IPART review of prices for Water Administration Ministerial Corporation

From July 2010

Hunter Water Corporation submission

June 2010

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Hunter Water Corporation submission

Main points

Hunter Water extracts surface water from the Williams, Allyn and Paterson Rivers and groundwater from the Tomago and Tomaree sources under licences issued by the Water Administration Ministerial Corporation.

Since 2003, entitlements to water for all users have been refined through water sharing plans that have been progressively implemented across NSW. The two water sharing plans most relevant to Hunter Water's operations are those for the Hunter unregulated river and alluvial water sources and the Tomago–Tomaree-Stockton coastal groundwater systems.

This submission focuses discussion on Hunter Water's surface water extraction from the Williams River because this is the primary water source for Hunter Water. Hunter Water operates the Williams River water source with the Newcastle water source covered by the 2009 water sharing plan for Hunter unregulated and alluvial water sources. Together these two sources account for 92 per cent of Hunter Water's total water sharing plan entitlement.

Under the water sharing plans, Hunter Water has a large entitlement that reflects the fact that it has multiple extraction points and that, due to variations in flows and groundwater levels, water is not accessible at some of these points every year. As a result, the total entitlement volume under both the surface and groundwater sharing plans is more than six times the average extraction since 2005.

The Office of Water's December 2009 pricing submission to IPART proposes moving Hunter Water's surface and groundwater pricing to a "fixed price only" based on the entitlements set out in the water sharing plans.

The issues surrounding charging on entitlement are similar to those articulated in Hunter Water's 2006 submission to IPART's bulk water pricing review. The main difference is that the surface water entitlements now have been formalised through the water sharing plans and are significantly larger than anticipated in 2006.

IPART recognised in its 2006 bulk water price determination that Hunter Water is unlike any other user because its entitlements are well in excess of annual extraction requirements. Accordingly the Tribunal found that charging on actual extractions was the most appropriate charging mechanism for Hunter Water.

In Hunter Water's operating context, entitlement is a legitimate tool for managing extractions over the long term. However, it is totally inappropriate as a tool for annual charging for Hunter Water's access to unregulated surface water and groundwater.

The inappropriateness is most apparent when applied to surface water. Hunter Water has separate surface water entitlements to extract water from the Williams River to store in the off-river Grahamstown Dam and to extract water from Grahamstown Dam for supply to its customers.

The effect of basing charges on these two entitlements is that Hunter Water will effectively pay twice for the right to take water from the Williams River for supply to its customers via Grahamstown Dam – once for the right to extract it from the river for transfer to Grahamstown Dam and again for the right to extract the water from Grahamstown Dam for supply to customers.

This situation is clearly inequitable. No other user is expected to pay twice for the entitlement to the same water.

Hunter Water's preference is to continue to pay for its extractions on the basis of actual annual extractions for the reasons supported by IPART in the 2006 bulk water price determination.

Should the Tribunal support the Office of Water's position that charging should be on a 100 per cent fixed basis, Hunter Water believes the entitlement should be based on the long-term average annual extraction limit of 78,500 megalitres per year set in the 2009 water sharing plan for the Hunter unregulated and alluvial water sources. This limit sets the maximum average limit on Hunter Water's extraction from both surface and groundwater sources and is more consistent with the intent of entitlement limits set for all other users.

1 Introduction

1.1 About Hunter Water

Hunter Water Corporation is a State-owned Corporation and the water and wastewater provider to over 500,000 people in the urban communities in seven local government areas in the lower Hunter Valley in NSW.

The Corporation delivers around 200 megalitres of water per day to these communities from both surface and groundwater sources within the Hunter Valley.

Hunter Water's extraction of water from surface and groundwater sources is regulated by the NSW Office of Water via licences and approvals issued under the Water Management Act 2000 (WMA) and in accordance with gazetted water sharing plans.

Hunter Water extracts surface water from the Williams River and Allyn River (the Paterson River provides a back up source for the Allyn River) and groundwater from the Tomago and Tomaree sources.

This submission focuses on Hunter Water's surface water extraction from the Williams River as this is the primary water source for Hunter Water.

1.2 The Williams River and groundwater extraction systems

Surface water is extracted from the Williams River, an unregulated tributary of the Hunter River running from the Barrington ranges to the Hunter River estuary at Raymond Terrace. Hunter Water extracts water from the Williams River at two locations – Chichester Dam in the upper Williams River valley and at Seaham just upstream of the estuary. Water extracted at Seaham is pumped to an off-river storage at Grahamstown (Grahamstown Dam). Natural inflows also contribute to storage volumes within Grahamstown Dam.

Hunter Water also extracts water from another unregulated tributary, the Allyn River, at Gresford to supply the township of Gresford. This extraction point was previously operated by Dungog Shire Council until 2008 when Hunter Water took over ownership and operation of the water supply and sewerage assets. The Gresford town supply also has a secondary source on the regulated Paterson River.

The Water Sharing Plan for the Hunter Unregulated and Alluvial Sources, which came into force on 1 August 2009 covers the Williams River, Allyn River and natural inflows to Hunter Water's Grahamstown Dam.

Groundwater is extracted from shallow coastal sand aquifers between the Hunter River estuary and Port Stephens using an extensive network of shallow bores. A water sharing plan has been in place for these groundwater sources since 2004. Groundwater is extracted from two aquifer systems – the Tomago and Tomaree (Anna Bay) sources.

Figure 1 presents schematically an overview of Hunter Water's water sources.

Figure 1
Hunter Water's Water Sources

An important feature of having these separate sources is that, to a degree, they can be substituted for one another to address changes in supply availability at one source or water quality problems. Thus, for example, in some years extractions from groundwater sources may be low but offset by higher extractions from surface sources. In other years, the opposite may apply.

This has implications for the proposal by the Office of Water to charge on entitlement as specified in the water sharing plans, especially when the substitution occurs between the types of sources (ie between groundwater and surface water).

1.3 Prices applying to Hunter Water under the 2006 IPART determination

IPART recognised in its 2006 determination that Hunter Water is unlike most other customers with entitlements well in excess of annual extractions.

The Tribunal concluded:

> *Given the nature of Hunter Water's entitlements, the Tribunal's finding is for DNR to continue charging based on extraction volumes for the 2006 determination. The Tribunal notes that it has not identified any other customers that face the same issues as Hunter Water.*

Accordingly, Hunter Water's current charges are based on extractions with the applicable rates being the total of usage and entitlement charges for Hunter Valley unregulated river systems and groundwater.

Hunter Water believes that this rationale for charging on the basis of extraction has not changed and that its charges should continue to be based on actual extraction volumes. This position is outlined more fully later in this submission.

The Tribunal's full 2006 finding as it applies to Hunter Water is reproduced as Appendix A.

2 Water Sharing Plans relevant to Hunter Water

Since 2003, entitlements to water have been refined through water sharing plans (WSP) that have been progressively implemented across NSW. Hunter Water has a large entitlement that reflects the fact that it has alternative extraction points and that, due to variations in flows and groundwater levels, water is not accessible at some of these points every year. The total entitlement volume under both the surface and groundwater sharing plans is more than six time the average extraction since 2005.

2.1 The Williams River and Newcastle Source surface water systems

New entitlements (or shares) for Hunter Water's surface resources were established by the water sharing plan for the Hunter unregulated rivers and alluvial water sources that commenced on 1 August 2009. Hunter Water has been in negotiation with the Office of Water and its predecessor organisations for several years on the development of this plan.

The entitlements in the August 2009 water sharing plan provide for growth in demand over time and for the possible need to access high flows in the Williams River to refill Grahamstown Dam after an extended drought. This entitlement provides Hunter Water with flexibility to operate its storages effectively in relation to available river flows and natural inflows to Grahamstown Dam. The specific entitlements set out in section 29 of the 2009 WSP are:

• For extraction from Chichester Dam (Williams River Water Source)	50,000 megalitres per year
• For extraction from the Williams River at Balickera/Seaham Weir (Williams River Water Source)	189,000 megalitres per year
• For extraction from Grahamstown Dam (Newcastle Water Source)	100,000 megalitres per year
Total	239,000 megalitres per year

The 2009 WSP also integrated groundwater and surface water extraction limits into a single long-term average annual extraction limit of 78,500 megalitres per year. This limit means that, while entitlements may be much higher to allow for various drought security strategies, average long-term extractions cannot exceed a limit that is consistent with current demand expectations.

2.2 The Coastal groundwater systems

Hunter Water's entitlements for groundwater were established by the Tomago – Tomaree - Stockton WSP in 2003. This plan identifies Hunter Water's groundwater shares, or entitlements, as 29,000 megalitres per year allocated as:

- 25,300 megalitres per year for Tomago source, plus
- 3,700 megalitres per year for the Tomaree source.

The plan recognises that these full entitlements will not be used every year by specifying that the annual volumes are to be averaged over three years. This means that larger volumes than the entitlement volumes can be taken in some years, provided they are offset by lower volumes in the three-year period.

In establishing WMA licences to replace the earlier Water Act 1912 licences, the former Department of Natural Resources initiated action with Hunter Water to develop a Sustainable Groundwater Extraction Strategy for the Tomago and Tomaree aquifers.

Hunter Water has competed work of this strategy, which is under review by the Office of Water. The final strategy will set out a sustainable extraction regime for these aquifers and, in most years, this strategy is likely to be main determinant of extraction limits, rather than the entitlements set out in the WSP.

Further, as mentioned in the Section 1 of this submission, the Tomago and Tomaree aquifers are shallow sand aquifers. These aquifers are recharged by significant or sustained heavy rain. It is only when these aquifers are notionally "full", and are kept full by continuous rain, that extraction can be sustained at levels approaching annual entitlement levels.

Overall, the entitlement volume is not a suitable expression of an annually accessible entitlement for charging purposes but more an upper bound that can be accessed only in some years. Further, the variable nature of water levels in these aquifers means that the annual entitlement volumes cannot be accessed in most years and that the actual limit on extraction will be driven by the rules within the Sustainable Groundwater Extraction Strategy.

2.3 Total surface and groundwater entitlements

The share entitlements to surface water total 339,000 megalitres per year and 29,000 megalitres per year for groundwater - in total 389,000 megalitres per year. This compares with Hunter Water's extraction from all sources of between 27,000 and 100,000 megalitres per year in recent years – see Table 1.

Table 1
Extraction of Water by Hunter Water Corporation – 2006/07 to 2009/10

Megalitres

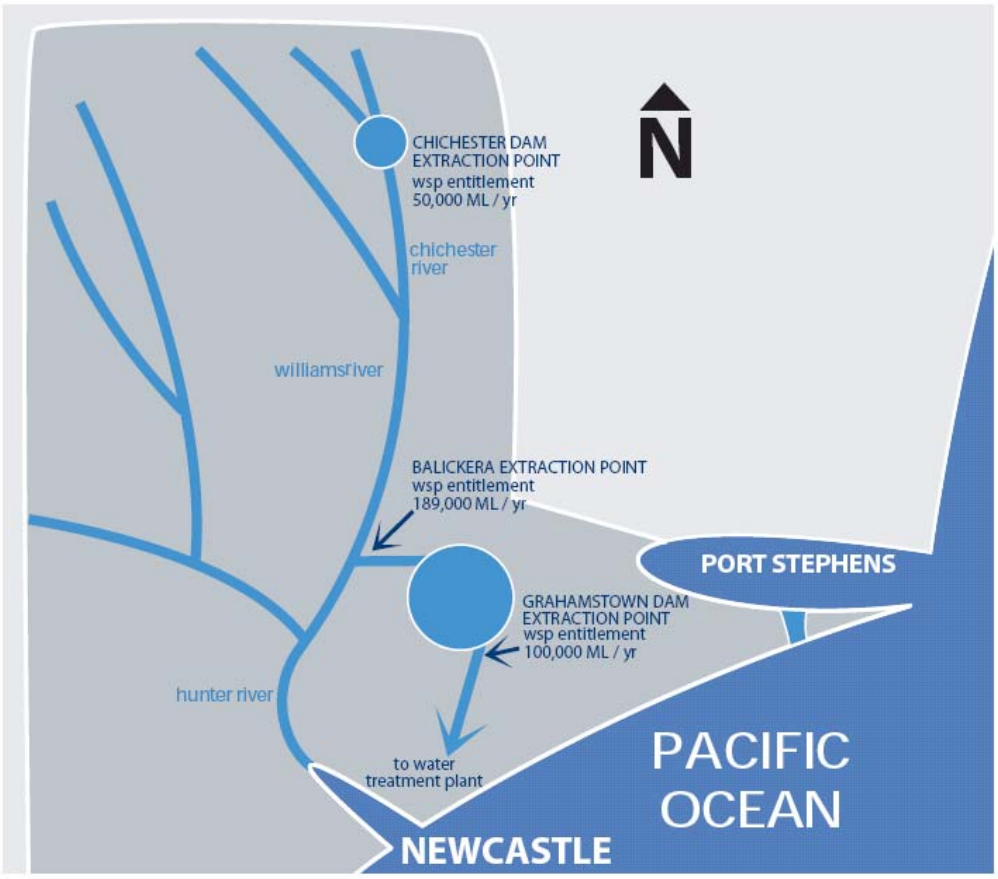
Source	2006/07	2007/08	2008/09	2009/10	Average
Surface water	87,615	65,735	24,342	27,457	51,287
Groundwater	11,978	2,998	2,739	7,104	6,205
Totals	99,593,	68,733	27,081	34,561	57,492

2.4 Issues with the application of Water Sharing Plan entitlements for water charging

The flexibility provided by the surface water share of 339,000 megalitres means that Hunter Water can access up to 50,000 megalitres per year from Chichester Dam and, in the same year, extract up to 189,000 megalitres from the Williams River at Seaham to refill Grahamstown after a drought, subject to available river flows and other extraction rules specified in Hunter Water's licence.

The 339,000 megalitre share volume also includes an entitlement to extract up to 100,000 megalitres from Grahamstown Dam (this is directed to Hunter Water's water treatment facilities). This information is presented schematically in Figure 2.

Figure 2
Hunter Water's Surface Water Entitlements as outlined in the Water Sharing Plan



The entitlements/shares established in the water sharing plan were never intended to reflect annual extraction volumes or be the basis for charging. To ensure that Hunter Water does not abuse the flexibility afforded by this high entitlement, the water sharing plan also sets a much lower “long-term average annual extraction limit” (LTAAEL). This limit ensures that Hunter Water cannot, on a continuous basis, extract at the levels reflected by its full entitlement or share volume.

The long-term average annual extraction limit is 78,500 megalitres per year, covering both surface and groundwater sources and applies until 2013. It is not an absolute limit but rather a long-term average limit, which means that extractions less than 78,500 megalitres in any year can offset higher extractions in other years.

Table 2 shows a comparison of water sharing plan entitlement volumes, average extraction volumes in recent years and the long-term average annual extraction limit. It can be seen that the aggregated entitlement volume is almost five times the volume that can be extracted under the LTAAEL.

It is Hunter Water’s understanding from the water sharing plan negotiations that the long-term average annual extraction limit would be measured at defined metering points.

It was also Hunter Water’s understanding that extractions at these metering points would be the accounting points for any variable charge component while the long-term average annual extraction limit would be the basis for any fixed charge component.

As highlighted above, Hunter Water was led to understand that aggregated entitlements/shares established in the water sharing plans were never intended to the basis for charging.

A fundamental issue for Hunter Water, due to the proposal by the Office of Water to now simply sum entitlements and use this as the basis for charging, is that there is a clear double count of the water volumes represented by the entitlement to pump water from the Williams River to Grahamstown Dam and the separate entitlement to extract water from the dam.

Using Figure 2 to demonstrate the above double counting issue, it can be observed that Hunter Water will pay for access to water from the Williams River at the Balickera extraction point to then transfer and store in Grahamstown Dam.

In addition, based on the Office’s proposal, Hunter Water would also be paying to access water, which could be the same water, from Grahamstown Dam to treat and distribute to its customers. This is clearly a double count if entitlements are purely added as per the proposal from the Office.

Table 2
Comparison of Entitlements, Long-term average annual extraction limit (LTAAEL) and recent extractions
Megalitres

	Surface Water	Groundwater	Total
Entitlements under water sharing plans	339,000	29,000	368,000
Average extraction 2006/07 to 2009/10 price period	51,300	6,200	57,500
Average extraction as a proportion of entitlement	15%	21%	16%
LTAAEL under water sharing plans			78,500
LTAAEL as a proportion of entitlement			21%

Entitlement and extraction volumes

Annual extraction of surface water varies markedly from year to year and is generally in relation to available river flows, demand and available free storage capacity in the Corporation's off-river storage at Grahamstown. Over the last 40 years, annual river flow at the offtake has varied between **6,000 ML and 800,000 ML** and extractions to Grahamstown have ranged from **zero to 86,000 ML**. The availability of high river flows does not mean high volumes always will be extracted because these high flows usually occur in years of above average rainfall and the Grahamstown storage receives good inflows from its own small catchment.

This situation, where entitlement is unlikely to be used in most years, differs from norm for irrigators described in the DNR's 2005 submission that "*most surface water entitlements are already fully utilised (ie close to 100% of allocation is utilised in any given year)*".

A similar situation applies to groundwater. Under the water sharing plan for the Tomago-Tomaree-Stockton groundwater sources, Hunter Water has an "available water determination" of 25,300 ML/year for the Tomago source and 3,700 ML/year for Tomaree. These volumes appear in current Water Access Licences under the WMA as the Corporation's "share components". These annual share components are derived from the initial three-year available water determinations in the water sharing plan by simple division. This simple arithmetic derivation from the longer-term available water determination means the annual share component may not be available every year or necessarily govern annual use.

3 The Office of Water's Pricing Proposals

As outlined in section 1 of this submission, Hunter Water is currently charged for bulk water on the volume of actual extraction each year. IPART's 2006 determination

recognised that Hunter Water is unlike most other customers with entitlements well in excess of annual extractions.

The Office of Water's December 2009 submission proposes moving unregulated river pricing and groundwater pricing to a "fixed price only" based on the entitlements set out in the water sharing plans outlined in section 2 of this submission.

The Office's submission acknowledges that, for unregulated river water, the proposed charging arrangements will mean that "*The Hunter and South Coast water users experience reduced prices because of the impact of the significant entitlement increases by the Hunter Water Corporation and the Sydney Catchment Authority which results in a greater entitlement base across which to spread the costs".* The Office's submission goes on to observe *"Hunter Water Corporation and the Sydney Catchment Authority will receive significantly higher water bills because of their increased entitlement"*.

However, the Office's submission does not quantify this bill increase nor does it provide evidence that this change results in an equitable cost sharing between the major utilities and other users. As discussed later in this submission, the proposed change to the charging arrangements means Hunter Water will be meeting 60 per cent of the Office's costs in relation to managing the unregulated surface water sources in the Hunter region. No evidence is provided to demonstrate that this distribution is a reasonable sharing of the costs between users in the region.

The Office of Water currently charges Hunter Water on the basis of actual extractions. As shown in Table 1, extractions vary from year to year mainly because of variations in the extraction of water from the Williams River at Seaham (Balickera) to the off-river Grahamstown Dam. Diversions to Grahamstown Dam vary from year to year with the availability of flows in the Williams River and the storage level in Grahamstown Dam. If the Grahamstown storage is full or near full, extraction from the Williams River at Balickera may be small even if there are available river flows.

Hunter Water recognises that the water sharing plan entitlements are legitimate and suitable instruments for managing extractions and entitlements over the long term. However, the entitlements are specifically framed for managing extractions and sharing available water among users and are not a sound basis for annual charges. Overall, Hunter Water's entitlements are not a suitable expression of the volume of water that can be routinely extracted in any one year and should be considered only to be an upper limit that can be accessed only in some years. In this regard, Hunter Water's entitlements are different to those for other users such as irrigators. The 2005 price submission by the then Department of Natural Resources noted that, subject to available river flows, "*most surface water entitlements are already fully utilised (i.e. close to 100% allocation is utilised in any given year)*".[1]

The inappropriateness of using the water sharing plan entitlements for annual charging is clearly illustrated by Hunter Water's 189,000 megalitre per year entitlement to extract water from the Williams River at Balickera.

First, this entitlement is framed solely to allow Hunter Water to access flood flows in the river when Grahamstown Dam is severely depleted after a long drought. Its main purpose is to limit the amount of flood flows Hunter Water can access in a year, not to provide an annual extraction entitlement at Balickera. With the water sharing plan also setting a long-term average annual extraction limit for Hunter Water of 78,500

[1] DNR 2005 submission, page 36

megalitres per year, it is impossible for Hunter Water consistently extract 189,000 megalitres at Balickera year after year. Because it is impossible to extract this volume annually under the plan, Hunter Water believes this volume should not be a basis for annual charging.

Second, all water extracted from the Williams River is pumped to Grahamstown Dam. Water extracted from Grahamstown Dam is subject to the Newcastle water source entitlement of 100,000 megalitres per year. Hence, Hunter Water is effectively paying twice for this water – once for the Balickera entitlement to extract it from the Williams River for transfer to Grahamstown Dam and again for the Newcastle source entitlement to extract it from Grahamstown Dam for supply to the urban distribution system. To Hunter Water's knowledge, no other user is required to pay for two entitlements to the same water.

As outlined earlier, the variable nature of water levels in the Tomago and Tomaree groundwater sources means that the annual entitlements cannot be accessed in most years and that the accessible extraction volume will be driven by the rules within the Sustainable Groundwater Extraction Strategy. The Corporation believes that, on these grounds, bulk water charges for these groundwater sources should not be linked to the water sharing plan entitlements.

Further, as outlined in section 1, Hunter Water has considerable flexibility to substitute between its groundwater and surface water sources. The Corporation's decisions about substitution are based on a range of factors, including resource sustainability and water quality protection. Given that different tariffs apply to surface water and groundwater, it is desirable that the Corporation's total bulk water charges in any year reflect its source substitution decisions.

In the light of the above arguments, entitlement is not considered a suitable basis charging.

4 Impact of the Office of Water Pricing Proposals

To provide an assessment of the impact of the Office's proposed charging structure, Hunter Water has calculated the increase in its water bills from 2009/10 to 2010/11 and for each subsequent year of the proposed price path.

Table 1 shows that 2008/09 was the second lowest extraction year during the current price path (2006/07 to 2009/10). Comparing the Office's proposal with Hunter Water's bill liability for this low extraction year would provide a distorted picture of the bill impact. To provide a normalised assessment, the bill impact of changing the charging structure has been assessed by applying 2009/10 prices to the average annual extraction for the current price path.

Hunter Water's 2009/10 bill liability on the basis of the annual average extraction of 57,500 megalitres for the current price path would be $271,700.

Table 3 and Table 4 show how this liability increases under the Office's proposals.

Table 3
Bill Impact - Office of Water Proposal Scenario 1
$2009/10

	Current price path Billed on extraction		Next price path Billed on entitlement		
	Average extraction[a] ML	HW Bill 2009/10 $	HW Bill 2010/11 $	HW Bill 2011/12 $	HW Bill 2012/13 $
Surface water	51,300	233,400	901,740	962,760	1,027,170
Year on year increase			286%	7%	7%
Groundwater	6,200	38,300	227,650	233,160	236,060
Year on year increase			494%	2%	1%
Totals	57,500	271,700	1,129,390	1,195,920	1,263,230
Year on year increase			316%	6%	6%

a. Average extraction is average annual extraction over the 2006/07 to 2009/10 price path.

Table 4
Bill Impact - Office of Water proposal Scenario 2
$2009/10

	Current price path Billed on extraction		Next price path Billed on entitlement		
	Average extraction[a] ML	HW Bill 2009/10 $	HW Bill 2010/11 $	HW Bill 2011/12 $	HW Bill 2012/13 $
Surface water	51,300	233,400	1,057,680	1,118,700	1,179,720
Year on year increase			353%	6%	5%
Groundwater	6,200	38,300	257,230	262,740	265,640
Year on year increase			571%	2%	1%
Totals	57,500	271,700	1,314,910	1,381,440	1,445,360
Year on year increase			384%	5%	5%

a. Average extraction is average annual extraction over the 2006/07 to 2009/10 price path.

The increase in bill liability from 2009/10 to 2010/11 is $857,700 or 316 per cent for the Office's Scenario 1 and $1,043,200 or 384 per cent for Scenario 2.

4.1 Impact on Hunter Water's IPART-determined operating expenditure

In July 2009, IPART delivered a price determination for Hunter Water for the period from 2009/10 to 2012/13. In that determination, IPART based prices to be charged by Hunter Water on an efficient level of operating costs for its water services for the period from 2009/10 to 2012/13.

Over the period 2010/11 to 2012/13, the additional operating expenditure that would result from the Office's proposed charges would increase the operating expenditure

on which the prices for Hunter Water's customers are set by between 1.8 per cent and 2.5 per cent. These increases are shown in Table 5.

Table 5
Impact on Hunter Water's operating costs
$m 2009/10

	2010/11	201/12	2012/13
Hunter Water regulated opex[a]	47.0	46.3	46.7
Scenario 1 bill increase	0.86	0.92	0.99
Increase as proportion of opex	1.8%	2.0%	2.1%
Scenario 2 bill increase	1.04	1.11	1.17
Increase as a proportion of opex	2.2%	2.4%	2.5%

a. Water price opex derived from IPART 2009 [a] and IPART's regulatory pricing model - both updated to 2009/10 terms at CPI increase of 3.9%.

The increase in operating costs shown in the table are not covered by the prices set by IPART for Hunter Water's water services for the price path ending on 30 June 2013.

Hunter Water believes the questions it raises in this submission about the overall suitability of using water sharing plan entitlements as a basis for charges should be more than sufficient grounds to modify the Office's proposals. If the Office's proposals are modified, the increases in operating costs identified here may not be as significant as those shown in the tables.

Nevertheless, it is likely that new charges will result in real increases in operating costs for Hunter Water. Because these new charges will be the result of a determination by IPART, Hunter Water would expect these costs to be recognised retrospectively as prudent expenditure at its next price determination in 2013 and allowed to be recovered through post-2013 prices.

4.2 Notional impact on prices for Hunter Water customers

As mentioned in the previous section, Hunter Water is not able to pass through any increase in Office of Water charges to Hunter Water customers until after 1 July 2013.

However, it informative to see what impact the proposed increases would mean for Hunter Water's prices if they could be passed through to customers immediately. The year-on-year increases as they would apply to a typical residential customer are shown in Table 6. Over the determination period the notional increase would total $4.50 under Scenario 1 and $5.40 for Scenario 2.

Table 6
Year-on-year notional price increase to residential customers
$2009/10

	2010/11	2011/12	2012/13	Three-year total
Bill increase – Scenario 1	3.92	0.30	0.30	5.53
Bill increase – Scenario 2	4.77	0.30	0.29	5.36

While these increases may not seem large, Hunter Water's customers are already seeing a significant real price increase of 30.7 per cent over the 2009/10 to 2012/13 price path.

Hunter Water acknowledges that it, and its customers, should meet legitimate resource management costs through the Office of Water's charges. However, as stated throughout this submission, it is doubtful that using water sharing plan entitlements as a basis for this charging provides an equitable allocation of regional resource management costs to Hunter Water and its customers.

5 Cost Sharing Arrangements

Hunter Water's entitlement under the Hunter unregulated and alluvial sources water sharing plan is 339,000 megalitres per year from a total plan entitlement of 567,149 megalitres per year.[2] Hunter Water's entitlement therefore accounts for 60 per cent of the valley-wide plan entitlement.

If charges are to be based only on entitlement, this will mean that Hunter Water is paying 60 per cent of the Office of Water's costs relating to managing the unregulated and alluvial water sources in the Hunter region.

Hunter Water accepts that, in recent years, there has been increased involvement for the Office's Hunter region staff on matters related to Hunter Water due to Hunter Water's proposal to construct Tillegra Dam. However, the heightened activity surrounding the Tillegra proposal should not be regarded as being typical of ongoing water resource management activity.

It is also difficult to see where such short-term heightened Hunter Water-related activity is reflected in the activities making up forecast operating expenditure provided by the Office of Water. The major items in the forward expenditure estimates are for surface water quantity monitoring, head office systems administration, river bank and river bed remediation, regional administration and water sharing plan development. Hunter Water believes that its activities would only significantly impact on the last two of these items. In total, these two items account for only around 15 per cent of the forward operating expenditure for the region.

[2] Table 16 of the Office of Water submission shows the total plan entitlement as 597,149 megalitres per year. This includes a total of 376,700 megalitres for major utilities – Hunter Water Corporation and Macquarie Generation. This total is not consistent with the total entitlement for major utilities of 346,700 megalitres per year in section 29 of the gazetted water sharing plan. In quoting a total of 567,149 in this section and to make this discussion consistent with the gazetted plan, Hunter Water has deducted the 30,000 megalitre difference from both the total major utility entitlement and total entitlement shown in Table 16 of the Office's submission.

Hunter Water does not believe that the Office's forward operating cost estimates demonstrate a case for Hunter Water to bear 60 per cent of regional costs.

In geographical terms, the Hunter unregulated and alluvial sources water sharing plan identifies nine water sources with a total of twenty-five water management zones. Hunter Water's operations occur in only three of these zones. In addition, staff of the Office of Water engage regularly with fifteen water users' associations throughout the Hunter.

By comparison Hunter Water, as a large user, is a single point of contact, thereby reducing the Office's unit administration costs for activities like metering and billing, resource information and data collection and water sharing plan development. Other than in the Paterson and Allyn River valleys, Hunter Water meets the full cost of the Office's flow gauging and monitoring stations in its catchments. Overall, Hunter Water is a net provider of information to the Office particularly in relation to monitoring and analysis of surface water quality and groundwater quantity and quality. The benefits of some of this work (such as stream flow and water quality information) are made available to the broader community.

All licensing costs are paid by Hunter Water through a separate management charge which is intended to meet the costs of the Office's corporate licensing unit and the administration and review of Hunter Water's licences. All investigations and studies carried out by Hunter Water as part of licence agreements are funded fully by Hunter Water.

Hunter Water believes these qualifications mean that the routine operational costs it imposes on the Office, when considered on a per-megalitre-extraction or entitlement basis, are not as extensive as for other users, such as irrigators, on whose behalf the Office performs these functions. The Corporation recognises that the approach taken by the Office is to average valley costs (separately for regulated and unregulated rivers and groundwater) across all users and that it is difficult to isolate particular costs to specific users or user groups. While this approach provides administrative simplicity, it does not take account of the economies of dealing with Hunter Water or recognise the water resource management functions that Hunter Water performs.

Taking these factors into account and putting the contemporary activity related to Tillegra Dam aside, it is highly questionable whether allocating 60 per cent of the Office's regional operating costs to Hunter Water can be substantiated.

It is particularly questionable given that the Office acknowledges in its submission that the Hunter Water's entitlement has been increased since the last determination to provide drought security and because the water sharing plan entitlement is almost five times the expected level of annual extraction reflected by the LTAAEL. Hunter Water can find no justification in the Office's submission as to why the increased water sharing plan entitlement, rather than the limit on extraction (LTAAEL) or average annual extraction, is a more appropriate basis for cost sharing across all Hunter region users.

6 Water Resource Management Costs

Hunter Water Corporation is not in a position to comment in detail on the Office of Water's cost projections and the cost implications of the Commonwealth water reforms.

The Corporation notes that independent review consultants have reported to IPART on adequacy and appropriateness of the Office of Water's proposed capital and operating expenditure.

Hunter Water is prepared to accept the quantum of projected costs subject to this scrutiny by the IPART's consultants and the Tribunal being satisfied that the future expenditure is necessary, prudent and efficient.

However, Hunter Water believes some functions included in the forecast expenditure may not be relevant to Hunter Water. These are:

- C11-01: Metering and billing water usage. The Office of Water does not incur any metering costs for Hunter Water because Hunter Water provides usage measurements to State Water directly for account preparation. Metering costs also have little relevance under the 100 per cent fixed charging proposal.

- C1-02 and C1-06 Surface water data management and information provision. Hunter Water meets the full cost of surface and groundwater data acquisition for the groundwater resources and for the Williams River. It is therefore not appropriate that Hunter Water should share the costs of data and information management outside these systems, other than for the Paterson River and Allyn River systems, which are sources for the water supply for the township of Gresford.

- Bureau of Meteorology water information. Hunter Water is a nominated agency under the Commonwealth *Water Regulations 2008* and as such is also required to provide water information to the Bureau of Meteorology in relation to its role as the operator of major storages and as an urban water utility. This responsibility is not shared by other users such as irrigators.

  Hunter Water is the major data supplier in relation to the Williams River catchment and the coastal groundwater sources. In this context, it is questionable whether it should also be meeting a share of the Office's data and information costs for other water management units (sub catchments) in the Hunter region.

7 Concluding comments: alternative charging options

Hunter Water considers that imposing bulk water charges on the basis of the entitlements set out in the water sharing plans is totally inappropriate and inequitable.

As shown earlier, while entitlement is a legitimate tool for managing extractions over the long term, it is totally inappropriate as a tool for annual charging for Hunter Water's access to unregulated surface water and groundwater.

The inappropriateness is most apparent when applied to surface water. Hunter Water has separate entitlements to extract water from the Williams River to store in Grahamstown Dam and to extract water from Grahamstown Dam for supply to its customers. The effect of basing charges on these two entitlements is that Hunter Water will effectively pay twice for the right to take water from the Williams River for supply to its customers via Grahamstown Dam – once for the right to extract it from the river for transfer to Grahamstown Dam and again for the right to extract the water from Grahamstown Dam for supply to customers.

This situation is clearly inequitable. No other user is expected to pay twice for the entitlement to the same water.

Hunter Water's preference is to continue to pay for its extractions on the basis of actual annual extractions for the reasons supported by IPART in the 2006 determination as outlined in section 1.3 above and reproduced in Appendix A to this submission.

Should the Tribunal support the Office of Water's positions that charging should be on a 100 per cent fixed basis, Hunter Water believes the entitlement should be based on the LTAAEL (long-term average annual extraction limit) of 78,500 megalitres per year as set by section 44 of the Hunter unregulated and alluvial sources water sharing plan. This limit sets the maximum average limit on Hunter Water's extraction from both surface and groundwater sources and is more consistent with the intent of entitlement limits set for all other users.

The LTAAEL, as set in the water sharing plan, does not provide a fixed split between surface and groundwater. Rather, it sets the surface water component as a residual after deduction of average annual extractions from the groundwater sources. Hunter Water believes that a suitable rolling average arrangement could be developed to apportion the LTAAEL between surface and groundwater for annual bulk water charges.

References

Department of Environment, Climate Change and Water (NSW), 2009, **Review of 2010 Bulk Water Prices. New South Wales Office of Water submission to IPART**, Sydney, December

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Department of Natural Resources (NSW), 2005, **Submission to IPART to set Water Resource Management Charges from 1 July 2006**, Sydney, September

Independent Pricing and Regulatory Tribunal (NSW), 2006, **Bulk Water Prices for State Water Corporation and Water Administration Ministerial Corporation: From 1 October 2006 to 30 June 2010**, Report Nos 4 and 5, 2006, Sydney, September

Independent Pricing and Regulatory Tribunal (NSW), 2009 [a], **Review of prices for water, sewerage, stormwater and other services for Hunter Water Corporation. From date of gazettal. Water – Final Report,** Sydney, July

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Hunter Water Corporation, 2005, **Submission to the Review of Bulk Water Prices 2006/07 by the Independent Pricing and Regulatory Tribunal,** Newcastle, November

Water Sharing Plan for the Hunter Unregulated and Alluvial Sources 2009 (347) (NSW)

Water Sharing Plan for the Tomago Tomaree Stockton Groundwater Sources 2003 (118) (NSW)

Appendix A

Extract from IPART's 2006 report *Bulk Water Prices for State Water Corporation and Water Administration Ministerial Corporation: From 1 October 2006 to 30 June 2010*, pages 141 and 142.

Paragraphs relating only to the Sydney Catchment Authority have not been included**.**

12.8.1 Explanation about charge setting

Currently, the Sydney Catchment Authority and Hunter Water Corporation (Hunter Water) charges are based on their usage volumes.

In relation to surface water, Hunter Water submitted that it does not currently have an entitlement volume for surface water and that charges should continue to be based on extraction volumes.

Hunter Water expects its entitlement allocation for unregulated rivers to be set at the upper bound of extraction, which will not be available or used in most years. In a letter dated 22 February 2006, Hunter Water states that the interim entitlement volumes are four times average annual extractions. Actual extractions will vary greatly from year to year depending on a range of factors including demand and its Hunter Water's off-river storage capacity in Grahamstown dam. This is different from most irrigators that use close to 100 per cent of annual allocations. Therefore, Hunter Water argues that in future its charges should be based on usage rather than entitlement volumes.

Similarly, in relation to groundwater, Hunter Water notes the upper bound nature of its entitlement, which will be required only occasionally to substitute for surface water in times of drought or when it is experiencing are operational problems. Further, it believes that actual extraction will be driven by the "Sustainable Groundwater Extraction Strategy" (which is currently being developed), so that the annual share component represents an upper bound that will need to be accessed only in some years. It therefore regards entitlement volumes as inappropriate measures for annual charging.

Given the nature of Hunter Water's entitlements, the Tribunal's finding is for DNR to continue charging based on extraction volumes for the 2006 determination. The Tribunal notes that it has not identified any other customers that face the same issues as Hunter Water.

Abbreviations

CPI	Consumer Price Index
DNR	Department of Natural Resources
IPART	Independent Pricing and Regulatory Tribunal
LTAAEL	Long-term average annual extraction limit
ML	Megalitre
the Office	NSW Office of Water
SLA	Service level agreement
WA	Water Act 1912
WMA	Water Management Act 2000
WRM	Water resource management
WSP	Water sharing plan