incentives for customers to manage their discharges
- alignment with industry standard methodologies
- alignment of methodologies with other nearby water utilities.

For this pricing review, Hunter Water has proposed comprehensive changes to its pricing structure to better align with an industry wide, standardised approach developed by the Water Services Association of Australia (WSAA) published as the National Wastewater Source Management Guideline.<sup>22</sup> This approach uses a new preventative risk management framework to assess and manage the specific risks to wastewater systems posed by the customer's trade waste discharges. Hunter Water has indicated that it has undertaken the revision to the fees and charges from a zero base; justifying all fees and charges on the basis of current costs.

In the process of determining prices and justifying costs, Hunter Water has kept records, based on staff timesheets, of specific costs associated with each task or activity required in the management and operation of the trade waste system. Labour rates used in the calculation of the trade waste fees and charges are the same as those used for determining the plumbing related miscellaneous charges, which are reviewed separately in section 5.7.13.

Hunter Water has applied the risk management framework to two key areas:

- customer management – categorisation into minor, moderate and major agreement levels
- customer management – review of tankering services fee structure.

Hunter Water has also proposed some changes in their approach to calculating charges for accepting and treating some individual trade waste parameters. These changes are driven by factors including:

- the transient nature (and hence unsecure) nature of trade waste customers related to both the quality of the discharges and the location of the discharges
- increases in treatment costs.

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<sup>22</sup> WSAA (2008), National Wastewater Source Management Guideline, Water Services Association of Australia (WSAA), Melbourne.

Hunter Water has applied the change in approach for individual parameters to the following:

- Biochemical Oxygen Demand (BOD)/Non-Filterable Residue (NFR)
- heavy metals
- phosphorous.

## 7.2 Overview of proposed charges

Hunter Water has proposed changes to the following trade waste charges:

- introduction of a moderate agreement category for trade waste customers between the existing minor and major categories and trade waste fees and charges adjustment resulting in a net overall increase in revenue from trade waste charges paid by customers
- revision to BOD/NFR strength charges, resulting in an overall reduction in revenue, and the development of an incentive charge, which is designed to have a neutral effect
- revision of heavy metals charges resulting in a net decrease in revenue
- revision of phosphorous charges resulting in a net decrease in revenue
- revision of tankering charges resulting in some variation in charges dependent on a number of factors.

Hunter Water's submission also included an apparent increase in the sulphate charge which was not specifically noted or explained.

Hunter Water has indicated that, for all of their proposed charges, the derivation of the charges makes no allowance for the effect of inflation and the charges should be increased annually in line with the CPI.

## 7.3 Customer categorisation & fees adjustment

### 7.3.1 Proposed charges

Hunter Water's trade waste customers are currently allocated to one of two categories:

- minor trade waste customer or
- major trade waste customer.

The allocation of customers is based on an assessment of the customer's proposed trade waste volumes and the quality of the proposed trade waste and there are set guidelines to determine which category is appropriate.

In order to address a significant difference between the trade waste fees charged for minor customers and major customers, Hunter Water is proposing to introduce an intermediate category of trade waste customer, the moderate trade waste customer.

Hunter Water has also revised the methodology used for the allocation of customers to each category; bringing the method into line with the industry wide, preventative risk based framework. The proposed framework is presented in Figure 7.1. The proposed moderate trade waste agreement category is shown in orange between the two existing categories.

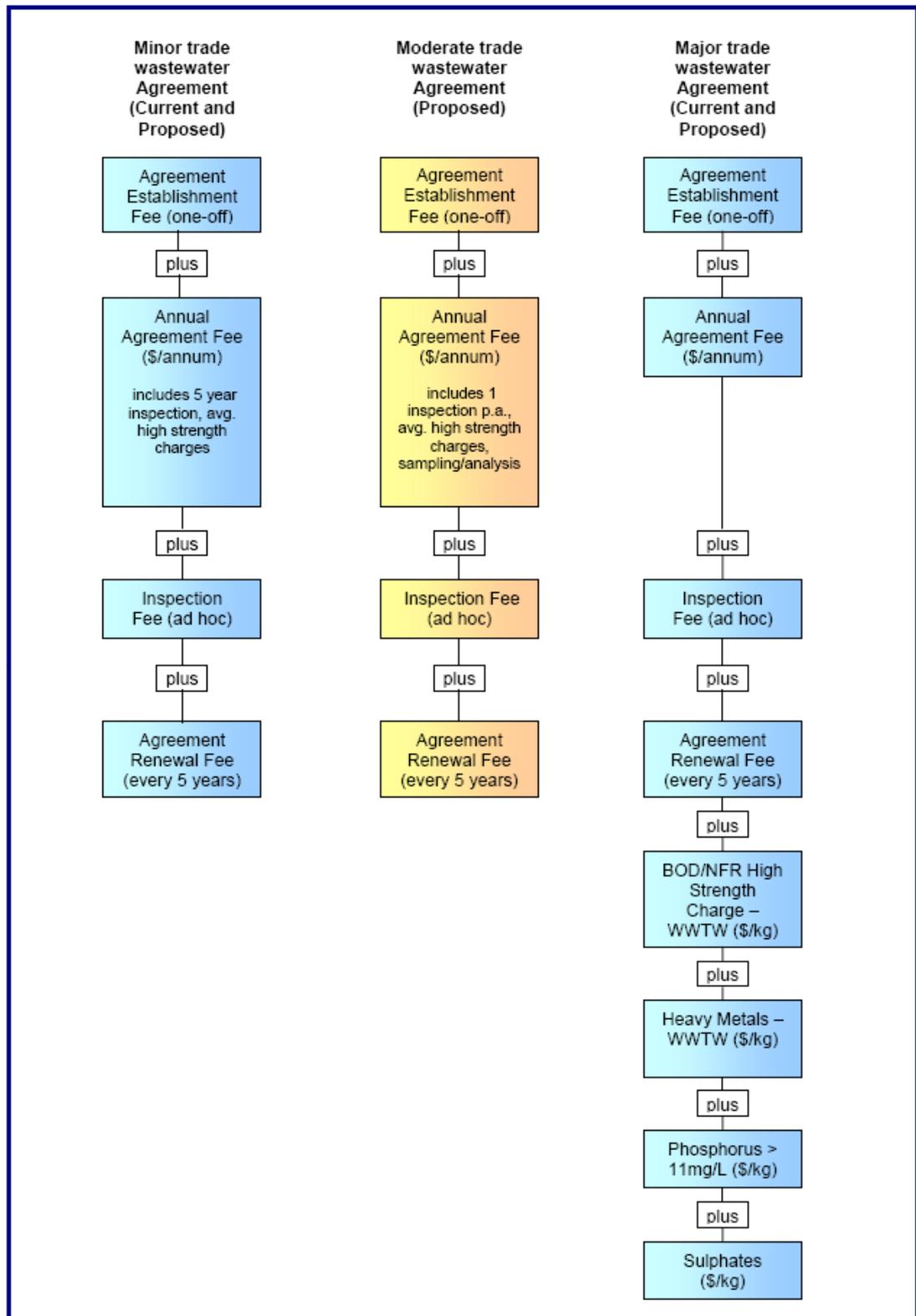


Figure 7.1 Hunter Water’s Trade Waste Pricing Structure<sup>23</sup>

<sup>23</sup> HWC (2008), Submission to IPART on prices to apply from 1 July 2009, Hunter Water Corporation, Newcastle, page 129.

The moderate category is similar to the minor category but includes more regular site inspection (one per annum rather than one every five years) and also includes sampling and analysis costs for the inspection.

Hunter Water has proposed to introduce a transition plan to minimise the impact of transition for customers who may be moving from minor to major or vice versa. The plan will limit categorisation to one step at a time, for example, minor to moderate rather than minor to major.

As part of the introduction of the new moderate category, Hunter Water also proposes to adjust the specific fees and charges applicable for trade waste agreements and inspections. The proposed adjustments are shown in Table 7.1.

**Table 7.1 Hunter Water's Proposed Trade Waste Agreement and Inspection Fees**

	2008/2009	2009/10 – 2012/13
<b>Minor Agreements</b>		
New minor agreement establishment fee	160.21	113.62
Existing minor agreement holders:		
Annual agreement fee	113.16	108.16
Inspection fee	101.96	104.81
Existing Renew/Reissue	118.75	94.25
<b>Moderate Agreements</b>		
New moderate agreement establishment fee	n/a	594.63
Existing moderate agreement holders:		
Annual agreement fee	n/a	846.40 <sup>a</sup>
Inspection fee	n/a	104.81
Existing Renew/Reissue	n/a	429.81
<b>Major Agreements</b>		
New major agreement establishment fee	885.06	594.63
Existing major agreement holders:		
Annual agreement fee	349.54	435.02 <sup>b</sup>
Inspection fee	101.96	104.81
Existing Renew/Reissue	655.40	429.81

Source: HWC

a. Annual agreement fee includes high-strength charges for the average discharge quality of these customers

b. Separate high-strength and consultant charges for heavy metals, phosphorus and sulphate apply and are not included in the annual agreement fee

### 7.3.2 Analysis of charges

As indicated above, Hunter Water proposes to introduce an intermediate category of trade waste customer, with the introduction of a moderate trade waste agreement.

The current allocation of customers to either a minor or a major agreement is based on an assessment of the customer's proposed trade waste volumes and the quality of the proposed trade waste according to set guidelines to determine which category is appropriate.

However, there is a significant difference between the trade waste fees charged for minor customers and major customers and, where customers sit on the threshold of either category, there is a potentially major cost impact to either the customer or to Hunter Water. This difference has resulted in contentious discussions with customers and some difficulties in negotiating agreements.

In specific situations, for example where large companies can afford to implement on-site pre-treatment of trade waste discharges they may then be able to satisfy the requirements of a minor trade waste customer. While pre-treatment should be encouraged where the cost to a customer of doing so is less than Hunter Water's cost, it is not clear that the existing pricing system is sending appropriate pricing signals. For example, if the customer is classified as 'large' and thus incurring high costs, but the incremental costs to Hunter Water of treating the waste is relatively low, then the pricing system may inefficiently encourage customer pre-treatment even if its costs of doing so are greater than those of Hunter Water.

Hunter Water's introduction of the moderate category has the following stated objectives:

- impartially reduce disputes about category assignment by Hunter Water for customers that are on the threshold between minor and major agreements
- minimise the impact on customers who change from minor to major agreements due to increases in business size or changes in business practices
- commence monitoring of the quality of customers discharges in order to mitigate risks (to the treatment process and of regulatory breaches)
- better align the charging methodology with that of Sydney Water.

Hunter Water has also stated that a particular customers' category can be reviewed on the renewal of the customer's trade waste agreement. This provides an incentive for customers; offering a pathway to reducing their own trade waste fees and charges by implementing cleaner production practices or some form of on-site treatment. While this is an incentive, the limitation of category review to the duration of the agreement, currently five years, only provides an incentive to customers in the latter part of their agreement. Some consideration should be given to allowing customers to change categories on application and on demonstration of the relevant reductions in trade waste discharge risk.

Table 7.1 provided details of Hunter Water's current and proposed trade waste agreement and inspection fees. A number of the current fees and charges are proposed to change. The proposed average changes are presented in Table 7.2 below. Some of these changes are discussed briefly in the following points.

**Table 7.2 Hunter Water's Proposed Trade Waste Fee Changes<sup>24</sup>**

Current Category	Proposed New Category	Customer Types	Existing Average Fees p.a.	Proposed Average Fees p.a.	No. of customers affected
Minor	Minor	Small restaurants, mechanical workshops, butchers, bakers, dentists etc.	113	108	1927
Minor	Moderate	Large restaurants and takeaway food outlets, large pubs and clubs, multi-use complexes	113	846	114
Major	Moderate	Large restaurant and takeaway food outlets, large pubs and clubs, multi-use complexes	5,888	846	64
Major	Major	Industry, hospitals	14,682	5,908	114

Source: HWC

In general, Table 7.2 indicates that the average fees for the minor agreement category are decreasing. Hunter Water has stated, that the overall reduction is “*due to the increase in the number of customers leading to cost reductions from economies of scale*”<sup>25</sup> However, this statement is contradicted by the actual number of customers remaining in the minor category which is lower than the previous arrangement (refer details below). While this decrease is unexplained, given it is a decrease, its justification is not disputed.

On average, the fees for the major agreement category are decreasing significantly due to related reductions in BOD/NFR and phosphorus charges (refer to section 7.4 and 7.6). However the specific fees listed in Table 7.1 are, on balance, increasing. The proposed fee for establishing a major agreement for existing agreement holders is increasing by 36%, the proposed annual agreement fee is increasing by 25%, and the inspection fee has increased by 2.8% as discussed above.

Hunter Water has provided supporting documentation to explain the current breakdown of the fees and has indicated that it has recalculated fees and charges from a zero-base. Hunter Water explained that the previous methodologies used to calculate these fees and charges were overly complex and built up over many years by previous trade waste managers. Hunter Water has taken the step of completely re-evaluating the basis for their fees and charges.

The review of fees and charges, as discussed above, involved keeping records, based on staff timesheets, of specific costs associated with each task or activity required in the management and operation of the trade waste system. Labour rates used in the calculation of the trade waste fees and charges are the same as those used for determining the plumbing related miscellaneous charges, which are reviewed separately in section 5.7.13.

Hunter Water’s actions are prudent measures and ensure that the current fees and charges accurately reflect current costs, in line with the cost reflectivity principle.

The potential impacts of the introduction of the new moderate category have been assessed by Hunter Water and it was determined that the process will impact on 178 customers across

<sup>24</sup> HWC (2008), Submission to IPART on prices to apply from 1 July 2009, Hunter Water Corporation, Newcastle, page 129

<sup>25</sup> Ibid, page 142

both categories, representing about 8% of the total trade waste customers. These impacts are discussed briefly below.

In the minor trade waste agreement category, representing 2,041 out of 2,219 customers:

- 53 out of 2,041 customers (3%) would ultimately move from a minor agreement to a major agreement. While Hunter Water states that the discharges from these customers represent an increased risk to the wastewater system, the increase in fees for these customers is significant, rising from \$113 per year up to about \$4,000 per year for the highest risk customers (up to a 3400% increase)
- 61 of the 2,041 customers (3%) would move from a minor agreement to the moderate category. This would represent an increase in their annual fees from \$113 per year to an average of \$846 per year (a 650% increase). Hunter Water states that the increase in fees covers the included site visit, sampling and analysis costs, additional management due to greater risk mitigation, and an average of load based costs

In the major trade waste agreement category, representing 178 out of 2,219 customers:

- 37 of the 178 customers (21%) would ultimately move from the major agreement to the minor agreement representing a potential reduction of around \$4000-\$6000 per year to \$108 per year (a 98% reduction)
- 27 of the 178 customers (15%) would move from the major agreement to the moderate agreement representing a reduction of around \$5,888 average per year to \$846 per year (an 85% reduction).

Hunter Water proposes to limit customer transfers to a one-step category change for the coming price period. This means a customer moving from the minor to major categories would be assigned firstly to the moderate category. Hunter Water has stated that the proposed transition from a minor agreement to a major agreement, or vice versa, will occur in three key steps:

1. Testing and sampling – Hunter Water will undertake testing and sampling to identify if a customer should change their agreement level
2. Transition period – the customer will be moved to a moderate agreement for up to 12 months. This period will allow further testing and sampling to occur using a minimum of three samples taken at random dates across the 12 months
3. Analysis of sampling – the samples taken will be analysed (at Hunter Water's cost) to confirm if the customer should either stay on the moderate level or should move to either of the minor or major level agreements as appropriate.

Hunter Water indicated that this staged transition will limit the financial impact on customers and this will certainly be the case for customers moving from a minor category to the major category. These customers will have at least 12 months to either plan for the transition to a major customer or to implement measures to ensure that they remain in the moderate category or even, in some circumstances, move back to the minor category.

The transition period will also lessen the financial impact on Hunter Water, as would be the case for customers moving from the major category to the minor category. Hunter Water has stated that for these customers, the moderate category transition recognises that they have implemented measures to optimise discharge quality but still provides Hunter Water the opportunity to undertake monitoring that will confirm the change in discharge quality. This is a prudent risk management measure.

Hunter Water has stated that there could be circumstances where a customer may not have to wait for the 12 month transition period to end before moving agreement levels. For instance, where a major agreement customer can demonstrate, through verifiable sampling and

analysis, that their trade waste discharge meets the requirements of a minor category, they will be entitled to request that Hunter Water move them to the minor category. If Hunter Water is satisfied with the sample results, they may then do so. This process will allow customers who have invested heavily in improving the quality of their trade waste discharge to realise the financial benefits of this investment through the significant reduction in annual fees associated with a minor agreement.

We note that the overall impact of the proposed changes to the trade waste agreement charges is a net increase in revenue of approximately \$80,000 per annum. Hunter Water has stated that this increase in revenue has been offset by increases in labour costs and business unit overhead expenses including fuel. While fuel prices have fallen sharply in recent months, including since the commencement of this review, as noted in section 5 we do not consider this is likely to warrant a review of overhead rates.

We have assessed how the introduction of the moderate category meets IPART's principles for trade waste charges. The moderate category is designed to more accurately reflect that some customers have a lower impact on the wastewater system and hence are a lower risk. With a reduction in potential risk there is an associated reduction in costs. The moderate category then covers the reduced risk cost to Hunter Water of handling the trade waste, a key pricing principle.

Hunter Water provided a breakdown of the proposed fees and charges for the moderate customer category generally demonstrating that the charges were set in a manner that is relatively transparent and mostly reflects costs incurred, another key pricing principle.

### 7.3.3 Summary

We have reviewed the fees and charges proposed by Hunter Water and support the full re-evaluation of fees and charges, from a zero-base, in order to ensure that current costs are reflected.

We support the introduction of the moderate trade waste category with its intention to reduce the current financial impacts on customers related to transferring between the minor and major trade waste agreements. It should improve the cost-reflectivity of tariffs and ensure more appropriate price signals are provided

We support the introduction of the transition phase to defer some of the impact of customers changing from the minor to the major agreements and vice versa.

We note the proposed length of the transition period of up to 12 months as a buffer measure for both the customers and Hunter Water. This is a prudent measure that will lessen the financial impact on customers and should act as a risk management measure for Hunter Water.

We also note and support Hunter Water's process whereby customers may be able to shorten their transition period, with verifiable sampling and analysis, in order to realise savings from higher fees and charges and potentially recoup investments in managing their own trade waste.

## 7.4 BOD/NFR charges

### 7.4.1 Proposed charges

Hunter Water's biochemical oxygen demand (BOD)/non-filterable residue (NFR) charges are designed to recover the incremental costs required to treat wastewater that exceeds the strength of a typical domestic load. At present, the charges apply at different levels to reflect the respective ability of specific wastewater treatment plants to accept and treat the high

strength waste. This differential charging provides a clear signal to industrial/commercial customers on the cost of locating their business in the catchment of a particular wastewater treatment plant.

Hunter Water proposes to adjust the charges set for BOD/NFR to exclude recovery of the cost of and the return on capital for treatment assets. Instead, the cost of and the return on capital is proposed to be recovered through the periodic charges (usage and service charges) and relevant developer charges.

To offset the decrease in the high strength charges, Hunter Water proposes to introduce a significant “incentive” charge at particular wastewater treatment plants. This new charge is designed to continue sending a clear signal to industrial/commercial customers that, at some wastewater treatment plants, the impacts of high strength trade waste on the treatment plant process can be significant.

The “incentive” charge will be applied to only to the proportion of trade waste discharges that exceed an agreed load limit. The level of the “incentive” charge is proposed to be set at a sufficiently high level to act as an appropriate “incentive” not to exceed the agreed load limits. Hunter Water’s proposed BOD/NFR charges and incentive charges are shown in Table 7.3 below.

**Table 7.3 Hunter Water's Proposed BOD/NFR Charges and Incentive Charges<sup>26</sup>**

Wastewater Treatment Works	2008/09	2009/10 – 2012/13 Base Charge	2009/10 – 2012/13 Incentive Charge <sup>b</sup>
	\$/kg (\$ 08/09) <sup>a</sup>		
Belmont WWTW	2.34	1.05	3.15
Boulder Bay WWTW	2.95	1.47	4.41
Branxton WWTW	4.26	3.82	11.46
Burwood Beach WWTW	2.03	0.69	2.07
Cessnock WWTW	2.72	1.62	4.86
Clarence Town WWTW	-	14.18	42.54
Dora Creek WWTW	2.59	0.98	2.94
Dungog WWTW	-	9.29	27.87
Edgeworth WWTW	2.35	0.74	2.22
Farley WWTW	2.11	0.94	2.82
Karuah WWTW	13.88	28.59	85.77
Kearsley WWTW	4.20	13.22	39.66
Kurri Kurri WWTW	3.67	2.29	6.87
Morpeth WWTW	2.57	1.05	3.15
Paxton WWTW	7.62	17.15	51.45
Raymond Terrace WWTW	3.06	1.61	4.83
Shortland WWTW	3.03	2.13	6.39
Tanilba Bay WWTW	3.64	2.93	8.79
Toronto WWTW	2.49	1.34	4.02

<sup>26</sup> HWC (2008), Submission to IPART on prices to apply from 1 July 2009, Hunter Water Corporation, Newcastle, page 134

Source: HWC

a These charges apply where the concentration strength is greater than 350mg/L for BOD or NFR, whichever is the higher

b These charges apply for loads beyond the load limit set the trade waste agreement

Wastewater Treatment Works	2008/09	2009/10 – 2012/13 Base Charge	2009/10 – 2012/13 Incentive Charge <sup>b</sup>
	\$/kg (\$ 08/09) <sup>a</sup>		
Belmont WWTW	2.34	1.05	3.15
Boulder Bay WWTW	2.95	1.47	4.41
Branxton WWTW	4.26	3.82	11.46
Burwood Beach WWTW	2.03	0.69	2.07
Cessnock WWTW	2.72	1.62	4.86
Clarence Town WWTW	-	14.18	42.54
Dora Creek WWTW	2.59	0.98	2.94
Dungog WWTW	-	9.29	27.87
Edgeworth WWTW	2.35	0.74	2.22
Farley WWTW	2.11	0.94	2.82
Karuah WWTW	13.88	28.59	85.77
Kearsley WWTW	4.20	13.22	39.66
Kurri Kurri WWTW	3.67	2.29	6.87
Morpeth WWTW	2.57	1.05	3.15
Paxton WWTW	7.62	17.15	51.45
Raymond Terrace WWTW	3.06	1.61	4.83
Shortland WWTW	3.03	2.13	6.39
Tanilba Bay WWTW	3.64	2.93	8.79
Toronto WWTW	2.49	1.34	4.02

Source: HWC

a These charges apply where the concentration strength is greater than 350mg/L for BOD or NFR, whichever is the higher

b These charges apply for loads beyond the load limit set the trade waste agreement

## 7.4.2 Analysis of charges

Hunter Water has provided supporting information providing a detailed breakdown of the proposed BOD/NFR charges.<sup>27</sup>

Hunter Water's proposed charges for BOD/NFR have reduced significantly to reflect the removal of the return on and return of capital from this charge. However, it is understood that, in the context of the overall adjustments to trade waste charging that these reductions offset some significant increases in charges, for example, the changes associated with customer categorisation discussed in section 7.3.

Hunter Water provided information detailing the reasons behind the decision to remove the cost of capital from the BOD/NFR charges. Hunter Water stated that where infrastructure assets can be directly linked to a specific service, Hunter Water has proposed charges that include a return of/on capital. However, in the majority of cases, assets have multiple

<sup>27</sup> "High Strength and Tankering charges Price Model 2009-10.xls" Tab – 'Overall BOD Charges 2009-12

functions or provide services for both domestic strength wastewater and high strength trade waste and as a result, the recovery of the return of/on capital from trade waste customers is disadvantaging these customers.

Hunter Water has proposed sewer periodic (fixed and usage) charges at levels that meet building block revenue requirements the wastewater business including return on/of capital (refer to chapter 8 and chapter 10 of Hunter Water's price submission to IPART). Sewer service charges are a fixed annual charge for sewer service charged in relation to water meter size and sewer discharge factor. Users with a larger than domestic size meter pay a multiple of the base service charge. Sewer discharge factors are applied to both sewer service charges and sewer usage charges for non-residential customers to impute the sewer usage from water meter size and water usage. Users with a higher discharge, and therefore larger relative impost on the sewer system, pay a higher contribution towards costs.

Trade waste customers (except tanker customers) are connected to the sewer system and therefore pay sewer service and usage charges in addition to trade waste charges. Trade waste customers generally have large water meters and therefore pay much larger sewer service charges than residential customers. This means that, while Hunter Water proposes not to include return of/on capital in trade waste charges, trade waste customers will still pay an equitable contribution towards return of/on capital via periodic sewer charges and their contribution will generally be much larger than the contribution made by domestic customers due to their relatively larger volumetric impost on the system. In this way, cross subsidies are minimised and both trade waste and sewer prices are cost reflective, that is, those customers who place a higher burden on wastewater systems will pay more.

Further details on this issue are provided by way of an example related to phosphorous charges as detailed in Section 7.6.2.

The stated intention of the "incentive" charge is very clear, that is, to act as a signal to potential customers that the risks of accepting trade waste at levels higher than set load limits in specific wastewater treatment plant catchments are significantly higher than for other catchments. Exceedance of the set load limits could result in *"failure of the treatment process, environmental regulatory breaches, environmental damage and subsequent litigation and could compromise safety to the community, reticulation system workers and treatment plant workers."*<sup>28</sup>

An assessment of the proposed charges for BOD/NFR against IPART's pricing principles, however, reveals that the proposed charge does generally demonstrate that Hunter Water are identifying the capacity of the current systems to transport, treat and dispose of trade waste and that the charges reflects the differences in costs at particular locations.

### 7.4.3 Summary

Hunter Water's proposed charges for BOD/NFR represent a reduction in fees to customers. We are satisfied that the proposed reductions in fees are recovered through the sewer periodic charges paid by trade waste customers; however the analysis of these charges is the subject of a separate review.

We support the intention of the proposed "incentive" charge that is designed to reflect the respective risks of accepting trade waste at specific locations. This is clearly consistent with IPART's principles for trade waste prices.

We would suggest, however, that Hunter Water consider describing the "incentive" charge as a risk factor charge. The intention of the charge is to represent the additional risk of a customer's discharges on a particular wastewater treatment plant catchment.

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<sup>28</sup> Ibid, page 133

## 7.5 Heavy metals charges

### 7.5.1 Proposed charges

Hunter Water's current heavy metal charges use the original methodology developed by IPART in 1994 and are designed to account for the costs of environmental monitoring, sludge and effluent/influent heavy metal monitoring, a portion of the regulatory load based licensing fees and the administration costs of treating and accepting heavy metals.

The charges are based on the total mass of heavy metals discharged however given the total loads are quite low and the costs of treatment are high, the typical load based licence fees related to heavy metals are low.

Hunter Water's proposed charges for heavy metals are shown in Table 7.4 below.

**Table 7.4 Hunter Water's Proposed Heavy Metal Charges<sup>29</sup>**

	2008/09	2009/10 – 2012/13
Heavy Metals:		
Burwood Beach WWTW catchment	32.31	16.07
All other catchments	26.48	18.54

### 7.5.2 Analysis of charges

Hunter Water's heavy metals charges are proposed to decrease significantly from current levels (30-50% reduction). Hunter Water has stated that the reduction "*has resulted from a higher overall heavy metal load being discharged...giving rise to savings through size economies.*"<sup>30</sup>

Hunter Water has supplied further information which provides a detailed breakdown of the proposed heavy metals charges<sup>31</sup> and provides further justification of the proposed charges. The information includes the following details for each wastewater treatment plant:

- total metal concentrations as a sum of the concentrations of individual metals
- calculated biosolids production
- calculated total metal loads (including residential)
- components of wastewater treatment costs including administration, inlet sampling, biosolids monitoring, bio-accumulation studies, and Load Based Licence costs
- wastewater treatment plant costs per kilogram of metals
- trade waste group cost components including investigations of contaminated biosolids
- trade waste group cost component per kilogram of metals
- trade waste group charges including trade waste metal loads from non-domestic sources and group administration charges
- trade waste group charges per kilogram of metals

<sup>29</sup> HWC (2008), Submission to IPART on prices to apply from 1 July 2009, Hunter Water Corporation, Newcastle, p. 136.

<sup>30</sup> Ibid, page 134

<sup>31</sup> "High Strength and Tankering charges Price Model 2009-10.xls". Tab – 'Metals Charges'

- total costs and cost rates listed for Burwood Beach and averaged for the other wastewater treatment plants
- proposed total income per annum for heavy metals.

The details submitted included a comparison of the proposed charges with those from the last submission (escalated at 5.7%). The comparison shows that the proposed charges represent a 35% decrease over the last submission.

Hunter Water has previously indicated that it undertook a comprehensive review of the trade waste charges methodology in order to reflect current costs. This review started with a zero base and was based on actual staff time allocations based on completed timesheets. We are satisfied that, given this review and the information on the heavy metal loads and treatment costs provided, that the proposed heavy metal charges are consistent with the trade waste pricing principles..

### 7.5.3 Summary

Our review of Hunter Water’s supplied information suggests that the proposed heavy metal charges are appropriate and consistent with the IPART trade waste pricing principles.

## 7.6 Phosphorous charges

### 7.6.1 Proposed charges

Hunter Water’s current charges for phosphorus are based on the following components:

- use of chemicals and administrative costs
- costs associated by the regulatory load based licence fees for phosphorus
- costs of managing additional bio-solids produced as a result of the chemical removal of phosphorus.

Hunter Water has proposed two key changes to the phosphorus charges; the inclusion of additional costs for managing bio-solids offset by the exclusion of the return of and the return on capital from the charges.

Hunter Water’s proposed phosphorus charges are shown in Table 7.5 below.

**Table 7.5 Hunter Water's Proposed Phosphorus Charges<sup>32</sup>**

	2008/09	2009/10 – 2012/13
Phosphorus > 11mg/L (\$/kg)	3.10	1.77

Source: HWC

### 7.6.2 Analysis of charges

Some discussion of the issues relating to the return of/on capital for BOD/NFR charges and the phosphorous charges has been included in section 7.4.2. Hunter Water provided some more details on this issue by way of an example, which is outlined below.

Different phosphorus removal mechanisms include chemical precipitation, adsorption, or biological removal by bacteria. It is relatively easy to identify the operating costs of chemical removal. It is also possible to transparently apportion chemical costs between domestic

<sup>32</sup> HWC (2008), Submission to IPART on prices to apply from 1 July 2009, Hunter Water Corporation, Newcastle, page 136.

strength wastewater discharges and high strength trade waste discharges. For example, calculating the total load per annum and the portion of the load due to each customer type and recovering costs in the same proportions (e.g. if chemicals cost \$100,000 p.a. and trade waste customer discharge 60% of the phosphorus load then they should pay for \$60,000 of the chemicals related to phosphorus removal).

However, it is far more complex to apportion capital costs because major infrastructure elements of wastewater treatment plants (WWTP) often serve multiple purposes. For example, a biological reactor (e.g. SBR, aeration tanks, clarifier) can be used to remove suspended solids, dissolved organic matter, grease/oil, nitrogen and phosphorus. It is not possible to say that 10% of the tank is used to remove dissolved organic matter, 20% to remove phosphorus etc. Nor is it possible to say the tank itself is there to remove organic matter but the aeration system of pipes and switchboards is there to remove the phosphorus. All the assets for the aeration tank help create the right environment bacteria to live and contribute to the removal of multiple constituents.

For similar reasons it is difficult to say that any particular percentage of the asset is required to treat higher than domestic strength wastewater. Put another way, even if Hunter Water stopped all trade waste discharges to a particular WWTP then it would not be feasible to abandon the aeration tanks. The assets would be required anyway – to treat other constituents and/or to treat lower concentration discharges of phosphorus (below the 11mg/L threshold, above which trade waste customers must pay a load based charge).

On the pricing principles of customer equity and cost reflectivity, it does not seem equitable for trade waste customers discharging phosphorus with a strength greater than 11 mg/L to pay a return on/of capital as part of their phosphorus charge for assets that could not be transparently linked to their discharge quality, or for assets that would be needed even if their phosphorus quality improved to less than 11 mg/L.

### 7.6.3 Summary

We have reviewed Hunter Water's proposed phosphorous charges and the reasons for the changes related to the return of/on capital and we are satisfied that the methodology used is appropriate and reflects the trade waste pricing principles, particularly in relation to cost reflectivity and customer equity.

## 7.7 Sulphate charge

### 7.7.1 Proposed charges

Hunter Water's current charges for sulphates need to cover the costs associated with treating sewage gases and odours, increased maintenance associated with the increased corrosion of assets, and measures to deal with increased occupational health and safety hazards.

Hunter Water has indicated, however, that it is difficult to develop a cost-reflective model to account for these costs. As a result Hunter Water applied the methodology used by Sydney Water Corporation and approved by IPART in 2003.

Hunter Water's proposed sulphate charge for the current period is:

- Sulphate charge =  $\$ \{ 0.126 \times (SO_4/2000) \} / \text{kg}$  (price expressed in 2008/09 dollars)

### 7.7.2 Analysis of charges

Hunter Water stated that it had only two customers discharging sulphate, but this has since reduced to one customer. The impacts of any changes to this charge are therefore small.

Hunter Water has further stated that it is working with this customer to reduce the impacts of their phosphorous discharges.

Hunter Water's proposed charging formula provides for an increase in prices of 5% in real terms from the current price. We note that the escalation factors used by Hunter Water in other supporting information are different, for example, escalation factors of +3.2% and +2.4% appear to have been used for the BOD/NFR charges.

Hunter Water has adopted the methodology originally proposed by Sydney Water Corporation and approved by IPART in 2003. Hunter Water has stated that sulphate treatment costs have generally increased by CPI since this time, and as a result the proposed charges will reflect the trade waste pricing principles set in the 2003 review.

### 7.7.3 Summary

We have reviewed Hunter Water's sulphate fees and charges and believe that they appropriately reflect the trade waste pricing principles.

## 7.8 Tankering charges

### 7.8.1 Proposed charges

Hunter Water currently accepts a variety of waste discharges collected by tanker customers including septic waste (sludge and effluent), portable toilet waste, and industrial waste (high strength waste). Charges for this service must cover:

- the capital costs of dedicated equipment to received tankered waste
- administration costs associated with managing receipt of the waste
- increased treatment plant operating costs resulting from tankered waste receipt.

The current charges recover costs through a number of specific fees, including:

- establish tankering agreement (once off charge)
- renew agreement
- monthly invoicing fee
- delivery processing fee
- specific charge based on type of waste
- sampling and analysis charges
- specific BOD/NFR, heavy metals, phosphorus and sulphate charges.

Hunter Water is proposing to adjust the current pricing structure, as shown in the orange highlighted components in Figure 7.2 below.

Hunter Water's proposed specific fees and charges for tankering services are shown below.

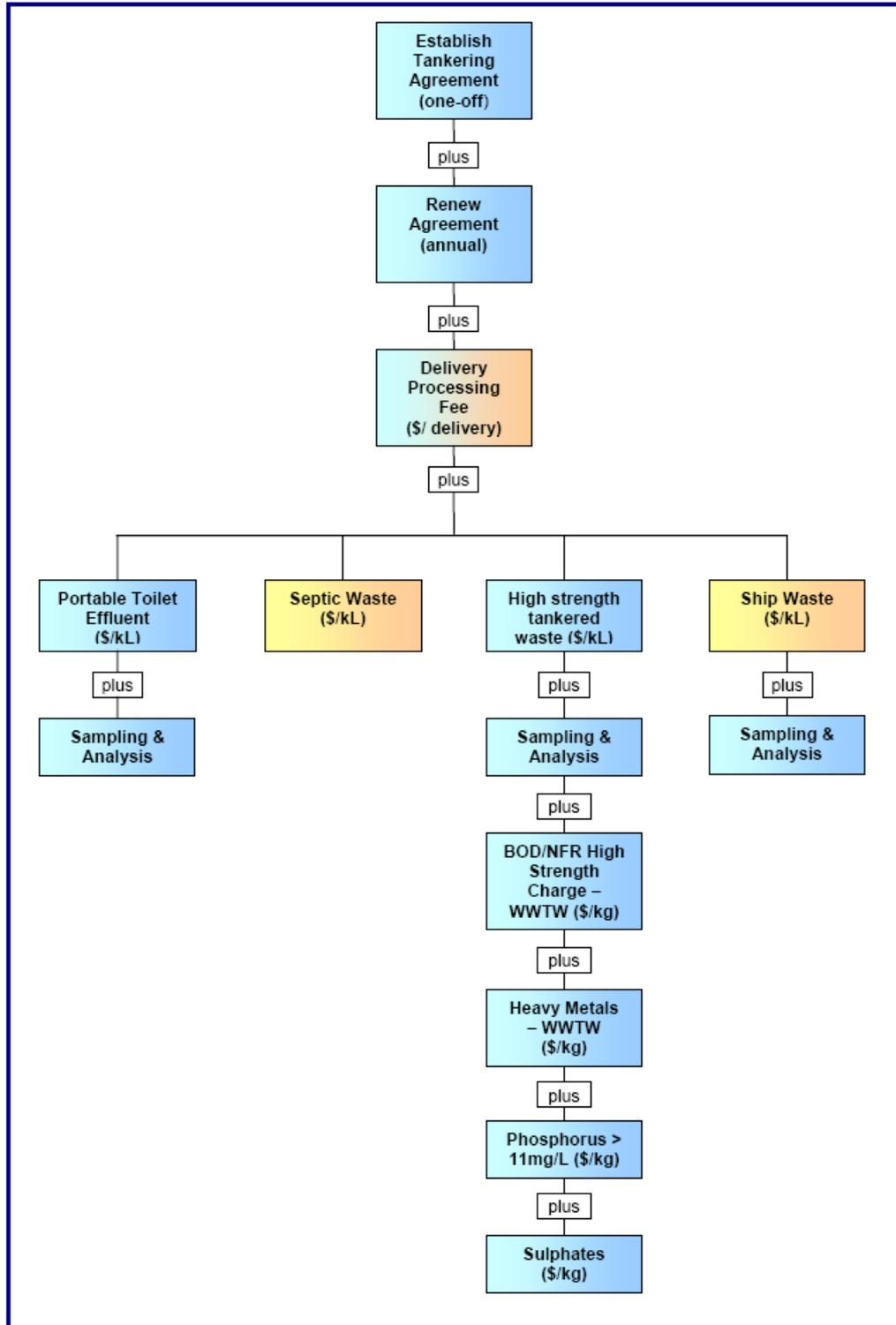
**Table 7.6 Hunter Water's Proposed Tankering Services Fees/Charges<sup>33</sup>**

	2008/09	2009/10 – 2012/13
Establish tankering agreement	\$160.21	\$190.39
Renew agreement	\$118.75	\$121.51
Monthly invoicing fee	\$22.41	n/a
Delivery processing fee	\$2.24	\$3.75
Portable toilet effluent (\$/kL)	\$16.14	\$12.07
Septic effluent (\$/kL)	\$3.39	n/a
Septic sludge (\$/kL)	\$31.23	n/a
Septic waste (\$/kL)	n/a	\$3.62
Ship waste (\$/kL)	n/a	\$6.73
High-strength waste (\$/kL)		
Volume charge (\$/kL)	\$2.85	\$3.34
Load charge (\$/kg)	See Table 13.2	See Table 13.2

Source: HWC. Note: Table 13.2 referenced in the table above is reproduced in Table 7.2 of this report

<sup>33</sup> HWC (2008), Submission to IPART on prices to apply from 1 July 2009, Hunter Water Corporation, Newcastle.

Figure 7.2 Hunter Water's Proposed Tankering Services Pricing Structure<sup>34</sup>



Source: HWC

<sup>34</sup> HWC (2008), Submission to IPART on prices to apply from 1 July 2009, Hunter Water Corporation, Newcastle.

The proposed tankered waste pricing structure is also affected by the exclusion of the return on and return of capital from the BOD/NFR charges with significant reductions in the high strength waste charges applied to tankered waste. Additionally, Hunter Water has proposed a number of changes to the specific components shown in Table 7.6, including:

- increase of 20% for establishment of the tankering agreement
- increase of 67% in the delivery processing fee
- decrease of 25% in portable toilet effluent fee
- increase of 17% on the high strength volume charge.

Hunter Water is also proposing to install dedicated, automatic tanker receival facilities at two highly used wastewater treatment plants and is planning on installing similar facilities at other plants. These facilities allow monitoring of the tanker waste as it is being discharged, automatic closing of the facility, and volumetric record of discharges.

Hunter Water has made allowances for the return of and the return on capital for the dedicated, automated receival facilities in the proposed volumetric charges.

Hunter Water has proposed a staged implementation of the septic waste charge to account for the uncertainty in accurately determining the actual proportions of effluent and sludge in each load. While this issue would be resolved once the automated receival facilities are installed, in the mean time, Hunter Water is proposing to use a weighted average proportional allocation of 99% effluent and 1% sludge for each load. Hunter Water has set the septic waste charge to reflect this allocation.

Hunter Water has also revised its approach to tanker customer management to align with the WSAA National Wastewater Source Control Guidelines discussed previously. The risk-based approach will assign a risk category to each tankering activity, which will then be scored, with the score determining the frequency of sampling and analysing discharge quality.

### 7.8.2 Analysis of charges

Hunter Water has provided some supporting information including a breakdown of the proposed tankering charges<sup>35</sup> and additional information on time spent by trade waste staff related to tinkering.<sup>36</sup> We are satisfied that the proposed charges are cost reflective even with relatively large increases in charges. The increases in specific costs are generally offset somewhat by decreases in the high strength waste load charges. Hunter Water has undertaken an analysis of the impacts of the proposed changes on a typical range of customers and the results of this analysis are shown in Table 7.7 below.

**Table 7.7 Hunter Water's Tankering Customer Impacts**

Tanker Company Size	08/09 fee total	09/10 price path fee total
<b>Small</b>		
Company a	\$21,232	\$19,352
Company b	\$23,455	\$25,478
<b>Medium</b>		
Company c	\$72,508	\$75,390
Company d	\$38,893	\$42,118

<sup>35</sup> "High Strength and Tankering charges Price Model 2009-10.xls". Tab – 'Tanker Charges'

<sup>36</sup> "Trade Waste Group Time-cost Allocations Jan 07 to Jan 08.xls". Tab – 'Fees'

<b>Large</b>		
Company e	\$198,157	\$184,579

Source: HWC

Overall, the examples provided in Table 7.7 show that there is an overall actual reduction of around \$3,800 per annum across the board (based on the sum of the differences between the 2008/09 fees and the 2009/10 fees). However the variation for specific customer types and sizes is much more significant than this.

Hunter Water also provided information indicating that they had consulted with a number of tanker operators about the proposed tankering charges adjustments. The consultation indicated that Hunter Water's charges for tankering represented a relatively small proportion of the costs of their operations.

An assessment of how Hunter Water's proposed charges for tankering reflect the trade waste pricing principles reveals that the proposed adjustments better reflect the actual costs of accepting and treating trade waste, the revised load charges reflect the differences in costs of treating waste at particular locations and that the charges were set in a relatively transparent manner; through consultation with major tanker operators.

### 7.8.3 Summary

Hunter Water has introduced proposed tankering charges that appear to better reflect the actual costs of accepting and treating the tankered waste. We support this proposal.

## 7.9 Comparison of charges

Hunter Water has implemented a number of changes to their trade waste fees and charges systems to achieve some consistency with other water utilities. A number of the changes proposed by Hunter Water have already been implemented by Sydney Water and approved by IPART in 2003.

The 2003 review compared Hunter Water's fees and charges at the time, to a range of other water utilities and in general, Hunter Water was within the bounds of the other agencies.

Hunter Water, in their submission, has sought to demonstrate that they have undertaken a comprehensive review of their fees and charges, implementing a standardised, preventative risk management framework for managing risks to wastewater systems as developed by the Water Services Association of Australia (WSAA).

A brief review has been completed of available information on trade waste systems in place at other agencies and the initial findings are that Hunter Water remains within the bounds of these agencies' charges. In particular, Hunter Water's proposed charges now reflect, to a much greater degree, the charges set by Sydney Water Corporation in 2003.

However it is difficult to compare approaches to trade waste management and pricing across different jurisdictions given the variance in regulatory regimes, business drivers, and pricing principles and frameworks, for example.

Table 7.8 shows Hunter Water's trade waste charges compared to other water utilities.

**Table 7.8 Hunter Water's Trade Waste Charges Compared with other Water Utilities**

Water Utility	Trade Waste	2008/09	2009/10	2010/11	2011/12	2012/13
Hunter Water	Biological Oxygen Demand#	3.85	5.53	5.53	5.53	5.53
	Heavy Metals*	26.48	18.54	18.54	18.54	18.54

	Phosphorus	3.10	1.77	1.77	1.77	1.77
	Sulphate <sup>1</sup>	-	-	-	-	-
	Biological Oxygen Demand	295.11	342			
Melbourne Water (Eastern Sewer)	Total Dissolved Solids	12.02	24	-	-	-
	Total Nitrogen	575.43	707			
	Suspended Solids	259.17	189			
	Biological Oxygen Demand	38.57	10			
Melbourne Water (Western Sewer)	Total Dissolved Solids	12.02	24	-	-	-
	Total Nitrogen	782.69	167			
	Suspended Solids	6.84	2			
	Biological Oxygen Demand	0.48	0.10	0.13	0.14	0.16
City West Water	Total Dissolved Solids	0.39	0.68	0.81	0.99	1.20
	Total Nitrogen	0.94	0.13	0.15	0.17	0.20
	Suspended Solids	0.03	0.01	0.01	0.01	0.02
	Biological Oxygen Demand	0.53	0.63	0.73	0.81	0.90
South East Water	Suspended Solids	0.30	0.35	0.41	0.46	0.51
	Total Nitrogen	1.16	1.37	1.59	1.79	1.98
	Oxidised Sulphur	0.99	1.17	1.36	1.52	1.69

\* Different Charge for Burwood Beach WWTW catchment

# Average Charge across all WWTW catchments.

<sup>1</sup> Calculated by a formula

## 7.10 Summary of Findings

This section collates the findings made in the body of this review of trade waste.

We have reviewed Hunter Water's proposed charges for trade waste and we have found that, overall, the charges reflect IPART's trade waste pricing principles in relation to the reflection of actual costs, the reflection of differences in costs at particular locations, and that the charges appear to have been set in a manner that is transparent.

We have reviewed information supplied by Hunter Water outlining the potential impacts of the proposed charges and providing examples of estimated impacts for various customers. The information supplied by Hunter Water does not generally provide a sufficient level of detail to identify specific impacts on individual customers based on their commercial process or location/catchment.

The information supplied included costs related to ongoing administration of the proposed charges, and Hunter Water indicated that the costs of implementing the new/adjusted charges were included in the proposed fees and charges.

### 7.10.1 Customer categorisation and fees adjustment

We support the full re-evaluation of these fees and charges, from a zero-base, in order to ensure that current costs are reflected.

We support the introduction of the moderate trade waste agreement category as it should improve the cost-reflectivity of tariffs and ensure more appropriate price signals are provided

We support the introduction of the transition phase to defer some of the impact of customers changing from the minor to the major agreements and vice versa.

We note that the 12 month transition period will act as a buffer measure for both the customers and Hunter Water reducing the financial impact on customers and acting as a risk management measure for Hunter Water.

We also note and support Hunter Water's process whereby customers may be able to shorten their transition period and realise savings.

### 7.10.2 BOD/NFR charges

We are satisfied that the proposed reductions in fees are recovered through the sewer periodic charges paid by trade waste customers; and are therefore consistent with the cost reflectivity and user-pays trade waste pricing principles.

We support the intention of the proposed "incentive" charge to reflect the respective risks of accepting trade waste at specific locations. This is clearly consistent with IPART's principles for trade waste prices.

We would suggest, however, that Hunter Water consider describing the "incentive" charge as a risk factor charge to reflect its stated purpose.

### 7.10.3 Phosphorus charges

We have reviewed Hunter Water's proposed phosphorous charges and the reasons for the changes related to the return of/on capital and we are satisfied that the methodology used is appropriate and reflects the trade waste pricing principles, particularly in relation to cost reflectivity and customer equity.

### 7.10.4 Sulphate charge

We have reviewed Hunter Water's sulphate fees and charges and believe that they appropriately reflect the trade waste pricing principles.

### 7.10.5 Tankering charges

Hunter Water has introduced proposed tankering charges that appear to better reflect the actual costs of accepting and treating the tankered waste. We support this proposal.